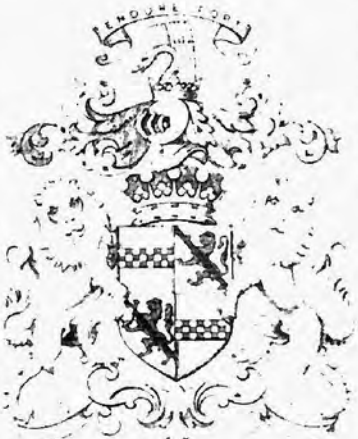

Contains Articles by Dr. John E. Gray of the British Museum see pages 91, 102, 117, 135 & 149. See also notice at page 188 & advertisements on covers of numbers for 1863 & 1864, included at the end of the volume.

YOUNG ENGLAND.

THE EAGLE OWL.

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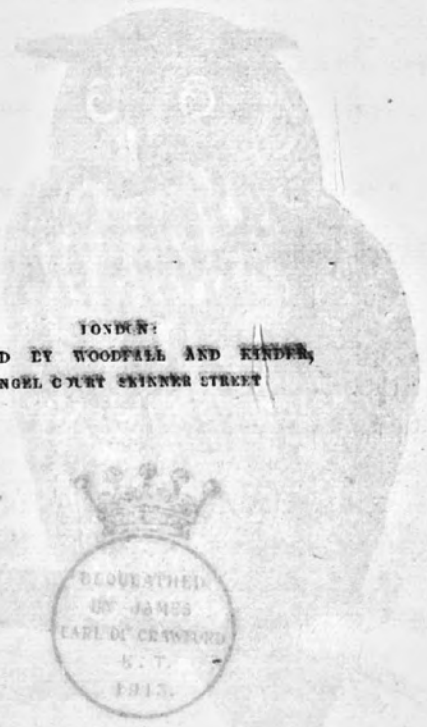


PREFACE.

THE present volume contains portraits and biographical sketches of some of the most distinguished personages of the day, and historical likenesses of all the kings and queens of England, from the Conqueror to Victoria; it has a History of all the British Birds of Prey, with accurate drawings from nature of every one of them; a Description of all the Postage-Stamps in the World; an Account of Ships from the earliest times to the present; it also has an Easy Introduction to Gardening, for boys and girls, with full instructions as to tools, and how to use them—the ground, and how to prepare it—the plants and how to set them. The Young Naturalist, through many delightful and easy chapters, is allowed to ask all sorts of curious questions and to get ready and pleasant information.

The Amusements are various and abundant—round games (or games played in a party) not a few, for the New Year, common games for any time, picture puzzles and original riddles in profusion.

The printers and publisher have—(O gentle reader! if you ever "think of starting a periodical," —by the way, one of the most difficult things in the world,—be sure to get a good publisher, and don't be afraid to pay for good printing, these are half the battle)—we were saying the printers and publisher have done their duty—we are therefore not surprised that YOUNG ENGLAND during the present year has won golden opinions, and has called forth the decided approbation of the press, which we hereby acknowledge with due humility and thankfulness.

We had almost forgotten the voluminous correspondence which, cut down to its lowest limits, appears here; in which our readers have done us the honour of supposing we know everything. This has attracted the notice of that distinguished naturalist Dr. Gray of the British Museum, who has kindly undertaken to answer all the questions in Natural History which may henceforth be addressed to YOUNG ENGLAND. Here is a rare chance. We only hope, *now*, the letters containing these questions will fall, with the sharp double-rap of the postman, not later than the 10th of the month—

"Thick as leaves in Vallambrosa"—

and that the vast resources of Dr. Gray will be called forth to instruct and delight the increasing number of those who take pleasure in natural history, or in other words, observing and studying the works of God.

The many improvements which we feel encouraged to make, and the valuable drawings which we intend to give, will render it necessary to increase the price of our paper—for the future, YOUNG ENGLAND will be 2d. monthly. We yield to this necessity of our position the more readily, because we know that the increase of price will be of little or no importance to most of our readers.

*** Be careful that all letters (except those on the business of the paper) be addressed, not later than the 10th of the month, to

THE EDITOR OF YOUNG ENGLAND,
Care of Mr. W. Tweedie, Publisher, 337, Strand.

INDEX.

YOUNG ENGLAND.

VOL. I.—NO. 1.] JANUARY 1, 1862. [PRICE ONE PENNY.

A NATION'S PRAYER.

"GOD Save the Queen!" is the prayer of England's mighty people, on behalf of England's rightful monarch. England stands first and pre-eminent among the nations of the earth. Her language is all but co-extensive with the globe; her sons are settling in every clime;—her institutions are taking root in every soil, and are growing up in their strength under every sky. Like some great central orb, she is attracting all nations to

GOD SAVE THE QUEEN!

herself: and, certainly, the population of the British isles, which numbers more than thirty millions, "placed under such fortunate circumstances of rapid communication and easy concentration, as to be equal to twice their number in any other kingdom," is worthy of a great dominion, and no less worthy of a Sovereign who knows how to rule and govern such an empire. Such a Monarch now fills the throne; and never was Sovereign more deserving of the love and devotion of her subjects. When comparatively young, she was called to the duties and the responsibilities of the highest station, and since the time that our country could claim a kingdom or a history, the Court has been the purest ever known, just because the Sovereign herself has embodied every virtue which can give grace and dignity to the female character. Her marriage brought her into union with a man not more distinguished for his mental endowments than for his moral excellences; but over whose early death there have been shed the tears of a nation's afflicted patriotism. Never in the history of any preceding Sovereign was life reduced to such a reality. Never were such light and happiness thrown over the hearth and the home of royalty. Never did such purity, or so many excellences look out from beneath the purple of the palace. Never did the diadem rest on a fairer brow; and never was the sceptre grasped by a more impartial hand. Never was the throne more radiant with truth and justice; and never had the country a brighter example of all the private, domestic, and social virtues. Her Majesty is, in every sense, the Sovereign of her people, going into all parts of her dominion, and mingling freely with all classes of her subjects. She is at home no less in the cottage than in the mansion, and can mingle her sympathies and her thoughts with the humblest peasant, no less than with the first noble of the land. She ascended the throne amid the prayers and the benedictions of her people, and they have reaped, and are reaping now, the fruit in the blessing of her unparalleled reign.

Suddenly, and to her irreparable loss, the Queen has been bereft of the companion of her youth, and the guide of her life—the man in whom alone she could implicitly confide, and to whom she could ever trustingly look up for counsel, and sympathy, and encouragement; nor is there any one within the circle of even royalty itself, who can replace what she has lost. Of this sad fact the national grief is at once the proof and the expression. There is not a home, nor a family throughout the land, into which the bereavement has not sent a pang as acute as that of some deep domestic visitation. They were no feigned tears which have been shed. The tears were as genuine as the sorrow was real. Nor can we conceive of a single individual throughout these realms, who does not cherish the feeling, and breathe the sentiment embodied in the following lines:—

"In this our nation's need,
We humbly with THEE plead,
God save the Queen!
"Her life now sanctify,
Her loss untold supply,
THYSELF be ever nigh;
God bless the Queen!"

Not only does every man feel as if he had lost a friend, but as if his relation of a subject to the Sovereign had merged into the higher and nearer relation of a son to his mother; nor is there one—from youth up to hoary age—who will not rally round the throne of the bereaved and sorrowing monarch, and give to her the homage of a more ardent loyalty, and the obedience of a more entire devotedness.

Upon the domestic happiness of the Sovereign, we might dwell at length. Her conjugal life has been blessed with a numerous offspring, and though that offspring brought with it a mother's anxieties and solicitudes, it also gave birth to a mother's joys and delights. Her children are all spared to her, to divide her sorrow and lend brightness to the future of her life. On one of the members of that family the eyes and the hope of the nation are now fixed with no common interest. The question is on every lip—What part is the Prince of Wales likely to act in this crisis of our national history? Is there any probability of his sharing with the Queen the burdens of the State? And in the event of his coming to the throne, is there the prospect of his reign corresponding with that of his illustrious Mother? What evidence is there that he will rise into his manhood strong in virtue, and when the sceptre of these free lands shall pass into his hand, that his rule will be such as shall ensure for him the affection, and loyalty, and devotedness of the nation?

"If the Prince of Wales" (to borrow the language of the *Times*) "is ever to be a wise and good Sovereign, he will now be a wise and good Son; and if he will ever feel any call to devote himself to his country as his parents have done, he will feel it now. This is the time for that self-sacrifice on which the greatness of a crown, as well as the glory of a statesman, a soldier, or a priest, must be founded. This, indeed, is the occasion such as historians and dramatists have loved to describe in the lives of their favourite princes, when the Prince of Wales will have to make a solemn choice between a life of frivolity, perhaps of trouble and misery, and a reign of usefulness, to make his name blessed for ever. He must resolve, if he would do; and renounce, if he would win. It is an awful thing to say, 'Now or never;' but experience proves that they who reject the first solemn call are seldom more affected by any that come after. We know not how much the destinies, not only of the British Empire, but of the whole human race, depend on the youthful Prince of whom we have seen so much, yet seem to know so little. Like the rest of us, he has position, and honour, and power to win. He may be a true king, or only a shadow of royalty.

"The destiny for one so young is, indeed, a great one, and it is weighted with the heaviest cares. To bear these cares the Prince must now make up his mind, if he wishes to gain the affection and esteem of the country. The national good-will is not to be obtained without some sacrifices, and the Prince has before him, as in the fable, two paths—those of duty and pleasure. The next few months will decide whether he is to stand in popular estimation where his late father stood—whether in the King who is to rule over us we are to look for one who, like his parents, will take an interest in all that benefits his people, and will show ability and energy in the study of it, or one who will only receive the conventional respect which belongs to his rank and office. Exposed to many temptations, his Royal Highness must resolve to earn public applause by resisting all that will draw him from the side of a Mother and a Queen who requires his help, and from the service of a nation which needs every counsellor it can find."

NEVER MISSED.—A conceited young man asked a friend what apology he should make for not being one of the party the day before, to which he had a card of invitation. "Oh, my dear sir," replied the wit, "say nothing about it; you were never missed."

Books Received :—

PICTORIAL SUNDAY READINGS, by the Rev. W. Owen. Parts 1—16, 1s. each.—James Sangster & Co., 36, Paternoster Row.

CASSELL'S ILLUSTRATED FAMILY BIBLE. Vol. I., to the end of 1 Samuel.—Cassell, Petter, & Galpin, London.

LONDON, JANUARY 1, 1862.

THE death of the PRINCE CONSORT has, by its very unexpectedness, taken us by surprise ; and at his too early grave we drop the tears of no feigned or fictitious grief. Happily, this bereavement does not interfere with the succession to the throne. The heir apparent is spared, and though we trust the day is far distant when he may be called to take the reins of government in his hand, we cannot but hope that he will prove himself more than equal to the duties and responsibilities of that high position.

In the depth of our national rief, we cannot forget that war is impending between two great nations, descended from the same stock, speaking the same language, professing the same faith, and to whom in common has been committed the work of the world's evangelization. Can it be that on either side the evil genius of war is to be unyoked, and the earth be soaked with the blood of those two peoples! We are fully alive to our national honour, but we deprecate war. It will do unutterable damage to the interests of commerce, of freedom, of Christianity. It will arrest that progress and development which are so characteristic of our age. It will lower both nations in the eyes of the world, and put a halt upon that Christian civilization which they are pledged to preserve and promote. A people plunged in war have no surplus power to expend in even the higher efforts of philanthropy, social improvement, or missionary enterprise.

The flame of persecution has at last been extinguished in Madagascar. The death of the Queen, and the accession of her son, who is a Christian, to the throne, have prepared the way for the future freedom, worship, and safety of some ten thousand native believers, who have hitherto withstood the force and the fire of the most cruel persecution with a magnanimity and a fortitude worthy of the martyr. But while we rejoice in the fact that Madagascar is now open to the commerce and the Christianity of England, we are reminded that in the island of Erromanga two of the missionaries have met with a violent death ; that two others have been murdered by the rebels in China, and that the missionary field is everywhere being thinned of its labourers by disease or death.

Would that we could speak in more favourable terms of home ! Trade is oppressed, thousands are out of employment : privation and want are more widely spread than many are disposed to believe. Commercial morality is every day losing in its life and integrity. Crime, and especially youthful crime, is taking a more aggravated character ;—the schoolmaster is not universally abroad, nor has education done her work. The battle with ignorance and crime, vice and sin, in all their forms and shapes untold, has yet to be fought. Our national prosperity depends on our national virtue ; and the virtue of any people must be determined by the extent to which they are affected and influenced by the lights and the lessons of a practical Christianity.

"CHRISTMAS CUSTOMS."

IN a country village there lived a steady, industrious labouring man and his wife, whose cottage was noted for its clean and tidy appearance.

The village postman having died, Thomas was elected as his successor. All went on well until Christmas-time, when, on going his rounds, a lady handed him a shilling and a glass of rum as his "Christmas Box."

Unfortunately for Thomas, he was not a pledged abstainer ; and although he would much rather have declined the liquor, yet, when the glass was so smilingly held out to him by the hand of a lady, it was no easy task to refuse it.

At several other houses, glasses were handed to Thomas, and he was urged to drink them off. "It will do you good," said one. "It will keep out the cold, Thomas," said another.

Before the postman had got through his rounds, he was so tipsy, that he fell into a ditch, and was carried home in a sad plight.

He lost his situation, and never looked up afterwards. He was so ashamed of his conduct, that he took to regular drinking to drown his sorrow ; and there is reason to fear that Thomas went down to a drunkard's grave.

His poor wife and little girl would never forget the "Christmas Customs" that caused their ruin.

And now, my young friends, I hope you will have plenty of fun, and enjoy yourselves this Christmas ; but I am afraid the "Customs" will tempt many to drink a *little*. Alas! the *old folks* will set you the *example* by drinking wine, and there will be negus for the *young* ones ; and, perhaps, it will be said to you, as it was to the postman—"Take a *little*. It won't hurt you," &c. And no doubt if you refuse you will be laughed at, and teased in many ways. But, my dear young friends, when you are asked to take a *little drop*, think it is a little drop of a bad thing, and *firmly*, but *politely* refuse it.

Remember that *little drops* are hurtful, and often lead to larger drops. Many who began with just putting their lips to the glass when they were boys and girls, little thought what it would lead to ! A *small beginning* has often proved a *terrible ending*. But let us all remember that thousands of people and families are every year plunged into the deepest distress through our Christmas Drinking Customs. Will you, "Young England," do all you can to abolish these Customs ?

Will you set your face against them ? especially as we can be better in *mind*, *body*, and *pocket* without them. And can you think of any better plan of doing this, than by having nothing at all to do with them ?

HOPEFUL.

SECUNDUM USUM SARUM.—This proverb had its origin in certain ecclesiastical usages. In many of the churches in England the offices or forms of service greatly differed, and this caused no little confusion in the worship, until Osmond, Bishop of Sarum, in the year 1090, drew up a uniform ordinal, or office, or service, which was very generally received and adopted all over England, and thus reduced the worship in all the churches to one form and order. Hence the phrase, *secundum usum Sarum*, which is now applied to actions formally done, or in so regular a way, by authentic precedents and in cases of unquestionable authority, that no just exception can be taken to them.

THE YOUNG NATURALIST.

THE OPOSSUMS.

CHAPTER I.

AN ADVENTURE IN SHADOWY DELL.

"Do come along," said Emily to her brothers with a degree of impatience, as they were leaving the door of a friend's house, where they had passed the day, "do come along."

"What is your haste, Emmy?" asked William, in his usual moderate way.

"Why, it is almost night, and we have got a long way to walk, and you know I don't like to go through Shadowy Dell after dark."

Shadowy Dell was the remains of what was once an extensive forest. It lay in an opposite direction from the woods where the children discovered the ants, so that Mr. Rogers's house was situated between the latter place and the spot which was the object of Emily's dread. It was a low, moist place, and as the trees grew thickly together, producing even at mid-day a deep shade, it was termed Shadowy Dell. Common report says, that the deceptive light called Jack-o'-lantern has been seen there, which is not improbable, considering the nature of the ground.

Emily, that she might *feel* more safe, took each of her brothers by the hand, and walked between them. She was timid, and a little out of humour, which she soon exhibited in her conversation.

"I don't see," said she, "why Mrs. Smith didn't get our tea earlier; she knew that we had that ugly place to go through."

"Perhaps it was not her fault," replied William.

"Whose fault could it be? she has the whole control of the family, and can make all the rest do just as she pleases."

"Not quite, I guess," said Robert; "I heard her tell Harry to go after the cows early in the afternoon, and not play by the way. But he was gone a long time, and when he returned she scolded him. It was more his fault than hers that we had tea so late."

"All that I wish, then," said Emily, "is that Harry Jones had to go through Shadowy Dell alone after dark."

"I don't believe he would mind that," said her younger brother, "for I noticed that he was a bold, impudent boy, and said a good many things that I would not dare to say."

"Impudence is no proof of courage," replied William. "There is Thomas Brown—he is the most impudent boy in the school; he contradicts the master, and uses language to him that no other boy dares to, and he cares no more for a whipping than an old donkey, and yet he is the most cowardly boy I know. His father can't get him to go out to the barn after dark, although it is only a short distance from the house, and he can see the lights burning in the room all the time."

"I should think," said his brother, "that a boy who had courage to be impudent when he knew he would be whipped for it, would have courage to go in the dark."

"No matter what you think about it, it is not so. Father says, that cowardice is a companion of wickedness, and I know that Thomas Brown possesses both these. He is as cowardly as he is bad."

In a few minutes the conversation was dropped, and the children hastened on in silence. The sun was almost down. The trees and bushes cast lengthened shadows on the ground. Bees and other insects were winging their way home, except gnats and mosquitoes, which seemed to fill the air. The crickets were chirping in every direction, and a few solitary birds were offering up their evening song.

They soon entered the uneven, crooked path which led through the dell, but did not find it so dark as they had expected. Trees had been cut down to make the path sufficiently wide for a cart to pass through, and the opening let in considerable light, and allowed them to see large patches of sky over their heads.

They had not proceeded far before Robert, whose eyes had been wandering in every direction, spied something ahead. "What is that?" said he, suddenly stopping and pointing to an object which had caught his attention. As they had not been talking since they entered the dell, and as the ground was covered with a soft species of grass or moss, which prevented their footsteps from being heard, they had approached the animal quite near, without being discovered. It was about as large as an ordinary-sized dog, and of a whitish-grey colour. The tail was long, tapering, and covered with scales. The head was sharp, the ears short, and the nose, ears, and paws almost free of the wool which covered the other parts of its body. When the children saw that they were undiscovered, they stepped cautiously out of the cart path, and concealed themselves behind some trees, that they might observe its habits. They noticed that its motions on the ground were very awkward, but when it ascended a tree, it moved about among the branches with great quickness and ease. Sometimes it would leap from limb to limb, sometimes it would hang by its tail, reach a limb below with its fore-paws and then drop upon it; or if it was after nuts or fruit when it suspended itself in this manner, it would get them and then raise itself to its former position. What surprised the children most, was the sudden appearance of several small ones. Whilst the old one was sitting upon one of the largest branches of the tree, a number of young ones were seen clinging to her, or else playing about on the limb; but where they came from, the boys could not tell. They were not there when the old one ascended the tree, neither did they climb up afterwards. Presently they all gathered around their mother, as the large one seemed to be, and disappeared. "Where have they gone now?" whispered Robert.

"That's more than I know," answered his brother. In a few moments the old one descended to the ground, and moved clumsily about in the path. The children looked up in the tree, but could see none of the small ones there; but when their eyes returned to the old one on the ground, they were astonished to see her almost covered with young.

"How under the sun did they get there?" whispered Robert again.

"I don't know," was William's brief reply.

"They didn't come down the tree with her, nor after her," whispered Robert; "I should like to know how they got there. Let's try to catch one."

"Well."

The children noticed that the young ones would occasionally hide themselves, either under or behind their mother, but they could not tell which.

"There they go, there they go," whispered Robert hastily, "they are all concealed under the old one. Let us make a dash at them, frighten her off, and then catch one. I think they are too young to hurt us."

"Emmy, you come too," said William; for he thought his sister might be unwilling to remain behind the trees alone.

"Oh, don't go," whispered the timid little girl; "throw a stick and frighten them away."

"No, no," said Robert, "I should like to get one of these little fellows, and bring it up at home."

After a little more whispering, they agreed to rush out to-

gether from their concealment, and with a loud noise frighten the old one off. If she made any resistance, the two boys were to beat her with their clubs. If she fled, they were then to try to catch one of the young ones.

If either of the boys had met this animal here alone, he would have been frightened, but as they were together, they felt somewhat courageous.

"I will count," said William, "one—two—three in a low whisper, and then say aloud *now*, and as soon as I say *now*, let us rush out."

Robert assented.

William whispered, "one, two, three," and then hollowed "now," as loud as he could. At the appointed signal, out sprang the boys, brandishing their cudgels, and shouting at the top of their voices; away fled the strange animal as fast as possible, and ascended the first tree it came to. The astonishment of the boys was great when they found no young ones.

"I am certain," said Robert, "that I saw them go either under or behind her, and I am sure they did not leave her, for I kept my eyes upon her all the time."

"This is the very spot where she sat," replied his brother, at the same time looking down upon the ground, "and there are no holes here into which they could have fled."

"I should like to know where the little rogues are." They looked up into the tree to which the animal retreated, and saw her clinging to one of the branches. As they found that she was afraid of them, they felt more courageous than they would have done if she had shown any disposition to attack them. They therefore paused a few moments, to watch her. Presently their surprise was greater than ever, when they saw two or three of the young ones gradually creep from under the old one, and commence playing around her.

"That beats all," said Robert; "there is some mystery about it. How can those cunning fellows pass from the branches of the tree to the ground, and then from the ground to the tree again, without being seen?"

"It is rather strange," replied his brother, "but I dare say pa has seen such animals, and he will tell us about it;—but come, we have stayed here long enough: the sun will be down by the time we get through the woods."

"I should like to stay longer, but I suppose we ought to go," said Robert. After giving the cunning rogues a farewell look, the boys took their sister by the hand, and commenced running. As the excitement of the adventure was now over, they all felt a little timid, which served to quicken their steps. They dashed by flowers and berries, equally heedless of the fragrance of the one, and the tempting flavour of the others. Now and then a straggling branch of a blackberry or thimbleberry bush would catch them, but they would tear by with a scratching noise, which sometimes made them fear that their clothes would require the use of the needle by the time they should arrive at home. Such was their speed, that in a few minutes they emerged from the gloomy shadows of the dell, into the open meadows. A cloudless sky was over them, with here and there a faint star, which the twilight rendered visible.

"Oh, there is pa," said Emily, "he has come to meet us;" and drawing her hand from her brothers', she ran to receive his affectionate embrace.

"Oh, how glad I am to see you, pa."

"What kept you so late, my daughter? we have been expecting you home for more than an hour."

"Why, Mrs. Smith didn't get tea till late, and then we met with an old ugly thing in that dark dell—I wish that dell wasn't there."

"What ugly thing?"

"I don't know; the boys can tell you all about it."

"Oh, father, we have had an adventure," said Robert, who by this time had come up.

"I should think you had, from your appearance; you look as if you had been running a race with John Gilpin. But what have you seen?"

The boys then related their adventure in the dell, and asked their father what kind of an animal it was, which they had seen.

"From your description, I should think it was an opossum. It is a very peculiar animal, exceedingly timid, and seldom seen in the day-time. Probably you would not have seen that one, if it had not been near sun-down, and if it had not been much darker in the dell than in the open land. It is very clumsy on the ground, but in the trees it can move about with great ease. It uses its tail to assist its motions. When necessary it can suspend the whole weight of its body by its tail. This it often does when reaching after birds' eggs or fruit, which it cannot obtain in any other way. Its hind feet are somewhat similar to our hands, by having short fleshy thumbs. They are so constructed that the animal can take a firm grasp of a very small twig, as well as of good-sized branches. It feeds upon apples, persimmons, birds' eggs, and sometimes small animals. When it perceives that danger is at hand, instead of fleeing farther and farther from its pursuers, it will cling to the branch of a tree, and remain motionless. When this is the case, the hunters usually ascend the tree, and shake the branch violently, until the animal drops off. As soon as it falls, it moves a few steps from where it struck, and then rolls or doubles itself into as small a compass as possible. In this position it pretends to be dead. At such times it is perfectly quiet, and will allow itself to be roughly handled, without making the least noise or motion. I have sometimes taken a stick and rolled them over and over several times, without making them show the least signs of life, and if I had not known their habits of deception, I should certainly have thought they were dead."

"That explains," said William, "an expression the boys sometimes use."

"What is that?"

"Why, when one boy is trying to deceive another, they say, 'he is playing the *possum*.'"

"But, father, what became of the young ones?" asked Robert; "they were the most mysterious characters; they could appear and disappear, just when and where they chose."

"I dare say it seemed so to you, but I can easily unravel the mystery. One of the most remarkable peculiarities of this animal is, that the female has a pouch or sack under her body, for the protection of her young. This pouch has an opening. It is something like a man's waistcoat, with two or three of the buttons unbuttoned. When danger is at hand, the young ones immediately flee into this pouch, and are there more safe than chickens are under the wings of the hen. Probably, when you saw those little ones disappear, it was in this manner."

"Yes," said Robert, "that explains it all. Those little rogues fled into their mother's pocket, and then she crept up and down the tree with them."

"When the young become so large that they cannot resort to this retreat for protection, they then cling to their mother by twisting the extremity of their tail around hers, or else around her legs. Sometimes half-a-dozen may be seen hanging to their parent in that way. As long as you had such an interesting adventure, I am not sorry you came home so late."

They had now reached their home, and the conversation ended.

BREAD FOR THE FAMILY.—A lazy fellow once declared in public company that he could not find bread for his family. "Nor I," replied an industrious mechanic; "I am obliged to work for it."

CLEVER AT EXAMINATION.—A young man in "these parts," who had spent a little of his own time, and a good deal of his father's money, in fitting for the bar, was asked after his examination, how he got along? "Oh, well," said he, "I answered one question right." "Ah, indeed," said the old gentleman, with looks of paternal satisfaction at his son's peculiar smartness; "and what was that?" "They asked me what a *qui tam* action was." "That was a hard one! And you answered it correctly, did you?" "Yes, I told them I did not know."

A BAD DINNER.—Everything sour but the vinegar.

HOME AND FOREIGN NEWS.

THE COURT.

His late Royal Highness Prince Albert. — We have seen the nation in tears for the loss which it has sustained in the death of the Prince Consort. While the Sovereign has too soon been bereft of a devoted husband, an enlightened counsellor, a faithful companion, and one who was ever willing to divide with her the cares and the burdens of her high position; while her royal children have too soon been deprived of a loving father, ever watchful over their interests, and supremely solicitous for their entire well-being; the country has lost one of its brightest ornaments, the world of art and science one of its most ardent lovers and patrons, and the republic of letters one of its most rarely endowed and most richly gifted minds. The name of Prince Albert will stand out in bold letters in the pages of English history, and his lofty virtues will be remembered to a late posterity. His sun has gone down while it was yet day, but though he has disappeared from our hemisphere, we love to think of him in that higher spoken-of being, where all his powers are elevated to still nobler employments.

The Queen.—Serious fears were entertained lest her Majesty might sink beneath the weight of her severe trial; but we learn, with extreme satisfaction, that under the supernatural strength vouchsafed to her, she has been enabled to bear up with exemplary fortitude and resignation under her irreparable loss, to commit herself with confidence to the affection, sympathy, and co-operation of her family, and to give herself to the business and the interests of the country with almost parental devotedness. These facts will still more endear her to the hearts of her loyal subjects, and there is not one of them who will not invoke Heaven's richest benediction on herself, her family, and her reign.

HOME.

Statue of Edward the Sixth in Windsor Castle.—We are told, on what authority we know not, that there is a beautifully-executed statue from the studio of Baron Triqueti —a prominent and distinguished man among the French Protestants—which stands at the top of the Queen's staircase in the private apartments of the Castle, and is designed to represent the boy-king, Edward VI., marking with his sceptre, which he holds in his left hand, a passage in the Bible, upon which he intently looks, and which a closer inspection discovers to be:—"Josiah was eight years old when he began to reign; and he reigned thirty and one years in Jerusalem. And he did that which was right in the sight of the Lord, and walked in all the way of David his father, and turned not aside to the right hand or to the left;" and that this statue was executed by the desire of the late Prince Consort, who intended it to convey to his son a constant and most significant suggestion of the Divine Rule by which the future Sovereign of England should fashion his heart and life.

The Winter Assizes.—Our criminal courts are revealing humanity in some of its ugliest types and developments. In how many instances is crime taking the character of a finished malignity; nor can we shut our eyes to the deeply-affecting fact of the increase of juvenile crime. Even the young are beginning to disregard the sacredness and the sanctities of human life, and are rushing upon deeds which fill us with very horror. The strength of a nation is its youth, but it must be a youth educated in virtue, and trained to nobler doing.

FOREIGN.

The French Government on the American Outrage.—"If anything were wanting," says the *Times*, "to show that the course taken by the British Cabinet has the sanction of European opinion, it would be furnished by the circular which the French Government has addressed to its diplomatic agents abroad. The purport of the circular is, to declare that the arrest of Messrs. Mason and Slidell was contrary to the principles which are regarded as essential to the security of neutral flags, and to announce that the Emperor has deemed it necessary to submit this opinion to the Cabinet of Washington, in order to determine it to make concession, which France considers indispensable."

The Government of Russia.—The Emperor of all the Russias has so far modified the autocratic or despotic form of his administration, as to associate with his Imperial Majesty a Ministry, to each of whose members is assigned his own particular department, and for which he is responsible, not to his colleagues, as in the British Cabinet, but to the Czar himself; who is, in fact, the head of the Ministry. Still this is a step in the right direction, and will, we doubt not, lead to other and still further concessions.

Australasia.—Queensland.—This is one of the finest colonies, both as it regards soil and climate, in the whole of Australasia, and opens up a wide field for commercial enterprise. The colony, we are told, continues to prosper, and that the introduction of cotton companies promises to impart an immense impulse to all its movements. Various countries have been fixed upon for the growth of cotton, and it is reported, on very good authority, that some successful efforts have been made to find a material for the manufacture of paper.

Madagascar.—The accession of Radama II. to the throne has been signalized by acts of corresponding wisdom and prudence. He has written to the Protestant Missionaries at the Mauritius and the Cape, informing them that his land is now open to the full introduction of Christianity; that he himself remains firmly attached to the Protestant faith, and that it is his purpose forthwith to establish schools for the education of his subjects of all classes and of any age. The Bishop of Mauritius, in a letter dated Port Louis, October 4th, said that he hoped soon to visit Madagascar; that there was a strong English feeling prevailing there, and the present prospects for missionary work, both there and on the continent, were calculated to stir up his hopeful expectations for regions so long clouded over with darkness and cruelty. The directors of the London Missionary Society, in the confident hope that the report which they expect shortly to receive from the Rev. W. Ellis, who has gone thither in their name and on their behalf, will justify the step, have resolved, if possible, to have ready in the early spring at least half-a-dozen missionaries, suitably qualified for the different departments of labour, evangelical, medical, and educational, demanded by the new circumstances that have arisen in Madagascar, and by the favourable facilities likely to be afforded by the extension of the gospel among the multitudes who are yet the victims of impure habits and debasing superstition.

The American Board of Foreign Missions.—The following facts are derived from the last annual report of this noble institution:—"Six persons have entered upon the missionary work for the first time within the year, and seven have returned to the fields which they had previously occupied. Eleven persons are under appointment. The number of missions was 20; stations, 113; out-stations, 171. Number of ordained missionaries (seven being physicians), 152; physicians not ordained, 5; other male assistants, 7; female assistants, 171; whole number of labourers sent from America, 335; number of native pastors, 29; native preachers, 218; native helpers, 406; whole number of labourers connected with the Missions, 988. Number of printing establishments, 4; pages printed last year, as far as reported, 33,003,079; from the beginning, 1,264,106,926. Number of churches (including all at the Sandwich Islands), 161; church members (do. do.), so far as reported, 24,456; added during the year (do. do.), 1,944. Number of seminaries, 9; other boarding-schools, 10; free schools (omitting those of Sandwich Islands), 298; pupils in free schools (omitting those at Sandwich Islands), 8,115; seminaries, 276; boarding-schools, 236; whole number in seminaries and schools, 8,630.

CALENDAR FOR JANUARY.

The dame the winter night regales
With winter's never-ceasing tales;
While in a corner, ill at ease,
Or crushing 'tween their father's knees,
The children silent all the while,
And e'en repress'd the laugh or smile,
Quake with the ague chill of fear,
And tremble, though they love to hear.

The Sun.

The Sun is south of the equator this month, and moving northward. It is at the shortest distance from the Earth on the 1st, and will pass from Capricornus to Aquarius about a quarter past 6 on the morning of the 20th.

The Moon.

First quarter	47	min. past	10	on the evening of the	7th.
Full-moon	55	"	1	" morning	"	16th.
Last quarter	37	"	6	" "	"	23rd.
New moon	50	"	2	" "	"	30th.

The Planets.

MERCURY is in Sagittarius at the beginning and in Capricornus at the end of the month, when it may be seen setting soon after 6 in the evening.

VENUS is in Aquarius, and is an evening star throughout the month, very easy to be seen. It is brightest on the 21st.

JUPITER is in Virgo, rising before 11 at the beginning and before 9 at the end of the month, and may be seen all night long.

SATURN is also in Virgo, and very conspicuous late in the evening.

URANUS is in Taurus, and seen throughout the night.

In these notices of the heavenly bodies we have carefully avoided what is abstruse, and mentioned only those objects which will be found readily by an ordinary observer, having but an elementary acquaintance with the constellations. The planet, in any case, may easily be seen, and if you know its place in the heavens—that is, the constellation, as Virgo, Taurus, &c.—where it is to be found, you will be able to identify and name it at once.

The Earth: times to look for Birds and Plants.

We now turn to the earth, not as a planet, but where we may take healthful walks, look for pretty flowers, and hear the beautiful birds sing. The following table has been arranged by the Editor, at a cost of much time and care, expressly for YOUNG ENGLAND.

The time of the flowering of plants and appearance of birds, &c., is compiled principally from the observations of the Rev. Gilbert White, of Selborne. They are put down in the order in which he saw or heard them the *earliest* in any year. If the season be backward, they may not be seen for weeks after the time mentioned here—but you may be looking out for them.

FIRST WEEK.—Greater titmouse and thrush sing—Insects swarm under sunny hedges—Primrose flowers—Bees appear—Gnats play about—Chaffinches, male and female, seen in great numbers—Red-breast sings—Larks congregate—Nuthatch heard—Winter-aconite flowers—Shell-less snail or slug—Grey and white wagtail appear—Missel thrush sings—Bear's-foot—Polyanthus and double-daisy flower—Mezereon—Pansy—Red dead nettle—Groundsel, hazel, and hepatica flower—Hedge sparrow sings—Common flies seen in great numbers.

SECOND WEEK.—Furze or Gorse—Wall-flower and Stock flower—The bunting seen in great flocks—Linnets congregate—Lambs begin to fall—Rooks resort to their nest trees—Black hellebore—White dead nettle and common crowfoot flower—House sparrow chirps.

THIRD WEEK.—Dandelion flowers—Bat appears—Spiders shoot their webs—The butterfly and the brambling appear—Blackbird whistles—Wren sings—Earthworms lie out—Crocus flowers—Skylark sings.

FOURTH WEEK.—Ivy casts its leaves—Hellebore flowers—Common Dor or Clock seen.—Woodlark and Chaffinch sing—Jackdaws begin to come to churches—Yellow wagtail appears—Honeysuckle, field speedwell, and nettle flower—Nettle butterfly appears—White wagtail chirps, and the shell snail appears.

THE ELM TREE.—Take the seed of the Elm and plant it; when the tree is grown and reaches its maturity, it will yield one million and a-half of seeds; plant these, and each of these again will yield one million and a-half of seeds; and such being the ratio of production, the third generation of trees will yield seeds sufficient, when planted out at the distance of only twelve inches from each other, to cover the surface of all the planets which compose our solar system.

THE EYE AND THE STARS.—It is well known that the power of vision is in proportion to the degree of light which falls on the retina as emitted from any bright or luminous body. The larger the pupil of the eye, the greater the number of rays which it can receive, and in proportion to those rays is its capacity to discern objects which otherwise must continue in the deep profounds of space unseen and unknown. Such an enlargement of the pupil of the eye virtually takes place when a *lens* is employed. In the lens all the lines of light are made to converge into a single point, and that point sufficiently minute to enter the eye. The eye thus receives as much light as if the pupil had been enlarged to the dimensions of the lens, and consequently its power of vision is in the same degree increased. The diameter of the lens is, in fact, the size and capacity of the eye. Hence the wonders of the telescope. Herschel's telescopes were of various lengths, and their adjusting power ranged from the lower point of two up to the greatly-increased point of twenty-eight. In one of his twenty-feet telescopes, which was of superior construction, he gave the power of ninety-six; while the power of his forty-feet instruments he fixed at 192 as the nearest computation. Now, if the eye can carry us to stars of the twelfth order of distances—that is, twelve times farther than the first or nearest range of fixed stars, we have only to multiply the power of the forty-feet reflector by twelve, and we have the distance to which it takes us, which is two thousand three hundred and four times farther than the naked eye can reach. So that were 2304 stars extended in a straight line beyond Sirius (and Sirius is from two to three hundred thousand times more distant than the Sun), and were each star separated from the one before it by an interval equal to that which separates Sirius from the earth, this telescope would take in the whole. Or were there a cluster of stars, consisting of five thousand distinct bodies, situated three hundred thousand times deeper in space than Sirius, which is distant from us some eleven or twelve billions of miles, this instrument would descry them all and bring them within the range of our vision!

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

GYMNOGENOUS BIRDS.

Chapter I.—Introductory.

How delightful, how inspiriting, is the full chorus of voices, the voices of birds, on a bright Summer's morning before man has resumed his daily labour! The deep melodious whistle of the blackbird; the amorous cooing of the stock-dove; the delicious air-floated chant of the skylark and wood-lark; the defiant crow of the pheasant; the strange love-call of the corncrake or landrail; the soft and tuneful warbling of the blackcap; the happy twitter of the martin; the monotonous but ever-welcome bi-tone of the male cuckoo; the harsh scream of the jay; the grating chatter of the magpie, and the loud cawing of the rook. The mind that is willing to receive the lesson must learn, from this diversity of language, the care that has been taken by an Allwise Creator of these His wonderful creations. Does it not fill us with astonishment, that every species of bird should have a language, a form, a colour, a flight, a gait, a nest, an egg peculiar to itself?—characters by which each bird may distinguish its kind from all other birds; and to reflect that all this multiplicity of variation has been contrived by an Omniscient Mind for some wise purpose, has been maintained in perfect order from the earliest dawn of creation until the present hour; and will, in all probability, be maintained as long as this world shall last! When we reflect on these things; when we listen to this morning hymn of praise; when we gaze on the variety of forms, and observe the diversity of habits; can we refuse to accept these wonders as direct evidence of the existence, of the goodness, of the wisdom, of the paternal care of an Omniscient, Omnipresent, Omnipotent God?

Yet birds are but a fractional part of a creation that is equally wonderful and perfect in all its parts. If then such Divine skill has been displayed in creating, and such unceasing care in upholding, the world of animals, shall any one presume to say that the study of the Creator's matchless works is unworthy of his creature, Man? Are we not told to consider the lilies of the field, and this for the express purpose of observing that their God-given beauty exceeded and surpassed all the efforts of man to clothe the greatest of earthly monarchs with pomp and glory? Indeed there is scarcely a page in the sacred Volume but teaches us to

"Look through nature up to nature's God."

And surely nothing is more improving than this desire to look upwards. The mind gradually expands with the knowledge it acquires, until it finally reaches the desirable condition of fully understanding its own nothingness, and of saying with heartfelt sincerity, "How little do I know! how much have I to learn!" Thus, although it is perfectly true that

> "The men
> Whom nature's works can charm, with God himself
> Hold converse; grow familiar, day by day,
> With His conceptions; act upon His plans,
> And form to His, the relish of their souls;"

yet we invariably see men who are thus thoroughly imbued with a love of nature, also endowed with perfect humility, the most retiring modesty, slow to speak, and carefully abstaining from the expression of positive opinion or the offering of unsolicited advice. As "a fool's voice is known by multitude of words," so is a wise man, and especially a learned naturalist, by his silence; he who has once felt the charm of really studying nature, may always be distinguished by the exceeding diffidence with which he imparts his knowledge.

The objects, then, of the Chapters on British Birds, to which this is intended to serve as an introduction, are *first*, and most especially, to direct the attention of the young to the wisdom and goodness of God, as displayed throughout creation: in the most minute humming-bird as well as the gigantic ostrich, we may see plainly enough the traces of the Master Builder, and seeing them, we cannot fail to admire and to praise: and *secondly*, to make my readers better acquainted, for their own amusement and advantage, with one of the most beautiful and interesting portions of a creation which is beautiful and interesting in all its parts. In carrying out these objects it will be my earnest endeavour to make myself intelligible to all, by using the simplest language that will explain with sufficient precision the truths which I desire to teach.

Every one knows a bird when he sees it, but every one is not able to explain how he knows it to be a bird: some would say, because it is covered with feathers, and indeed, that is a very striking character; but then the scales on a butterfly's wing are also very often called feathers, and are so like a bird's feathers, quill and all complete, that it is difficult to say they are not feathers. If, again, we say it has two wings, we say the truth; but then all flies and gnats have two wings, and two only. If we say a bird has only two legs, why, we have no more ourselves, and yet we are not birds. If we say it lays eggs, so do all reptiles, fishes, and insects. Indeed, it does seem very difficult to explain why a bird is a bird; no one has

the slightest doubt on the subject, but when we are required to explain the why and the wherefore, the matter is not quite so simple as it seems. The fact is, that in defining the different divisions in Natural History, we must consider a great number of characters, and not confine ourselves to *one*.

In attempting to distinguish birds from all other living beings, the character that has always struck me as of most importance, is, that a bird sits on its eggs, and converts them into young birds by the warmth of its own body: this is called incubating, and birds therefore are essentially incubators; and no other living creatures that I am acquainted with are incubators in the same sense of the word; no other animals, I believe, ever apply the heat of their own bodies to such a purpose. Birds have very warm blood; they are covered with feathers; they have two wings and two legs. This combination of characters is quite sufficient to distinguish birds from all other living things.

Now, regarding incubation as the most distinctive character of a bird, we may next very properly consider whether all birds manage their nest-building and incubating in the same manner; and we shall very soon find that they do not; take, for instance, a chaffinch, which builds a nest so cosy and soft, so solid and compact, so exquisitely neat, that it looks more like the work of some skilful mechanic who had served seven long years of apprenticeship to the trade of nest-making, than the production of two little birds who had never tried their beaks at a nest before. How wonderful is the structure! How wonderful the fact, that a bird can, without practice, and without example,—for recollect, it was not living when its father and mother built the nest in which it was hatched,—produce, by the simple exercise of a God-given instinct, so very beautiful and perfect a structure! Compare this nest of the chaffinch with the no-nest of the ostrich: this extraordinary bird, the largest of all living birds, lays its eggs on the bare sand, sometimes taking the trouble to scrape a little sand over them, but often leaving them exposed to the sun. Everyone must see what a contrast these two birds present. But I must now notice another fact: in proportion as the nest of the chaffinch is perfect, so is its young imperfect; it cannot see, it cannot fly, it cannot walk, it cannot even stand; indeed, it cannot eat, which is the very first function of life, but depends on the care of its parents, actually to put its food into its little gaping beak; it is quite naked, not having a fragment of clothing, either feathers or down; and, lastly, it could not even live were it not for the incessant care of one or other of its parents constantly covering it, and keeping it warm with the heat of their own bodies. But how about the young ostrich? It leaps into the world, armed at all points for the battle of life: it is completely clothed; it has an eye as keen as a hawk's; it runs with great swiftness, and it feeds itself. No contrast can be possibly more complete.

Now these two birds are what may be called types of the two great divisions of birds, for all birds resemble one or other of them in the condition in which the young are hatched. One division is called BIRDS WITH NAKED YOUNG (the scientific name is *Aves Gymnogenæ*); the other division is called BIRDS WITH CLOTHED YOUNG (the scientific name is *Aves Hesthogenæ*).

There are a great many other distinctions between the two divisions, besides this curious difference in the young ones. The gymnogenous birds are capital flyers: when you see a bird soaring like an eagle, or a hawk, or a swallow, or a heron, or a sea-gull, or especially like an albatross, which is said even to sleep on the wing, you may feel quite certain that its young ones are born blind, naked, and helpless; and there is another thing you may be also pretty sure of, and that is that the bird itself is not very good to eat. But when you see a bird that very much prefers to walk on the ground, such as the common fowl, the partridge, the quail, the turkey, the pheasant, the duck, the goose, the bustard, and the woodcock, you may be quite sure that such birds are clothed all over with down directly they are hatched; that they have bright and wide-open eyes; and they can feed themselves before they are an hour old; and you may be almost as positive that their flesh is pleasant to taste, wholesome, and nutritious. Now this knowledge is worth possessing: suppose you are in a foreign country, and know not a single bird you see, but you observe hawks, vultures, cormorants, gulls, terns, swallows, and hundreds of other birds that never seem to come and walk sedately and respectably on the ground, you may feel quite sure they are not worth powder and shot; they will never furnish you with a comfortable and wholesome meal: but if you see birds walking on the ground, and if, when they see you, they run away, and don't like to fly, just as you see poultry do in a farmyard, you may feel very certain that they will furnish you with good and wholesome food.

Having given this general definition of the two great divisions of birds, which I will in future call Gymnogenous and Hesthogenous, because there are no convenient English words so appropriate or descriptive, I will proceed to explain what tribes of birds are contained in each great division.

HESTHOGENOUS BIRD.

There are seven tribes of gymnogenous birds with naked young. First, the birds of prey, that is, such as hawks and owls (in science, *Accipitrina*); second, the sparrow tribe, including all the common small birds (in science, *Passerina*); third, the climbing birds, as parrots, woodpeckers, &c. (in science, *Picina*); fourth, the pigeon tribe (in science, *Columbina*); fifth, the gull tribe, including the petrels, terns, gulls, and albatrosses, (in science, *Larina*); sixth, the pelican tribe, including pelicans, cormorants, &c. (in science, *Pelicanina*); and seventh, the heron tribe (in science, *Ardeina*). There is really little or no difficulty in recollecting these seven tribes. Of the hesthogenous birds there are also seven tribes. First, the snipe tribe, of which the snipe, woodcock, and curlew are examples with which every one is familiar (in science, *Scolopacina*); second, the rail tribe, including the land-rail, water-rail, and moorhen (in science, *Rallina*); third, the plover tribe (in science, *Charadriina*); fourth, the ostrich tribe, including the ostrich, cassowary, emu, and kiwikiwi, none of which are inhabitants of Great Britain (in science, *Struthionina*); fifth, the poultry

tribe, including pheasants, partridges, and turkeys (in science, *Gallina*); sixth, the duck tribe (in science, *Anserina*); and seventh, the diver tribe (in science, *Colymbina*).

And here I must say a few words about scientific or technical words. I feel great contempt for that false science which seeks to enhance the merits of descriptive writing by the technicality and obscurity of the style. It is almost impossible altogether to exclude technical words and *italics* from the pages of Natural History; but, in the present day, he who uses them without absolute necessity, is either a pedant who wishes to display his newly-acquired knowledge, or a dunce who contrives under this cloak to hide his ignorance. Still scientific expressions must now and then occur, but should always be carefully explained: and as to Latin names of animals which at first sight perhaps appear useless, I will say a very few words. Leaving for a moment the Natural History of Great Britain, let us recollect that there are thousands, perhaps hundreds of thousands, of creatures, beasts, birds, reptiles, fishes, and insects, which never have had, nor never can have, English names; and how very unintelligible would a museum be if every animal were only labelled with the name it bears in the district where it is found: that name would be quite unintelligible to ninety-nine out of every hundred visitors. I am quite willing that those who object to Latin names of English animals should only speak or write of these tribes by the English names while they reside in England; but the advantage of learning the scientific or Latin name in addition, is this: it is intelligible in all parts of the world where naturalists reside. We know the partridge very well by that name in England, and really have no necessity for any other name while we are at home; but on the Continent the Dutch, French, Portuguese, Spanish, Italians, Germans, Turks, Russians, Swedes, Norwegians, and Danes, all give it a different name—a name of their own; and no one in these countries would have the slightest idea of what was meant either by the English word "partridge," or by the names used in any other country but their own. How different with the scientific name, *Perdix cinerea!* this is understood by every scientific man throughout the world. Therefore, although I would recommend every young naturalist to learn very perfectly the English name of every bird, I would also strongly impress on his mind the advantage of learning the Latin name also. Even in England the same English name is not kept to the same bird; thus the common hedge-sparrow has a different name in almost every county, and so has that commonest and most amusing of birds, the little blue tomtit.

I have said that there are flying birds and walking birds; and this, as already laid down, is a true and good distinction; but if we contrast birds with either quadrupeds or fishes, we shall find that each class has an element peculiarly its own; the land is for the quadruped, the air for the bird, the water for the fish. I would call attention to another fact—fishes are mute; quadrupeds are either silent, or make noises which excite fear or disgust; but birds are full of music, their voices are as delightful to man as to each other. Then how beautiful is their plumage! Just go to the British Museum: take no notice of the shape, that is the work of the bird-stuffer, but gaze on the colour of the feathers, that is the work of God. How ineffably glorious are the varying hues of the humming-bird, lighting up as you change your position with an effulgence that is really startling, and that no words can describe. Look at those trogons from Mexico! What a mass of lovely resplendent golden green, and what superb tails! Walk over to the cases that contain the pheasants, and what display and variety in their colour! Nature seems to have exhausted every combination of beautiful hues, and has far outstripped the art of man: all the taste, all the manufacturing talent and skill the world has ever witnessed, has produced nothing that will compare with the throat of a humming-bird, or the neck of a pheasant.

Neither my readers nor I may ever enjoy the spectacle of such birds assembled in their native wilds; that treat may never gladden the eyes and rejoice the heart of man, because some of these beautiful creatures come from the west and some from the east; they meet together only in museums and aviaries; and humming birds never in aviaries; the task of domesticating the humming-bird has yet to be achieved. Mr. Gould made the attempt, but failed. Seeing, then, how impossible it is to see these beautiful beings assembled in the woods, how grateful ought we to be for the opportunity afforded us in the British Museum of seeing their colours, so admirably preserved, of studying the formation of their beaks and feet, parts which the bird-stuffers cannot alter in form, but, alas! too frequently smear over with paint, and so entirely hide their original appearance. I recommend all those who begin the delightful study of birds, or, as it is called, of Ornithology, with this number of YOUNG ENGLAND, to verify every assertion that I make, by examining the objects themselves: there are now, happily, few towns in which this cannot be done.

(To be continued.)

ADDRESS TO CHILDREN.

BY THE REV. J. D. SMITH, OF DUBLIN.

WE have been attending a series of meetings, conducted by the above-named minister, at the Freemasons' Tavern. We were struck by the large number of young persons who appeared to be under deep religious feeling. We find from what Mr. Smith said, that a great many children, in Ireland, attend religious services in the Metropolitan Hall in Dublin, and that they are as much interested in those services and benefited by them, as are the grown people. We have obtained one of the addresses delivered on these occasions, and insert it for the benefit of our readers.

It appears the service to the adults was concluded by the hymn—

"I do believe, I will believe,
That Jesus died for me;
That on the cross He shed His blood,
That I might happy be."

When this hymn was sung, the benediction was pronounced, and those who wished to retire did so; a great number, however, remained with the children, who now gathered round Mr. Smith for their own address. After singing—

"Come to Jesus!"

he thus spoke:—"My dear children, since we met here last Tuesday, many of your companions, in these times of awakening and refreshing, have gone again to school. When they were here last Christmas, the Lord blessed them; and though many doubted and shook their heads at the idea of a work of grace in a *child's* heart, thank God they returned to us at the end of six months, delighted in Jesus, and happy in attending those meetings: but they are now gone again to school, and I want you to pray for them, that God may bless and keep them, and never let them wander beyond the reach of His own Shepherd-arm. And it may be—indeed, it is very probable—that some of them will never return again. I see many grown people here, with the garments of mourning on them; perhaps they have lost a child—a son, or a daughter; or, perhaps, they have just been weeping at a brother's grave. Ah! dear children, do you ever think that some day or other some one will be weeping for *you?* You will be *dead*—passed away—gone into eternity. I will tell you a story. I read it from the pen of a clergyman. Well, whenever this clergyman wanted to gather his thoughts up for preaching or writing (for he was a literary man), he just left the vicarage, and strolled into the old church-yard close by. Sometimes he would sit down on a tomb to think; and one day, as he strolled in, whose tomb do you think he sat on? The preceding rector's—that is, the clergyman who occupied the parish before him. He often read what was

written on the tombs. On this occasion he saw that it was fifty years since his predecessor had died. So, you see, the individual we are speaking of was not a young man. As he sat there, a little girl who lived in his parish came up to him, and began to prattle as little ones do. She was only an infant—just at that age when they delight to talk about anything and everything; and as the clergyman lifted up his hand to bless the child, the shadow of it fell on his predecessor's tomb. The child went to lay hold on the shadow, then looking from the hand on the tomb up to the hand of the rector, and putting her own fat little hand upon it, she said—'Was your hand always as old as it is now?' She asked this question with all the simplicity of an infant. The minister thought of the *three* hands—of the little child's; then of his own, what it had done—all the miles of paper it had passed over in manuscript; and then of the third hand, which had been fifty years mouldering in the grave. 'Sir,' she said, 'was your hand always like that?' 'No, my child,' said he; 'this hand was once as small, as fat, and young as yours.' And then he related and told how even she herself, if she lived, would get old and withered too. Was not this a sad yet pleasant story? Children, dear children! we may all learn a lesson from those three hands. Dear children, though your hands may be soft and young *now*, before many days pass over, you may be where the rector now lies—in the tomb; and when you are fifty years there, where will your soul be? Is not that a solemn question? If you are a child of God, a disciple of Jesus, you need not dread the grave. Suppose you had a Sunday coat; would you not at the end of the day fold it up and put it carefully by till you wanted it again? So the believer in Jesus, when he dies, puts aside the material garment of the body. The grave is the wardrobe of the saints, where their garments are laid up till the morning of the just, when they will be brought forth on the true resurrection Sabbath, all beautiful and fresh, fit for the pavilion of the King, to be worn at the court and on the hills of heaven; and though some dear little believer in Jesus should lay aside that garment at five years of age, and though it lie in the grave five hundred years, yet it will exactly fit her on the morning of the resurrection. And your fathers and mothers, if in *that* resurrection, will know it too, for your beautified body will preserve its identity, as said Jesus to Martha and Mary, 'Behold *thy brother*' (the same brother) 'shall rise again.' And only think, that little children's bodies will be like the body of Jesus, and they will wear, each one, a crown. A little girl dreamed one night that she stood within the gates of heaven, and saw a heap of crowns; but when she put one on her head, and found it was a great deal too large, she began to weep. An angel seeing her, came and asked her why she wept. She told him that all the crowns were too big *for her*. You need not weep said the angel, for we have all sizes here. And then he showed her a little one, and she put it on her head, and it just fitted her, and she felt so glad that she might have it for her own. But, alas! when, in the morning, she awoke, she found it only a dream. Yet, dear lambs, it is a reality—a blessed reality—that by-and-by, you that love Jesus—if you have believed in Jesus—you will not only have a glorious resurrection body, but *a crown;* and a crown that was made for you—one with no grey hairs, or locks thinned by age, underneath. No more sin—no more sadness there; but eternal joy and peace for ever, and for ever, and for ever. 'The ransomed of the Lord shall return, and come to Zion with songs and everlasting *joy*' (a *crown* of joy) '*upon their heads*, and sorrow and sighing' (as having no place there) 'shall flee away.'"

INFORMATION FOR THE PEOPLE.—Mr. William Chambers, of Glenormiston, recently erected a post at the opening of an attractive walk, bearing a board, on which was inscribed—"No thoroughfare this way. Trespassers will be prosecuted with the utmost rigour of the law." A wag, during the night, painted on the other side of the board—"Chambers's Information for the People."

ON A FEW OF THE PRINCIPAL POPULAR DELUSIONS.

By these are meant the great impostures and deceptions that at different times have ensnared and led astray the people.

The love of Gold—that metal considered by so many to be the great desideratum, and the chief means of procuring happiness, induced men to try if by any means they could manufacture it for themselves, as it was so difficult to obtain it in any other way. Accordingly, many persons devoted themselves to the study of *Alchemy*. They collected a small portion of every substance from the earth, the air, and the sea, and put them all into an earthen pot, to melt, together over the fire. The pot was often marked on the outside with the symbol of the cross, and was hence called a crucible.

This they used to watch very intently, in the vain hope of discovering a little of the precious metal at the bottom.

Another deception, which used to be very prevalent in England, was that of *Remarkable Prophecies*, delivered chiefly by old women, such as the famous Mother Shipton.

It was once predicted by some impostors, that on a certain day, which they specified, the waters of the Thames would overflow their banks, and all London would be drowned. This caused great alarm to many of the inhabitants, who betook themselves with their goods to the fields and villages in the vicinity of London, some days before the expected rising, and there awaited the catastrophe. Others, however, though half afraid the prediction might be true, were curious to see the end of it, and they remained in the city.

On the morning of the day which was to decide the fate of the metropolis, the banks of the river were crowded with eager spectators. They waited till noon, but nothing occurred, and nightfall found the river flowing onwards with its usual placidity.

The people, agreeably disappointed, returned to their homes, and the prophets said in their defence, that they had made an error in their calculations, which would place the date of the inundation just one hundred years later, when of course they would not be living to be ridiculed, should their prophecy a second time prove false.

The belief in *Witchcraft* was also very strong in England many years ago. If any calamity happened, it was almost sure to be attributed to the machinations of some old woman in the neighbourhood, who was suspected to be a witch. The usual punishment of witches, when their guilt was, certain was, being burnt alive, but if it was doubtful, they were subjected to an ordeal by fire or water. The fire ordeal consisted in walking barefooted over red-hot ploughshares, and the ordeal by water in being thrown, bound, into a pond or lake.

If by any chance the unfortunate victim in either of these trials escaped without injury, she was considered guiltless by her ignorant tormentors, who believed that Providence had interposed by a miracle, to protect the innocent. But of course, in the majority of instances, the victim perished or was much hurt, which was considered a proof of her guilt.

Haunted Houses used to excite great terror, when superstition was more prevalent than it is now. Old and dilapidated mansions often had the reputation of being haunted by ghosts. People affirmed that they had seen skeletons walking about the chambers at the dead of night, clanking heavy chains after them, &c. Sometimes unaccountable sounds were heard to proceed from these houses, which were generally caused by rats and mice, or the wind whistling through crevices, but which were supposed to be uttered by departed spirits, who were wandering uneasily about.

However, as superstition is now fast disappearing in England, owing to the spread of education, we hear scarcely anything of haunted houses, still less of witchcraft, and nothing of alchemy, though there seems still to be a mania for predictions and fortune-telling.

THE RAG BRIGADE.

THE Right Hon. the Earl of Shaftesbury is at the head of this new movement, which is a sufficient guarantee to the public that it will be conducted wisely and well.

We believe Mr. Herring, the wholesale stationer of Watling Street, by some letters in the *Times*, is the originator of the scheme.

A most able committee is formed to carry it out. We wish them great success. One of our friends died not long ago in London, worth certainly over 100,000*l.*, *it is said* a quarter of a million, who laid the foundation of his fortune by collecting and selling old rags, &c.

The object of the promoters is to furnish suitable and remunerative employment during the day-time to the elder boys of our Evening Ragged Schools. Their days are now for the most part spent either in idleness or in irregular and precarious pursuits, and thus the good influences of the Night School and of the Sunday School are largely frittered away. On the other hand, the daily waste in this great metropolis of cast-off and cast-out materials which are useful for manufacturing and other purposes, is immense, and this has seemed to suggest the proper field for the employment of the boys. Rags of all kinds, waste paper, (envelopes, old letters, &c.,) and worn and broken metal, are increasingly important elements in our national industry. During the month of October last no fewer than 7,350 bags of *foreign rags* were offered at a public auction in Liverpool alone. And again, bones and other refuse kitchen-stuff, which are now frequently surreptitiously disposed of or altogether wasted, are valuable items in our commercial economy.

It has been resolved, therefore, to form a band or brigade of carefully-chosen boys, who, under proper superintendence, will be employed in the earlier part of every workday in calling periodically at our homes and offices to *purchase*, according to a regulated tariff of market rates, the refuse material we have to offer them. They will have covered trucks, scales and weights, and receipt books, and will pay ready money for their purchases. During the first few months each party will be under the care of an adult superintendent, for the better satisfaction of the householders and others at the outset, and for the instruction of the boys in their duties.

A Brigade Bank will be established, and no boy will be raised to the position of "Collector," and entrusted with money for the daily trading payments, till he has at his credit in this Bank a sum sufficient to guarantee the amount of his daily dealings.

Store-rooms will be obtained, where, under a paid Manager, the boys will sort and prepare the stuff for sale. The disposal of it will be effected either by auction, or in such other manner as will best secure a fair market price.

The Boys will be provided with a suitable uniform, the cost of which they will defray by instalments. They will from the first be paid fixed weekly wages and a percentage upon the value of the stuff collected, and the results of the trading beyond what may suffice for these wages will be apportioned to the working expenses of the concern, provision for its extension, and the further permanent assistance of the boys themselves.

The practicability of training this class of boys for useful occupation has been demonstrated by the success of the Shoe-Black Brigade. It is believed that the Rag Brigade will be fully as beneficial as that important movement, by giving an honest direction to the trading propensities of the boys, and by forming in them habits of industry, and that thus it will help to qualify them for our shops and warehouses.

The Shoe Black Brigade was one of the new features of the first Exhibition year; this Rag Brigade will be a feature of the second, and it will be to our visitors a mark of the vitality and progress of our moral and benevolent institutions.

It is calculated that 500*l.* will be required to start it, and it is proposed to raise that amount by benevolent contributions; but it is expected that the Brigade will soon not only be self-supporting, but will provide for its own gradual self-extension.

The Committee of Management appeal with confidence to the public for this sum;—and further, and not less earnestly, they ask of all householders and merchants a kindly encouragement to the boys upon their rounds.

LIFE.

LIFE in the case of a being that should be certainly immortal, might be considered as an absolute possession. But with us, life is expenditure. We have it, but as continually losing it; we have no use of it, but as continually wasting it. Suppose a man confined in some fortress, under the doom to stay there till his death; and suppose there is there for his use, a dark reservoir of water, to which it is certain none can ever be added. He knows, suppose, that the quantity is not very great, he cannot penetrate to ascertain how much, but it *may* be *very little*. He has drawn from it by means of a fountain a good while already, and draws from it every day;—but how would he feel each time of drawing, and each time of thinking of it? Not as if he had a perennial spring to go to; not, "I have a reservoir,—I may be at ease." No! But, "I had water yesterday, I have water to-day;—but my having had it, and my having it to-day, is the very cause that I shall *not* have it on some day that is approaching. And at the same time I am compelled to this fatal expenditure!" So of our mortal transient life! And yet, men are very indisposed to admit the plain truth that life is a thing that they are in no other way possessing, than as necessarily consuming; and that as even in this imperfect sense of possession, it becomes every day less a possession! Nay, we sometimes see that the longer a man has been in the expenditure of it, the more securely he seems to feel it a property positive, entire, and his own.

FOSTER.

Amusements.

ROUND GAMES AND FORFEITS.*

By round games are meant games in which the play goes all *round* the party. They may be played with *forfeits* or otherwise, as the party may agree upon beforehand.

THE TELEGRAPHIC MESSAGE.

If ordered to send a message round the room by Electric Telegraph, you arrange all the players in a circle. You then whisper whatever you like in the ear of your next neighbour, who repeats it to the next, and so on round the circle, till the message comes back to you. You are then compelled to declare aloud if it has

* Collected from various authors; some of them are altered from "Round Games for all Parties," a book published by Bogue, Fleet Street.

been faithfully sent: and, if not, where it has been altered. Some alteration may generally be relied on, from the number of speakers the message has to be intrusted to. This is a very good way to test the correctness of your friends in *repeating what they hear*.

THE FEATHER.

One of the players takes a bed-feather, a bit of cotton down, or any light substance coming under the comprehensive denomination of "fluff," which he tosses up in the centre of the assembled circle (who should be seated as closely together as convenience will admit of). He then blows upon it to keep it floating in the air. The individual to whom it comes nearest does the same in order to prevent its falling on his knees, or, indeed, any part of his person—an accident which would subject him to the payment of a forfeit.

SHADOW BUFF.

Here the eyes of the practitioner are not bandaged. It is, however, the object of his comrades to make them of as little use to him as if they were.

A sheet or white table-cloth is hung upon a screen, after the manner of preparations for a magic lantern. The blind man (as we may call him for the sake of distinction) is seated on a stool, low enough to prevent his shadow being thrown on the sheet before him. At some distance behind him a lighted candle is placed, all the other lights in the room being extinguished.

These preparations being concluded, all the members of the company form themselves into a sort of procession, and pass one after the other between the blind man (who is not allowed to turn his head round as much as an inch) and the table whereon the candle is placed. This produces the effect intended. The light of the candle, intercepted by the forms passing before it, throws on to the sheet a profile shadow of each.

As these shadows pass before him in succession, the blind man is obliged to declare aloud the name of the person to whom he imagines the shadow to belong; the mistakes he falls into causing considerable amusement among the players.

It is scarcely necessary to say, that each, in passing before the light, takes all possible pains to disguise his appearance, his height and his walk, so as to prevent recognition.

FORFEITS.

Some difficulty is often found in fixing upon forfeits —we give a few.

BLOWING OUT THE CANDLE.

A candle is passed rapidly backwards and forwards before the mouth, the person paying the forfeit has to blow it out during its passage. This is a more difficult feat than may be imagined.

THE SLAVE.

This consists in doing what is commanded you by each member of the company, without speaking a word.

THE SPIRIT OF CONTRADICTION.

Do the direct contrary to what the different members of the company order you to do.

TO KISS YOUR OWN SHADOW.

Place yourself between the light and the person you intend kissing, on whose face your own shadow will be shown.

QUESTIONS TO BE ANSWERED.

[The answers must be written in a clear and distinct hand, and forwarded by post to the Editors on or before the 15th day of the month.]

Which was the largest Druidical Temple in Europe, and where was it found?

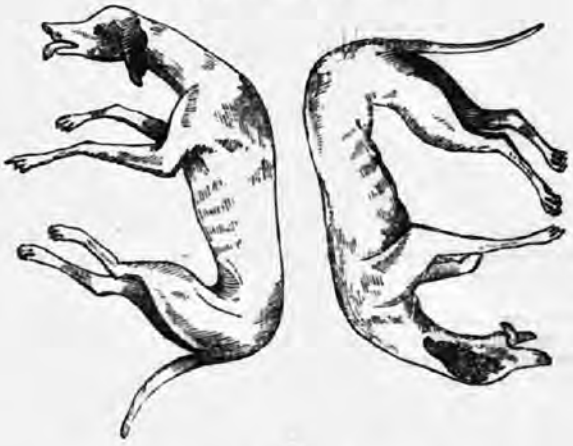
Can life be defined? And if so, how would you define it in contrast with inert matter?

In the worm of the beetle, which is the first part that arrives at perfection? And why?

In the human frame, which member is it that distinguishes man from all other animals? And in that member, which is the part most important to man himself?

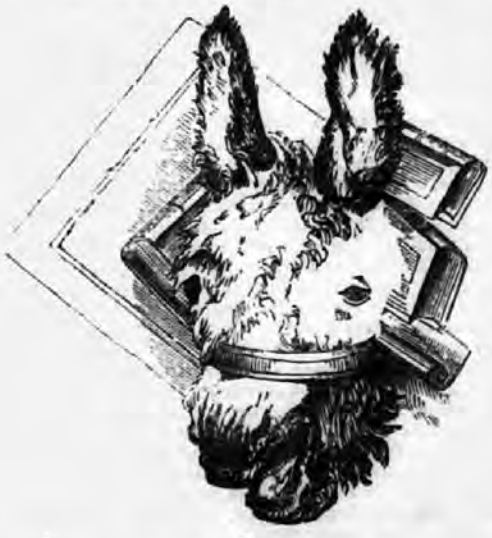
In drawing a contrast between the proud man and the humble, how would you describe and distinguish the one from the other?

PICTURE PUZZLES.



I.

THESE dogs you say are dead:
We say, nay, nay, nay;
Give them four stripes and you'll
Make them run away.



II.

By one mark of the pen, this head, if you can,
Pray change to the face of a learned man.
Come, quickly produce the metamorphosis,
By telling us where the learned man's nose is.

TO MY MOTHER.

THOUGH across the world I chance to roam,
And traverse the breadth of the ocean's foam;
Though continents stretch 'twixt me and home,
I will always think of thee.

Though up the ladder of fame I climb,
Astonish the world by thoughts sublime,
As ages roll on their course through time,
I will ever think of thee.

Nought shall sever my heart from thee;
As the ivy clings to the forest tree,
So ever will cling my heart to thee.
I will always think of thee.

Whatever my lot, on whatever ground,
Full of remembrance, a hallow'd sound,
At "Mother" my heart will always bound.
I will ever think of thee.

Nought shall sever my heart from thee;
When the sapling becomes the wither'd tree,
Mother will still be mother to me.
I will always think of thee,
I will ever think of thee. R. B.

GARDENING.

BY GEORGE M. F. GLENNY, JUN.

THIS month we propose to say a few words on the construction of economical plant protectors, for as there are many floral enthusiasts who could not command a very large sum for the erection of a greenhouse, it is the more necessary that I should point out how they will be enabled to shelter their plants through the winter for a very trifling outlay, which may be accomplished in the following manner. The first and best method is to get a common garden frame made to whatever size you think proper, either with one, two, or three lights; but instead of having them glazed, as is the usual custom, have some cheap calico stretched upon the frame, quite tight, and afterwards made waterproof by means of a composition, for the making of which we have given directions further on.

The next consists of six stakes being driven into the ground in a circle, at equal distances from each other, and two hoops, whose size and diametrical proportions must depend entirely upon the dimensions of the plant or tree you desire to surround—one to be nailed within an inch of the top of the supports, the other about half way down, and afterwards covered with the waterproof calico.

The third and last, though by no means the least important, is not only simple, but very useful for small or large square beds.

It consists of a sufficient number of arches, which may be formed with hoops from an old tub, which should be opened, pointed at each end, and thrust into the ground at the extreme edge, or outside of the bed, at about a foot apart all the way down. Then place a straight stick or lath on the top of these arches, and one on each side of them, about twelve inches from the ground. Tie each arch securely to these sticks, and you will have a frame strong enough to support the waterproof calico, taking care, however, that in both cases, the material used as a covering reaches the ground, where it will have to be secured, as, unless it is, the plants would be as well off without any covering at all.

You could but lose them if left entirely to the mercy of the weather, and you would be sure to do that if you neglected the above caution, besides having the mortification of knowing you had gone to the trouble of making a frame, which for the want of a little forethought failed to produce the desired effect, namely, the protection of your favourites.

To give them air and light you must contrive to have some portion of the coverings movable, for which purpose the top is preferable. Open these doors, or windows, as I may term them, whenever the weather will permit, but close them at night, or in fact as often as you think they are in danger of taking harm.

Here is a receipt for a first-class waterproof dressing, which I have frequently used, and found efficacious, but those who do not feel disposed to manufacture their own will be able to obtain any quantity already prepared, of Mr. Brigden, Seedsman, &c., of King William Street, City, E.C.

However where you feel inclined to make it yourself, get some thin cheap calico, and after having stretched it on your frames (or, if required, in a piece on the ground), quite tight, then cover it, by means of a brush, with a composition made of two pints of pale old linseed oil, one ounce of sugar of lead, and four ounces of white resin. The sugar of lead is to be first of all ground with a little of the oil, after which add the remainder and the resin, and mix these ingredients well together while warm.

Examine dahlia roots in order to ascertain whether they are suffering from damp, and should you discover such to be the case, lose no time in potting, and setting them to work.

Should you require a number of young plants for bedding out by-and-by, it will be as well to set them to work at once by means of gentle heat, whether they are suffering or not.

So long as the weather keeps mild roses may with safety be planted, provided their roots are protected by mulching with a good thick covering of rotten manure.

Examine the various plants in pits and frames for the purpose of removing dead leaves, seeing that they are kept sufficiently dry, and destroying vermin of every description by frequent fumigations of tobacco.

Give auriculas plenty of air whenever a favourable opportunity presents itself, and only just sufficient water to keep them from flagging.

Where the mild weather has encouraged pansies to grow they will, as a matter of course, be more susceptible of harm, and therefore will require twice the care, so that they do not receive injury from frost should it make its appearance, which is not at all unlikely in our changeable climate.

Air should never be withheld from carnations in frames, as a confined atmosphere is the principal cause of mildew, which they are at all times predisposed to. Water them in the morning, provided the weather is fine, that there may be no risk of a frost. The same directions will apply likewise to picotees and pinks.

CORRESPONDENCE.

EXCHANGE OF INSECTS AND EGGS.—George Stedman, Lindfield, Sussex, has several species to exchange either for birds, eggs, or insects. Write to him.

BRITISH SHELLS.—W. J. has specimens of Galeoma Turtoni, Solecurtus Candidus, Mactra Helvacea, Psammobia Cœstulata, Lima Hians, Donax Politus, Lustraria, &c., &c., to exchange for other British marine, land, or fresh-water shells. Address, W. J., care of S. Barbet, High Street, Guernsey.

DECORATIONS FOR BIRD CAGES.—A correspondent will be obliged by some one telling him how to dye moss and grass a good bright green; also how to make artificial snow and rock to decorate Bird Cages.

HOW TO KILL INSECTS.—Sir, I use an agent, in my entomological pursuits, which I have not seen mentioned in any of the Entomological papers, and which may be of great use and interest to your readers. This is "Arseniuretted Alcohol." It is the most effective solution for killing the Lepidoptera or Coleoptera, of any that I have tried (among which are *oxalic acid*, *prussic* or *hydrocyanic acid*, benzoin, corrosive sublimate, and, of course, the well-known laurel leaves and hot water, cyanide of potassium, and lately chloroform.) Arseniuretted alcohol does not deprive specimens of colour, or stiffen them unnaturally, and if it has any other effect upon the specimen it is *beneficial*. For instance, if there is any quantity of animal tissue, membrane, or skin (as, of course, in all Lepidoptera, or Coleoptera), it actually undergoes a mild and effectual process of tanning, something the same effect as corrosive sublimate has. It has a perfectly lasting effect upon all specimens in protecting them from larvæ, maggots, mites, or vermin. It is, moreover, the best agent for cleansing as well as permanently protecting specimens from vermin when once attacked. I shall be very glad to give any one full particulars concerning the best way of preparing it, and the most approved method of using it, with other information, if I could ascertain their address, through correspondence by means of *Young England*.—PHARMAKON.

RELAXING LEPIDOPTERA.—We have received many letters on this subject, so important to young naturalists, who wish to preserve and arrange their specimens. We make a few selections. "Put some sand (silver sand is the best) in a plate or other vessel, and well saturate it with water. Pin the insect

intended to be re-set on some cork, which place on the sand and cover over with a bell-glass or jar. This plan will do for most *Bombyces* and *Noctuæ*, which take from one to three days to relax according to size; *Geometræ* and *Pyrales* take three to twenty-four hours, and *Tortrices* and *Tineæ* half an hour to three hours. Clear wings can also be relaxed in this way. *Sphinges* and the larger *Bombyces* require to be treated as follows:—Put some moss, *off trees*, in a tin box about four inches deep, place the *Sphinx* or *Bombyx* (as the case may be) on it, cover over with more wet moss, close the box and leave it one, two, three, or four days, as the insect may require. I have relaxed a 'Large Elephant' in one day, and a 'Death's Head' in three days, by this plan. Green moths cannot be relaxed without injury, as the damp destroys the colour. Other orders of insects can, I believe, be relaxed with the sand (Hymenoptera for certain); I should think the moss would suit Coleoptera the best.—PERCY C. WORMALD, Kilburn."

"I will give you my method, it is the best I have found out; in fact, I never set any in the summer time, but reserve for the winter, when I have more time. I get a box made of the following dimensions: nine inches long, seven inches broad, four inches deep, and then line it inside with plaster of Paris of about three quarters of an inch in thickness. That is easily done by mixing about half a basinful of plaster with water, not too thin, and then pour it into the bottom of the box and let it set; then mix about the same quantity again, and hold a strip of wood to the side of the box and pour the plaster into the side and let that set, and so on all round the box. This box will last an Entomologist all his life. When he has any to relax, get a piece of cork and stick as many insects on it as he can; fill the box with water and let it stand about five minutes; then pour the water out again (it will have absorbed as much moisture as is required), put the cork with the insects on into the box; put a bit of wood over the top of the box, and let it stand for two or three days, and they will set just the same as if just caught, if not better. A few trials, and he will see the efficacy of such a box, and the cost is a trifle—say about eightpence.—JOHN CHILD."

"The following method of relaxing moths I have often practised and with the greatest success. Procure a preserve jar, half fill it with sand, pour water on the sand and let it settle; then pour off superfluous water, fix a piece of blotting-paper on the top of the sand, and stick your moth into it; cover the whole with a plate, and in two or three days, according to the size of the insect, it will be ready for re-setting.—HIAWATHA, Loughborough."

"I have found that holding them over the steam from a tea-kettle has softened the joints.—HENRY BEVIS, Red Lion Square."

"The best method of relaxing moths is, to take some fine sand in a saucer, and mix it with a little water to make it damp; then place the insect on a piece of cork, making a hole in the sand to receive it, and leave it there for about twenty-four hours.—ARCTIA."

GREASE OUT OF CLOTH.—Sir, Will you favour me by stating what will take grease and stains out of cloth?—J. P.

*** Spots of grease may be removed by a diluted solution of potash, but this must be cautiously applied, to prevent injury to the cloth. Stains of white wax, which sometimes fall upon clothes from wax candles, are removed by spirits of turpentine, or sulphuric ether. The marks of white paint may also be discharged by the above-mentioned agents.

THE SCURVY.—Sir, Can you kindly inform me what medicine to take for scurvy?—T. NICHOLL.

*** Go to a doctor. Cleanliness and mild beverages are great helps.—ED.

GEOLOGY.—C. R. Fagg will not be disappointed.

A NEW SUBSCRIBER.—None whatever.

BIRDS' EGGS.—Any of the raptores will be bought; also all kinds of corvus, woodpeckers, cuckoo, and wrynecks; together with shrikes, flycatchers, tits, wagtails, cross-bills, gallæ, finches, and exceptional ones as regards size or colour of any bird. Write to J. Binns, care of J. S. Newsome, Printer, Batley, Yorkshire.

FOREIGN POSTAGE STAMPS.—Sir, I have several duplicates of foreign postage stamps, of which I shall be glad to make an exchange with any other correspondent, per post.—L. BARON, Over Darwen.

THE NAME OF THE QUEEN.—Sir, Please can any of your readers inform me in your next Publication what was the surname of the Prince Consort, and did the Queen at her marriage take his name, as usual in other cases?—J. CROUCH.

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YOUNG ENGLAND.

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LORD PALMERSTON.

ENGLAND has long been rich in great and illustrious names; and among these the first place belongs to her Statesmen. The history of empires is but the history of men whose influence has, more or less, determined the destinies of their country. Although but a hundred years have rolled away since CHATHAM shook the British Senate with the thunders of his eloquence, what a constellation of great men does the page of our national history exhibit within that period! Beginning with this most distinguished of English Statesmen, who, regardless of personal considerations, and superior to a selfish and sordid ambition, ever kept before him the interests of our common humanity as the most sacred duty of a public man, we might pass from name to name in a long and bright succession, till we came to GRATTAN, whose fame stands higher for his public services than that of

LORD PALMERSTON.

almost any statesman or patriot in any age of the world; or we might begin with WILBERFORCE, whose genius was heightened by his virtues, and whose eloquence partook of the spirit and the inspiration that touched Isaiah's lips with hallowed fire, and call up to remembrance the men who in his own time, or since he passed away, performed the most conspicuous part on the great wide stage of public life, till we come to the lamented PEEL, whose recognition and adoption of the principles of free trade, whose preference for the system of direct taxation, whose conviction of the duty and the advantage of a peaceful policy by his diplomatic negociations and arrangements, whose manly and business-like qualifications for office, and whose patriotic devotedness to his country, rendered his ministry one of the most memorable in our modern history—or, to the equally-lamented

HERBERT, who, at the moment he was taken from us in an early manhood, gave promise of rising to the very pinnacle of political power and influence, and who, on his elevation, would have blended with that power the wisest and the purest benevolence.

But these are among the mighty dead; and, as we are not wanting in living examples, we might refer to LYNDHURST, who, to the most profound professional learning, and the widest legal experience, unites constitutional knowledge, political sagacity, and the power of debate in a rare degree;—to BROUGHAM, whose prodigious powers make us proud of him;—to DERBY, of whom it may be said, as was said of Canning, that "if ever man was made for the service and the salvation of a party," he has been raised up for that purpose;—or to RUSSELL, on whom it devolved to carry out the principles of Free Trade, Parliamentary Reform, and National Education, and who stands irrevocably pledged to the sacred interests of civil and religious liberty—interests to which we feel sure he will prove faithful amid the conflict of parties and in every crisis of our national history;—but from all such reference we forbear.

There is one Statesman, however, who, more than any other, is now filling the eye of the public, and to whom the whole nation is prepared to offer its richest ovation. He has won for himself a name and a renown which deserve more than any Roman triumph, and which no Roman triumph could express.

LORD PALMERSTON, who derives his title from a place of that name in the county Dublin, in Ireland, was born October 26, 1784, and is descended from an old English family. In common with many of our public men he went to school at Harrow—which may well be proud of him—whence he went to Edinburgh, where he prosecuted those studies which he afterwards perfected at the University of Cambridge. At no great interval from this, he entered on public life, and for nearly half a century he has been a member of the British Senate; has occupied a great variety of official positions; has gathered strength and influence with the progress of years; has built up for himself a European reputation; has made his name to be feared and honoured among all civilized nations; and, standing as he does at this moment on the very pinnacle of power, is the object of his country's pride, admiration, and confidence. Many are the laurels which he has reaped on the field of politics, but never did a richer wreath mantle his brow than now.

If the end of all government be the well-being of the people, then any government which does not exist for this end is not worthy of existence—no, not for one hour. Surely "they need feel no alarm at the progress of light, who defend a limited monarchy, and support popular institutions;" but power otherwise employed will rebound with destructive force upon its possessor, and trample his glory in the dust. If anywhere, it is in a national legislature that we should look for wise, virtuous, and enlightened men; and if in any man, in the head of the executive council, that we should expect to find capacity, integrity, firmness, and energy—a man equally removed from prejudice and caprice—from personal considerations and selfish ends. Now if no other national assembly can be compared with our British Parliament, we know of no man who could, without damage, be placed side by side with Lord Palmerston for his wisdom and ability as a Statesman. We speak not of his early education and mental learning—of his intellectual power and various attainments—of his versatile genius and his wonderful facility of making the best of every occasion. Nor do we speak of him as if we were prepared in all cases to adopt his principles, or endorse his opinions, or approve his policy; but we refer to him simply as a Statesman, whose highest honour is, that he has not only served, but saved his country in some of its most serious crises; has laid deeper the foundations of our national strength and greatness; has given greater stimulus to our industry; has opened new channels for our commerce, which is now stretching out "its hundred hands to grasp the wealth of earth and ocean," and is turning "the sands of the desert into gold;" has lent his name and his influence to all the nobler institutions of the land; has shed new light and gladness over the homes of the people; has done more than any other man, with the exception of the late lamented PRINCE CONSORT, to insure peace on earth, and inaugurate the brotherhood of nations; and who, in almost every act of his public career, has given us the undeniable proof that his country is no less dear to him than life itself.

Of his capacity no one has even the shadow of a doubt. He has always proved himself equal to deal with any question, however subtle, entangled, or perplexing, and to face any difficulty that had to be met and overcome. With his mind enlightened and informed, he has shown sagacity and wisdom in the practical application of his knowledge. While there has been no halt, neither has there been any precipitancy in his conduct. While there may be promptitude without haste, so there may be integrity without compliance with every popular demand. If the people will have a chief or leader, they must give up their own will to his; and if there be no room to question the honesty of his purpose, or the purity and the beneficence of his aims, his will must become the rule of their action. Otherwise he is not competent either to direct or to lead, and from the pedestal on which he stands, his fall will be speedy and certain. It is neither show nor semblance that will do for these days of earnest life and self-sacrificing work. And is it not the voice of this whole nation, that Palmerston is a man whose integrity is equal to his sagacity, and his energy not a whit behind his capacity? If true wisdom reveal itself in knowing when and how to act, then it is the part of true courage to seize upon emergencies and the crises in a nation's history, as the occasions for its higher and more impressive manifestation. And here our chief has once and again given practical proof that he is not "a reed shaken with the wind"—the sport and the play of every opposing influence. He has had to maintain the dignity of his country at home and abroad, in the midst of almost unprecedented difficulties, and in the face of the most determined antagonisms; and yet in no one instance has he fallen below the occasion. He has gathered strength from opposition; and, skilled in the weighing of probabilities, he has, like the immortal Chatham, learned to trample upon impossibilities. His attitude towards America, owing to the recent insult offered to the British flag, attests this fact. How calm, yet how manly! How pacific, yet how resolute! His conduct was in every sense worthy of the Englishman, the Statesman, the Patriot. That one single deed is enough to give immortality to his name; and for that act alone England owes him a debt of everlasting gratitude. We thank Heaven, on behalf of our gracious Monarch, that in this, the season of her bereavement and comparative isolation, there is such a man to head her council, to direct the affairs of the nation, and to maintain the honour of the country against all comers. With loyal, patriotic, devoted hearts, we say—God bless the widowed Sovereign, and spare the venerable Minister!

CALENDAR FOR FEBRUARY.

The sun peeps through the window pane,
Which children mark with laughing eye,
And in the wet street steal again,
To tell each other Spring is nigh.

Then as young hope the past recalls,
In playing groups they often draw,
To build beside the sunny walls
Their spring-time huts of sticks and straw.

The Sun.

The Sun passes from Aquarius to Pisces on the 18th. It may be well to find its place on the globe.

The Moon.

First quarter	11	min. past	8	on the evening of the	6th.
Full moon	6	,,	5	,,	14th.
Last quarter	17	,,	2	afternoon	21st.
New Moon	49	,,	4	,,	28th.

The Planets.

MERCURY is in Aquarius at the beginning and in Capricornus at the end of the month.

VENUS on the 1st, at about a quarter to six, may be seen very near the Moon.

JUPITER is in Virgo.

SATURN is also in Virgo. It will be difficult to tell which more to admire.

At the beginning of the month Jupiter will rise at about three-quarters past eight, and Saturn at about a quarter past eight; that is, Jupiter will be above the horizon half-an-hour before Saturn; and at the end of the month they will rise two hours earlier, and appear beautiful objects throughout the night.

The Earth; the earliest time to look for Birds and Plants, but they may not be seen for weeks after.

FIRST WEEK.—Barren strawberry, laurustine, butcher's-broom flower—Blue titmouse chirps—Brown wood owls hoot—Hen sits—Marsh titmouse begins his two harsh sharp notes—Gossamer floats—Fox smells rank.

SECOND WEEK.—The yew-tree flowers—Turkey-cocks strut and gobble—Yellow-hammer sings—Green woodpecker makes a loud cry—Raven builds—Brimstone butterfly appears.

THIRD WEEK.—Coltsfoot, pilewort, daffodil, and willow flower—Rooks build—Partridges pair—House-pigeon has young ones—Goldfinch sings—Missel-thrushes pair—Field crickets open their holes—Common flea appears (we wish it didn't).

FOURTH WEEK.—Sweet violet, filbert, and apricot flower—Frogs croak—Stone Curlew clamours—Ring-dove coos—Toad appears—Frogs spawn.

[NOTE.] In our last Monthly calendar "the trumpet honeysuckle" should have been noticed as throwing out its leaves, not that it flowers.

Fishing.

Last month you might occasionally lay hold of a trout or grayling. A chub might now and then be taken with cow or sheeps' brains; a greedy jack or a strong lively roach with paste; but there is more chance for the angler in February. In warm places you may now succeed with chub, roach, carp, perch, jack, and eels. You may take flounders in tidal rivers. Walton recommends for fly-fishing, in January, a red-brown fly, and a very little bright dun gnat for February; he directs you to use the red-brown, plain hackle, or Palmer fly, the lesser hackle, the great hackle, the great blue dun. The best general rules are contained in the following lines:—

"A Brown red-fly at morning grey,
A darker Dun in clearer day;
When the summer rains have swelled the flood,
The Hackle red and worm are good.

"At eve when twilight shades prevail,
Try the Hackle white and snail:
Be mindful aye your fly to throw
Light as falls the flaky snow."

SIR JOHN HAWKINS.

"STRONG DRINK."

LET us see where he lives, goes, and what he does. The first is soon answered; for you know he is to be found in the distillery and brewery, in every public-house, and in many other houses, in casks, bottles, decanters, tumblers, and I don't know where. He goes to all kinds of parties, Christmas and birthday. If a baby is born, or a marriage takes place, or a funeral, there you find him. It does not matter whether people are very happy or very unhappy, very well or very ill, very cold or very hot, he seems to be welcome under all circumstances. As to fairs, fights, and races, he always is sure to be there:—the place he prefers most is down people's throats, and then in their heads. And what does he do? It would take too long to tell you *all* he does. He makes people quarrelsome and unhappy; he makes good-tempered people bad; healthy people diseased; fair faces coarse, handsome faces ugly; bright eyes dull and bloodshot; paints noses red, and dots them with pimples. He makes strong people weak and shake; he makes heads ache and whirl, and limbs move zigzag; he steals away the brain, and everything that is good; robs people of their money; makes widows and orphans; fills prisons, workhouses, hospitals, and asylums. He robs Sunday schools and churches, for which he has a peculiar dislike, although he often finds his way into the latter. He has sent tens of thousands into banishment and to the gallows; and thousands every year, *even in Britain*, he hunts into the grave, and cheats of their souls.

Well, I fancy some of my young readers will say, if all this is true, and he is proved to be such a bad character, how is it that *good people* have anything to do with him? Is there nothing good that he does? You have only looked at one side. We reply, many people do *not* know *his* character, although we *ought* to know who we make *friends* of; and many do not *wish* to know. The fact is, they *like him*, and think his company does them good; and rather than give up his friendship, which at the best is deceitful (like that of a thief, who robs while he pleases), do not, or *will not*, see his faults. The only little good we have heard of, or know of him doing, is, that sometimes, when *properly* used, he *may be*, under some circumstances, useful as a medicine. But then he is a dangerous one, because people often get so very fond of physic—at least this kind; but even then he should be kept where all medicines are—at the doctor's or the chemist's. He *might* then be useful, as other drugs are, instead of being a curse to our otherwise happy land, and guilty of "high treason" to our best interests both here and hereafter.

Young England! if you like you can get rid of this monster! How? Join the noble Temperance cause, which is daily gaining ground, and then, when the next generation comes, "strong drink" will be a thing of the "past," and some day, we believe, will belong to the "dark ages."

HOPEFUL.

THE YOUNG NATURALIST.

CRYSTALS OF SNOW, MAGNIFIED.

CHAPTER II.

SENSITIVE PLANTS.

"How glad I am that winter is over," said Emily to her brothers, one pleasant spring morning, as they were leaving the house for a short walk.

"I thought you were very much pleased when winter came?"

"So I was. The first storm we had, looked beautiful. I wanted to sit by the window, and watch the falling flakes all day. You don't know how singular it seemed to look up towards the sky when it was snowing."

"Yes, I do," replied her younger brother. "The air was filled with millions of flakes flying before the wind. Some would overtake others, and, by uniting with them, would make large flakes; others would dart about in different directions, as if they were rogues fleeing from the pursuit of constables; and all were hurrying on as if engaged in some important business."

"I used to think," said William, "that they looked more like a great army retreating before an enemy. The large ones I called the officers, and the small ones soldiers."

"Did you ever try, Emmy, to fix your eye upon a single flake, as high as you could see, and then watch it till it reached the ground?"

"Yes, many a time I have picked out a good large one, and said to myself, I will see if I can't follow that fellow till he lights; but I seldom could succeed. He would dodge about so in the air, and there would be so many other flakes in the way, that I got confused, and could not tell which was the one that I was trying to keep track of."

"And now you say you are glad that winter is over?"

"Why, yes: I don't want it to be winter always. We get tired of anything when it lasts too long."

"That's true," said Robert. "I like winter well enough; I love to be on the ice, or coasting down hill, or riding in a sleigh, listening to the merry jingling of the bells; but after a while I get tired of these and want something else."

"That's just what father tells us; he says, 'the human mind loves variety.' I have heard him repeat that a great many times."

"Perhaps that is the reason why I love the spring, after we have had winter," said Emily.

"Who can help loving such a morning as this?" replied her brother.

It was indeed a beautiful day. Every vestige of snow was gone. In its place the young grass covered the fields, giving them a fresh and lively appearance. Various kinds of trees and bushes were covered with blossoms and young leaves, which filled the air with a pleasant perfume. The songsters of the grove were making sweet melody with their notes, and the industrious bee was buzzing about among the flowers, absorbing their delicious nectar. "See that bird," said Emily, as she pointed to one that was flying through the air with something trailing behind her; "I should think that she had been tied with threads, and had broken loose."

"No, no," replied William; "this is the birds' building season, and that little thing has probably got some tow in her bill, with which to line her nest, so as to make it comfortable for her young."

"That explains what I saw a few days ago," said Robert.

"What was that?"

"Why, I was standing in the barn-door, waiting for Betsey to milk the cows, and two or three birds lighted down in the barn-yard, and a moment after flew away with some straw in their mouths."

"Why have you not mentioned this before?"

"Because I thought that the birds were after the grain that might have been scattered there, and that in their attempts to get it, the straw stuck to their bills."

"Oh, no," said William; "they were building their nests, and used straw for the materials. If you had followed them you might have seen where they were building, and then you would have been much interested in watching them."

"I'll look out and not get so deceived another time," said Robert. Each side of the road where they were now walking was lined with barberry bushes. The children had often been here when the berries were ripe, and stripped the bushes. "I wonder if there will be many barberries this year?" said Emily.

"I should think, judging from the great number of blossoms, that there would be," answered William. "Father says, when there are a good many blossoms, we may expect considerable fruit."

"Oh, what a grand time we shall have then, in the summer," continued the little girl, and away she darted to the side of the road and broke off a cluster of blossoms.

"The botany class bring flowers to school," she continued, "pick them to pieces, and call it analyzing."

"If that's the way to study botany," said Robert, "I am old enough to learn; so give me some of your blossoms, Emmy."

"I have none to spare," said Emily, "but you can get some from the bushes." Robert stepped to the side of the road and broke off a little branch containing two or three clusters, and then began to play the teacher. He ran two or three steps ahead of his brother and sister, then turned round so as to face them, and began his mock instruction.

BARBERRY.*

"When you want to learn botany," said this new self-made teacher, "you must take a flower in one hand, so,"—at the same time reaching forth his left hand, with a single barberry blow between his thumb and finger,—"and a pin in the other hand, so,"—holding up his right hand with a pin in it,—"and then you must gradually pick the flower to pieces, so." He suited the action to the word, and carefully brought his pin in contact with the centre of the flower, as if pretending to be afraid of hurting it. The effect surprised him. "What does that mean?" said he, in a low voice, very different from the lively, spirited tones he had used a moment before. He repeated the thing which had attracted his attention two or three times, and then suddenly asked William, if flowers could feel.

"I should think not."

"I should think that this one did," continued Robert; "for when I put the point of a pin on one of these little stems, it springs, just as if it didn't like to be touched."

* There is but one British species of the *Bérberis Vulgaris* or common barberry—look for it in woods and hedges in June. The stem has light-coloured bark, yellow inside, and three-forked spines. The clusters of flowers droop as in the cut, and are yellow. The *filaments* are so sensitive that if touched they instantly close.

"Let's see," said William and Emily, at the same time drawing up close to their brother. Robert pulled off a fresh blossom, and holding it low, so that his sister could see, began his experiment. "Do you see these little threads or stems, that meet in the middle of the flower?"

"Yes."

"You notice that they are all lying back upon the leaves of the flower, like the spokes of a wheel?"

"Yes."

"Now I will touch two or three of them with a pin, close down at the bottom." Robert then held his pin as perpendicularly as he could, and touched with the point the lower end of the little stems, and immediately every one that he touched raised itself from its reclining position, and stood upright. He then touched the others, and the same result followed; so that instead of resembling the spokes of a wheel, Emily said they looked "like a bunch of broomsticks." "Let me see if I can do it," she continued. So she tore off a flower from the cluster that she held in her hand, then took a pin from her dress, and went through the experiment as successfully as her brother. "I guess we tickle the flower, and that makes it kick," said she.

"I don't know whether we tickle, or hurt it; but it certainly seems as if the flower had feeling."

"Perhaps there is something in the nature of the pin that does it," said William; "may be it is magnetic." After pausing and thinking a moment, he added, "If that is the case, then nothing but a pin or the same kind of metal will produce the effect—I will try." He took his bunch of flowers, sat down on a stone by the roadside, and began his experiments. First he took the stem of a leaf and touched the flower just as Robert had done, and the same results followed—the little stamens immediately rose upright. Then he took a small twig, then a small sliver of wood, after that a piece of straw, and touched them, and at each time he was successful. "No, it isn't the nature of the pin that does it," said William.

"How do you know?"

"Because anything else will answer just as well as a pin." Here was a discovery. The children had never heard that some plants exhibited a certain kind of sensibility, and therefore what they now saw was entirely new to them. So anxious were they to have the phenomenon explained, that they concluded to return immediately home.

"Let us go back across the fields," said Robert, "it is a great deal nearer." They walked along the road until they came to a pair of bars. Robert climbed over, but William being the more thoughtful of the two, let down a couple of them for his sister to creep through. After following her he carefully replaced the bars, when they all proceeded homeward together, and in a short time reached the house.

"I fear you have taken too long a walk, my dear children," said their mother, as she met them at the door.

"Oh no, we haven't been walking all the time."

"What have you been doing then?"

"Why, I was playing teacher," said Robert, "and was making b'lieve to teach botany, and when I touched a barberry blossom with a pin, it stirred."

"Then we all went to work," interrupted Emily, "to do the same thing."

"You must have been very good scholars, if you did just as your teacher showed you. But come, it is school time now. We will talk more about this by and by."

In the evening, after the children had learned their lessons for the morrow, the conversation turned upon their observations of the barberry blossom. Mr. Rogers told them that there were several plants called sensitive plants. "I once saw one in a hot-house," said he; "it was a low plant and bore white flowers arranged in heads. Its leaves were formed of four leaflets or little leaves united to one common stalk. Its sensibility was so great that when I touched it very lightly, it shrunk and folded up its leaves just as if I hurt it."

"Did your touch kill it?"

"No. In a few minutes it resumed its former position. I touched it again, but more roughly than I did at first, and then, not only did the leaves fold themselves together, but the stems to which they were attached bent themselves towards the main stalk, as if seeking the protection of their parent stem."

"It acted almost as if it were an animal," said Robert. "How strange!"

"The keeper of the hot-house told me," continued their father, "that it went to sleep every night."

"Went to sleep!" said Emily, in tones of surprise; "a plant go to sleep! What did he mean, pa?"

"I asked him what he meant. 'Why,' says he, 'it folds its leaflets and bends its branches towards the main stem, just as it did when you touched it so roughly, and remains so all night, and that I call going to sleep. When the sun rises, the leaves gradually unfold themselves, and the whole plant returns to its usual state, and then I say it is awake.' Now the barberry is a species of sensitive plant. Those little stems that you saw move are called stamens, and so irritable are they, that by touching them at their base, a convulsive motion is produced. It is a very interesting experiment, which any one may perform."

"But, pa," asked William, who had been sitting in a thoughtful mood for some minutes, "is it known what makes the sensitive plant fold its leaves at night, and open them in the day?"

"The gardener told me, that he thought the light had great effect upon it. 'For,' said he 'I once put a sensitive plant in a dark room in the day time. A little while after, I went with a very feeble light to examine it, and was surprised to find that it was all closed, just as if it had been night. I then got all the lamps we had in the house, lighted them, and had them brought suddenly into the room. In a few minutes the sensitive plant awoke, unfolded its leaves, and stretched out its branches; so I concluded that it was sensitive to the light as well as to the touch.'"

"The plant thought it was day," said Emily, "and the sun was rising."

"La!" said Robert, "it was tired of holding its limbs in one position, and when it woke up it wanted to stretch itself just as pussy does when she awakes. If it had a mouth, I dare say it would have gaped too." This attempt at wit was rather a failure. It produced no other effect than to bring a faint smile upon the face of their mother.

Mr. Rogers, after telling his children that he would relate to them some more strange things about sensitive plants at another time, commended them to the protecting care of their Heavenly Father, and they separated for the night.

A FRENCHMAN AT HIS ENGLISH STUDIES.—Frenchman: Ha, my good friend, I have met with one difficulty—one very strange word. How you call h-o-u-g-h?—Tutor: Huff.—Fr.: *Tres bien, huff;* and snuff you spell s-n-o-u-g-h, ha!—Tutor: O, no; *snuff* is s-n-u double f. The fact is, words ending in *ough* are a little irregular.—Fr.: Ah, very good; 'tis beautiful language. H-o-u-g-h is *huff*, I well remember; and c-o-u-g-h *cuff*. I have one bad *cuff*, ha!—Tutor: No, that is wrong. We say *kauff*, not *cuff*.—Fr.: *Kauff, eh bien. Huff and kauff*, and *pardonnez moi*, how you call d-o-u-g-h? *Duff*, ha!—Tutor: No, no, not *duff*.—Fr.: Not *duff;* ah! oui; I understand—is *dauf* hey? Tutor: No. d-o-u-g-h spells *doe*.—Fr.: *Doe!* It is very fine; wonderful language; it is *doe:* and t-o-u-g-h is *toe*, certainement. My beef-steak was very *toe*.—Tutor: Oh, no no; you should say *tuff*.—Fr.: *Tuff!* And the thing farmer uses; how you call him p-l-o-u-g-h, *pluff?* ha! you smile; I see I am wrong, it is *plauf?* No? ah, then, it is *ploe*, like *doe:* it is a beautiful language, ver' fine—*ploe?*—Tutor: You are still wrong, my friend. It is *plow*.—Fr.: *Plow!* Wonderful language. I shall understand ver' soon. *Plow, doe, kauf:* and one more r-o-u-g-h, what you call General Taylor; *rauf* and ready?—Tutor: No; r-o-u-g-h spells *ruff*.—Fr.; *Ruff*, ha! Let me not forget. R-o-u-g-h is *ruff*, and b-o-u-g-h is *buff*, ha!—Tutor: No, *bow*.—Fr.: Ah; very simple, wonderful language; but I have had what you call c-n-o-u-g h; ha! what you call him?

HOME AND FOREIGN NEWS.

LONDON, FEBRUARY 1, 1862.

A VERY general desire has been expressed on the part of the public for the erection of a Monument to commemorate the name of the late PRINCE CONSORT; but opinion is divided as to the character and form of this well-deserved tribute. We may grant that such an erection should be illuminated with "the lamp of sacrifice," but it does not follow that we should have recourse to a mere column, or to an obelisk of a bygone age, or to a cold statue coveting shelter from every shower that falls to water the earth. The nearest approach to the true idea is that of a temple, embodying the highest types of architecture and sculpture, and these again expressive of the many virtues—private, social, and public—of the illustrious Prince, over whose grave we have so recently shed the tear of unfeigned sorrow. There are architects and sculptors still living among us who are equal to such a design, and who could give it such a form as would be worthy of the mighty dead, and reflect lasting honour upon the nation. But in saying this, we are not ignorant of the tendency to lapse into some grosser materialism, or into Pagan idolatry. A great deal has been said in favour of a simple monolith; and much in behalf of an ALBERT GALLERY, for works of the first class in sculpture and painting; taking care that the erection itself be in the most chaste and finished style of architecture. There will be no difficulty in raising £250,000 as a Memorial Fund, and this, wisely expended, will give us a monument corresponding with the wishes of a bereaved nation.

HER MAJESTY THE QUEEN.—We are happy to be able to state, on good authority, that the health of our gracious Sovereign remains unimpaired, and that she bears up under her irreparable loss with more than mere mental fortitude. It is nothing less than the spirit of resignation. Hence the calm dignity and perfect self-possession with which she again entered on the public duties of her high office. A nation's prayers have been heard in her behalf; but still she cannot be expected to come forth from her deep retirement, and mingle, as she has done, in the brighter scenes of life. It is a higher Hand only which, under the influence of time, can heal the wound which death has inflicted.

THE PRINCE OF WALES AND HIS LATE ROYAL FATHER.—In the new Horticultural Gardens, now in progress at Kensington, it was arranged that there should be some visible and permanent memorial of the Great Exhibition of 1851, and that this erection should be surmounted with a statue of Her Majesty the Queen. Since the death of her illustrious Consort, however, the Queen has expressed the wish that her own statue should give place to one of Prince Albert. The Royal desire was made known to the Council in an autograph letter from the Prince of Wales, with the gratifying intimation that, having obtained the permission of the Queen, his mother, he would himself present the contemplated statue of his beloved father, as a tribute of filial affection. These are his own words:—"The characteristic modesty and self-denial of my deeply-lamented father had induced him to interpose to prevent his own statue from filling the position which properly belonged to it, upon a memorial to that great undertaking, which sprung from the thought of his enlightened mind, and was carried through to a termination of unparalleled success by his unceasing superintendence. Anxious, however humbly, to testify my respectful and heartfelt affection for the best of fathers, and the gratitude and devotion of my sorrowing heart, I have sought, and have, with thankfulness, obtained the permission of the Queen, my mother, to offer the feeble tribute of the admiration and love of a bereaved son, by presenting the statue thus proposed to be placed in the Gardens under your management." May such sentiments never cease to have a place in the heart of the Heir to the Throne! His father has left him a bright example, and in proportion as his own character is fashioned after that beautiful model, will he receive the homage and the confidence, the affection and the devotedness, of this free and mighty people.

PRINCE ALFRED AND THE PRINCE OF WALES.—The return of Prince Alfred is daily expected; but he comes to find his Royal home less complete, and the sunshine, which shed itself daily over all within, darkened and obscured. But he will find a Mother there ready, with open arms, though with weeping eyes, to receive him, with loving brothers and sisters to embrace him and welcome him back. On his arrival, the Prince of Wales, in harmony with the plan laid down by his late father for the perfecting of his education, will set out on his travels in the East. He will be absent for several months, and is not, therefore, expected to be present at the opening of the Second Great Exhibition. This is to be regretted. Nothing would have been more fitting, in the absence of the Sovereign herself, than that the Heir to the Throne should have taken her place, and made her people feel less, if possible, the loss which they have sustained in the removal of his honoured father. May Heaven watch over him during his travels, and preserve his life and health!

HOME.

England has just passed through another crisis in her history. Two kindred nations were on the very point of war, and to both the war would have been unspeakably disastrous. The attitude taken by our Government has brought America to a tardy and unwilling submission. Still the wrong has been confessed; the men taken from on board the *Trent* have been given up. The only reparation which was demanded has thus been made, and we trust that, whatever may be the civil commotions which are now convulsing the United States, no future attempts will be made to insult the flag of a country which has maintained the strictest neutrality, and which is solemnly committed to the interests of humanity all the world over.

SOCIAL AND COMMERCIAL MORALITY.—Men may talk of "the brilliant panorama of modern society," but there are some dark—dark shadings in the picture. Our modes of modern life are largely factitious, nor do they leave the heart so chaste and pure in principle. There may be less of open vice, but there is more of secret impurity. Our domestic sanctities are being neglected, and, therefore, invaded. The ties of marriage are held less sacred, and the extravagances of female life are driving young men to celibacy or to licentiousness. But it is a fact written on the page of universal history, that a corrupted

youth is the certain precursor of a nation's fall. Then as to our commercial morality, nothing can be more affecting than the false principles on which a large amount of business is now conducted. It is a fierce and fiery age in which we live, and in the race to be run for some of this world's prizes, the competition is fearful. Hence the spirit of speculation and enterprise; hence the defalcations and the bankruptcies now so common; hence the frauds and the forgeries which are practised, even by men who were deemed above suspicion. Let any one who is learned in the science of physiognomy go through our great avenues of business, and what a study will he find in the face of almost every man he there meets! English society is becoming, to a large extent, artificial. We are all, whatever be the position we occupy, or the circle in which we move, surrounding ourselves with artificial wants, and to overtake these factitious requirements, how many are there who have recourse to dubious means, and to lines of action which neither prudence nor justice — neither integrity nor honesty, can approve! There is something radically wrong in our modern society.

HARTLEY COLLIERY.—What an affecting tragedy has been enacted in the neighbourhood of North Shields! By the unexpected failure of a piece of machinery, and the falling-in of the shaft of a coal-pit, no fewer than two hundred and fifteen men and boys were, for six or seven days, interred in the dark earth. The most energetic means were employed to force an entrance into the pit, but it was not till the night of Wednesday, the 22nd ult., that the cloth brattice was so far complete as sufficiently to clear the shaft of its accumulated gas as to allow three pitmen to descend, when, having urged their way through the most pestiferous air, they found a large body of men sleeping the sleep of death. Not a living man was found. The lifeless bodies were lying in groups; children in the arms of their fathers—brothers with brothers; a sad and sorrowful spectacle. The mere recital of the facts affects the heart and fills the eye with tears. We feel sure that the sympathy of the whole English people will be called forth in behalf of the bereaved and sorrowing families. How characteristic of our gracious Monarch was it for Her Majesty to send a telegram to the very spot, asking intelligence as to the hopes of saving the men, although by the time it reached the scene the last ray of hope had faded away. It is thus that Royalty renders itself attractive, and that Her Majesty enthrones herself in the hearts of her people.

FOREIGN.

FRANCE.—After years of extravagant outlay, our Gallic neighbours are compelled to retrench, and adopt a more moderate expenditure. The Emperor had no alternative but to reduce his army, and his Minister is successfully grappling with the financial difficulties of the empire.

ITALY.—Notwithstanding the reports which obtain to the contrary, things in Italy are steadily advancing, and promise still greater consolidation. RICASOLI is a man of noble daring; but his prudence is equal to his firmness, and Italy is safe in his hands. With regard to the Roman question, he is reported to have said the other day—"that at Rome not only the interests of the Italians, but of humanity in general, were at stake. Perhaps at this very moment our destinies are ripening. The Government, firm in alliance with France, will continue to follow its present policy." At the inauguration of a local society in Turin, the Prince Royal expressed himself in these emphatic words:—"It needs to be seen that, in the day of her struggle, Italy will find a soldier in every citizen."

AUSTRIA.—Poor Austria! Is there no morning to succeed her long, dark night? We regret to read in English print that in this unhappy country things "proceed without improvement. Blunder succeeds to blunder, and one act of cruelty follows hard on the heels of another; despotism and death go hand in hand. Martial law has been proclaimed in Hungary, and every person whom a military tribunal may accuse of specified crimes, is at once to be hung up, without distinction of quality or rank. This barbarous proceeding is professedly based on the increase of crime, more especially of robbery and murder."

AMERICA.—While Egypt has been recovering from her financial difficulties, America has unblushingly declared herself nationally bankrupt, by suddenly stopping all payments in specie. For this there is no other remedy but the heaviest taxation; but how the States will bear this remains to be seen. The civil war is as far off a settlement as ever, and, before it comes to a close, will involve an expenditure of life and property which it is fearful to contemplate.

INDIA.—Lord Canning is to be succeeded in the Governorship of our Indian possessions by Lord Elgin, who has already won for himself a high reputation as Governor of Canada, and twice as the representative of Her Britannic Majesty in the Celestial Empire of China, in which he completed a Treaty, whose riper fruits will be reaped both there and here for ages to come, and which will, in no common degree, subserve the interests both of commerce and religion. In India, which has become subject to the sceptre of England—not that we may pique and plume ourselves on the vastness of our possessions, but may give to the people of this mighty continent our laws, our institutions, our language, and our Christianity—he will have viceregal power: nor can we but hope that, in this new and still more elevated position, he will strengthen the claim which he already has to our confidence and esteem. He is assuredly fitted for the office, and we have no doubt that his services will add to the many honours which he now enjoys.

CHINA.—The Celestial Empire is deeply disturbed. The spirit of rebellion is widely abroad, and doing fearful havoc. The party who were opposed to England, and who tried to usurp the superior authority on the demise of the late Emperor, have, through the heroic energy of the Empress Dowager and the Empress Mother of the present Sovereign, who is a child of scarce seven years, been displaced, and their leaders either sent into exile or doomed to death. The old Cabinet has been entirely broken up, a new ministry has been formed, and we may hope, from all that we can learn, that the change now effected will be to the advantage of the empire, the interests of commerce, and the free, wide spread of our simple, spiritual, Protestant Christianity.

THE COUNTY OF WILTS.—Old Fuller, in his "Worthies of England," says, "A pleasant county and of great variety. I have heard a wise man say that an ox, left to himself, would, of all England, choose to live in the north; a sheep in the south part hereof; and a man in the middle betwixt both, as partaking of the pleasure of the plain and the wealth of the deep country."

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

THE GOLDEN EAGLE.

THE WHITE-TAILED EAGLE.

CHAPTER II.—BIRDS OF PREY (*Accipitrina*).

BIRDS of prey seem almost sufficiently characterized by their name, but that name rather implies a general similarity in their habit of feeding on flesh, than the assertion that all the species prey upon living animals. With most of them this is indeed the case; they feed on animals they have themselves killed; but in other instances they consume only the bodies of the dead, being attracted to the disgusting banquet by the stench arising from putridity. Let us not, however, suppose that this habit, filthy as it is, is without its advantage in the general economy of nature. Vultures, and it is these birds to which I now allude, are Nature's scavengers, and by their obscene habits cleanse the earth's surface from those putrefying carcases which remain unburied, and which otherwise might load the atmosphere with pestilential vapours: on this account we find the vultures always welcomed in hot climates, and often protected by the most stringent laws. Other birds of prey, the Secretaries, or Serpent-killers, live entirely on snakes, preferring, as it is said, those that are most venomous. The country of these birds is Southern Africa, and, like the vultures of tropical countries, they are highly valued on account of their useful propensity: it has been asserted that, if unchecked by these birds, venomous reptiles would so increase in the neighbourhood of the Cape of Good Hope as to render the country uninhabitable by man. The Vultures (in science, *Vulturidæ*) and the Secretaries (in science, *Gypogeranidæ*) constitute two families of birds of prey that are not found in Great Britain, but it is necessary just to give them this passing notice. There are two other families with which we are more familiar; the Falcon family (in science, *Falconidæ*), and the Owl family (in science, *Strigidæ*); they are essentially and properly birds of prey, and most of them lead a life of murder and rapine, the falcons preying by day, and the owls by night.

For this life of rapine, birds of prey are admirably fitted: their sight is piercing; their strength enormous; their weapons of offence sharp and powerful; their flight rapid; and lastly, their endurance of hunger wonderful. Let us consider these points separately. The eyes of all birds have a peculiarity of structure, which enables them to see near or distant objects equally well, and this wonderful power is carried to the greatest perfection in the birds of prey. When we recollect that an eagle will ascend more than a mile in perpendicular height, and from that enormous elevation will perceive its unsuspecting prey, and pounce on it with unerring certainty; and when we see the same bird scrutinizing, with a most microscopic nicety, an object close at hand; we shall at once perceive that he possesses a power of accommodating his sight to distance, in a manner to which our own eye is unfitted, and of which it is totally incapable. I should like to make this quite clear to every one of my readers; and I ought to say that I am indebted for my knowledge of these facts, not so much to my own observations as to those of my esteemed friend, Mr. Thomas Allis, of York, who, I believe, stands quite unrivalled in his knowledge of the osteology* of birds. If we take a printed page, this page of YOUNG ENGLAND for example, we shall find there is some particular

* Osteology teaches the structure and form of the bones and the mode in which they are joined together.

distance, probably ten inches, at which we can read the words and see each letter with perfect distinctness, but if we move this page to a distance of forty inches, or bring it within a distance of five inches, we shall find it impossible to read it at all; a scientific man would, therefore, call ten inches the *focus* or focal distance of our eyes. We cannot alter this focus except by the aid of spectacles. But an eagle has the power of altering the focus of his eye just as he pleases; he has only to look at an object at the distance of two feet or two miles in order to see it with equal distinctness. Of course the eagle knows nothing of the wonderful contrivance which God has supplied for his accommodation; he employs it instinctively, and because he cannot help it. The ball of his eye is surrounded by fifteen little plates, called sclerotic bones; they form a complete ring, and their edges slightly overlap each other. When he looks at a distant object, this little circle of bones expands, and the ball of the eye, being relieved from the pressure, becomes flatter; and when he looks at a very near object, the little bones press together, and the ball of the eye is thus squeezed into a rounder or more convex form. The effect is very familiar to everybody: a person with very round eyes is near-sighted, and only sees clearly an object that is close to him; and a person with flat eyes, as in old age, can see nothing clearly, except at a distance: the eagle, by the mere will, can make his eye round or flat, and thus see with equal clearness at any distance.

The strength of birds of prey is equally wonderful; a hawk has been seen carrying, with apparent ease, a partridge much heavier than itself, and the great eagle of the Alps has been shot while bearing off a full-grown goat. Ease and rapidity of flight are equally remarkable: a hawk will, without any apparent effort, strike a pigeon at its fastest flight. Then examine their weapons of offence: the claws and beak are alike sharp, curved, and strong, and are formed for inflicting the severest wounds. Lastly, and a consequence of the uncertainty always attendant on a life of rapine, birds of prey are able to fast for an almost incredible time: an eagle has been known to live for five weeks without food, and yet exhibit no symptoms of weakness. Thus Nature, or rather that Providence, whose care for his creatures is so constantly set before us, has adapted in all respects these seeming tyrants of the feathered tribes, to the life they have to lead, and the part they have to play, that of keeping within due bounds the increase of those races which depend for subsistence on the fruits and plants of the earth.

Family 1.—Falcons (*Falconidæ*).

Having already said that the vultures and secretaries are not natives of Great Britain, I have only to distinguish the falcons and the owls. Falcons fly by day, have small heads, small eyes, projecting beaks, and the feathers on the cheeks lie flat and are generally arranged as in other birds: in all these characters they differ from the owls.

1.—The Golden Eagle (*Falco chrysaëtos*).

This magnificent bird may be seen to advantage in the gardens of the Zoological Society in Regent's Park, and he is well worthy of a visit. He is allowed sufficient space to display himself in natural positions, and you cannot fail to observe the quickness of his brilliant eye when a flock of pigeons or a solitary rook passes over his prison. The Golden Eagle is indeed a noble bird, but I must beg my readers to study him as he is, and never to confound him with the eagle of fiction as described in what are called "popular" works on Natural History. In such works you will read of his daring courage, of his feats in carrying off children, deer, and sheep. I recommend you to distrust all such stories; they were first told of a very different bird, the Lammergeyer of the Alps; and I cannot tell you whether they were true or untrue in the first instance; but that daring bird being called the eagle (*l'aigle*), compilers have taken the liberty to transfer his accredited feats to the account of our British eagle, and the scene of these feats from Switzerland to Scotland. It has long been a received maxim that to make Natural History attractive, you must introduce fiction—in fine, you must make it untrue. I will not believe this: I think better of my countrymen, and of my readers, than to believe that fiction can have greater charms for them than fact. Far from being the brave bird he is represented, the Golden Eagle, in a wild state, is cowardly, wary, timid, and distrustful in the extreme; he feeds on young grouse, or young hares—that is, the young of the blue or mountain hare, and especially on the flesh of sheep that have fallen from a precipice, and thus miserably perished; and he is readily taken in traps baited with garbage.

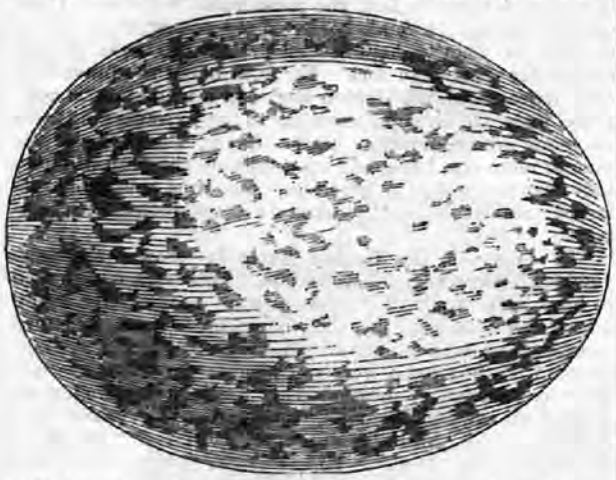
The colour of the Golden Eagle is brown, the term "golden" being very inappropriate. This term is supposed to have reference to a yellow powder, occasionally found among the feathers. In the young bird, until its third year, the tail feathers are very dark, almost black at their extremities, forming a very conspicuous bar across the tail. This circumstance induced our English ornithologists, Shaw, Latham, and Montagu, to describe the young as a distinct species, under the appropriate name of "Ringtail," or "Ringtailed Eagle:" and Bewick, under the latter name, has given the most life-like representation of the bird that it is possible to conceive. The beak is horn-coloured, the feet yellow, and the claws black; but I wish particularly to invite attention to the fact, that the legs of the golden eagle are covered with feathers down to the toes, and that the plates or scales which cover the toes are very small, and like network, except three plates at the very end close adjoining the claw: these three, on each toe, are very large, going quite across the toe. The White-tailed Eagle, next to be described, is altogether different in this respect, and I have introduced here a drawing of a foot

of each to show the difference more clearly than it can be described in words. The right-hand figure represents the foot of the Golden Eagle, the left-hand figure that of the White-tailed Eagle.

The Golden Eagle inhabits Scotland, but is uncommon: two specimens in a museum at Belfast, said to have been trapped in Ireland, are supposed to afford evidence of its having occurred in the sister kingdom: there are a few instances, and very few, of the bird having been killed in England. The newspaper paragraphs recording the occurrence of the Golden Eagle in England may be supposed, without exception, to refer to the species next described. It is not to be wondered at, that a bird of such powers of flight should occasionally be met with far from his accustomed home: what is five hundred miles to him? But his occasional visits to those places where man has fixed his abode, must be regarded as errors of judgment; for which, alas! he is almost invariably compelled to pay the penalty of death.

The Golden Eagle breeds in some inaccessible rocks in Sutherlandshire, in the Hebrides, and formerly also in the Shetland Isles. The nest is placed on some jutting platform of stone, and is of enormous size, composed of large sticks as a foundation, and filled up with rubbish of every kind. The eggs are very large, sometimes exceeding three inches in length, and generally are two in number; it is said that three have occasionally been found in one nest; they are of

a dingy white colour, freckled with pale brown. I have never taken the egg myself, but once observed a pair of old



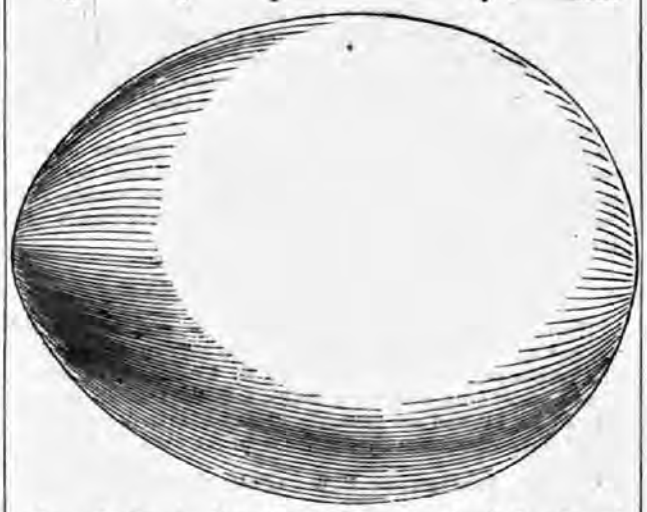
birds hovering about a precipice in Glencoe, where I have little doubt they had a nest and young.

2. The White-tailed Eagle (*Falco albicilla*).

This fine bird may also be studied to advantage in the gardens of the Zoological Society. He is quite as large as the Golden Eagle, often larger, but is a duller bird, not having the same bright animated look. I observe that he sits with his wings drooping down as though they were out of joint, and his feathers are loose and rough. In a state of nature he is as strong on the wing as the Golden Eagle, but does not soar to so great a height. His food is fish, carrion, and offal of all kinds: he will eat the flesh of any dead animal, and is not particular about its condition; hence he may readily be caught in traps baited with garbage, and he comes to such a bait eagerly, and without that precaution and wariness that birds of prey generally exercise. The mode in which he sometimes obtains fish is very singular: his general plan may be to watch the fish approach the surface, and dart down on it when basking in the sunshine; but the following mode is often adopted. He will sit on some naked projecting rock, generally selecting one that wind and rain have combined to bring to exactly the same colour as his own plumage; and there he will remain motionless for hours, watching the gannets, cormorants, gulls, and especially the ospreys, fishing in the water below. His quick eye instantly detects the capture of a fish by either of these birds: he allows the successful fisher to rise in the air with its prey, and then, leaving his storm-beaten perch, he dashes after it with the rapidity of an arrow, and with a wild scream that is re-echoed by every crag. The terrified osprey—it is most frequently this bird—replies with a cry of terror equally piercing, and after a few brief, rapid, and always fruitless attempts to escape, drops the salmon or mullet that a moment before had been dangling from its sharp claws: then the eagle, sweeping below the osprey, seizes the still living fish ere it has reached the surface of its native waters; and, returning to his solitary perch, the fish now in his possession, he strips off and swallows its flesh, leaving its undivided backbone to bleach among the crags. Those who have not visited the wilder coasts of Scotland and Ireland can form no idea either of the abundance or the habits of the birds that inhabit those seemingly desolate regions, depending on the sea and land-locked lakes for subsistence. The clamour and aërial evolutions of the sea-birds, when such a scene of plunder as I have described takes place, is something to be remembered long after it has passed from the sight. I have watched the White-tailed Eagle both in Scotland and Ireland, gazing with delight on the ease, smoothness, and power of his flight. I have seen a pair soaring in circles over Urrisbeg, and have wondered whether it was mere amusement or love that prompted their graceful evolutions, or whether they were contemplating a raid on the salmon fisheries of Ballinahinch.

The colour of the White-tailed Eagle varies with age, and naturalists have given a separate name to different states of plumage. The ordinary colour of birds that are shot or trapped is plain brown, each feather paler towards the base: the tail is brown, but shaded with different hues; over every part of the body white feathers are occasionally scattered; in this state it is the "Sea Eagle" of British authors, and the *Falco ossifragus* of science. The old birds are of a beautiful and delicate ash-colour, and the tail perfectly white; it is then the "Cinereous Eagle" of British authors, the *Falco albicilla* of science. The lower half of the leg is covered with pale lemon-coloured scales, and not with feathers as in the Golden Eagle; the toes are also lemon-coloured, and the claws black. The toes are covered with large plates in a regular series, in this respect also differing from the Golden Eagle, as will be seen on looking at the left-hand figure of the two feet placed side by side for comparison. There is so great a difference in the colour of our two eagles at different ages, that I think it is better not to trust much to colour, more especially as the difference in the legs and toes will always distinguish them from each other.

The White-tailed Eagle is common compared with the golden: there is scarcely a county in England, Scotland, Wales, or Ireland, in which it has not been killed. Being a fish-feeder, it is most frequently found near the coast, and on this account it is much more widely distributed than the Golden Eagle. When in Scotland, studying the habits of birds, and collecting materials for a future history of the feathered inhabitants of that interesting country, I heard of eighty-three of these birds having been trapped by one man in a single year in the vicinity of Loch Tay. The White-tailed Eagle breeds both in Scotland and Ireland. It builds a large nest of sticks on the ledge of some precipice facing the ocean, and exposed to all the fury of Atlantic



gales: the female lays two white eggs, about the size of those of a goose.

(*To be continued.*)

Dr. Johnson Pourtrayed.—Johnson is better known to us than any other man in history. Everything about him,—his coat, his wig, his figure, his face, his scrofula, his St. Vitus's dance, his rolling walk, his blinking eye—the outward signs which too clearly marked his approbation of his dinner, his insatiable appetite for fish sauce, and veal pie, with plums, his inextinguishable thirst for tea, his trick of touching the posts as he walked, his mysterious practice of treasuring up orange peel, his morning slumbers, his midnight disputations, his mutterings, his gruntings, his puffings, his vigorous, acute, and sarcastic eloquence, his vehemence, his insolence, his fits of tempestuous rage, are all familiar to us.—*Macaulay.*

DO GOOD CHILDREN ALWAYS DIE?

"Do *good* children *always die?*"

"What makes you ask that question, dear?"

"Because Mrs. Minton said, she always thought her baby was *too good* to live."

"Yes, love; she was, I know, a remarkably sweet and gentle child, and so bright and intelligent too. Such a baby, whose little brain is very active, is more likely when it is cutting its teeth to have fits, or some other serious illness, than a kicking, jumping, screaming boy like our merry Frankie. Such a baby is so much less trouble; it will be so easily amused with seeing anything pretty, or with music, or being talked to, that we call it *good*. I don't know that God would say it was good more than the troublesome noisy one. But sometimes I do think that when parents pray much to Jesus to make their children good, He does, while they are yet babies, give them a new and holy heart. Little Alice Minton was so gentle and loving—so like Jesus—I cannot help thinking this was the case with her. But then she did not die *because* she was *good*, but because she was too thoughtful for so young and weak a child. If I were to say to little Frank when he was creeping on the floor, 'Frank, do not touch those oranges on the table while I am gone——'"

"He would not know what you said, mamma; and besides, he could not reach them."

"Then, would it be *very good* of him not to touch them?"

"Why, no; because he could not; and if he could, and were to get them, it would not be naughty, because he would not know it was wrong."

"So you see a baby *cannot* be *so* good or *so* naughty as older children, because it can neither *do* so much nor *know* so much."

"But then, mamma, I have read many stories of older children, who do know, and the good ones always die; and once, when I was reading one to Bertie, he said, 'Well, I don't wish to be so *very good and die.*' 'Twas when papa said we should have the pony to ride in the summer; and I thought so too, mamma. Is it naughty to think so?"

"Not naughty to wish to ride the pony, my darling, and not naughty to wish to live in our pleasant homes with all who love us; only we must ask God to make us willing to go when He calls us. But you say the good children we read about always die. You forget that we do not write the lives of people till they are dead. So if you have a *true* story of the *whole* of a child's life, you must hear of its dying."

"I don't quite understand, mamma."

"I have a very dear friend—the same that sends me those long letters from India. She had two little girls, called Helen and Agnes. She used to write and tell me all about them. They both learned to love Jesus, and tried very hard to please Him; and from her letters I should have said that Helen was a *better* child than Agnes. But poor little Agnes sickened and died, and then her mamma wrote a little account of her, which many children love to read; but they have never read the pleasant stories of Helen I have in her letters. People don't write a book about a child and print it when the child is living."

"Helen, mamma! Is it that nice, kind Miss Drummond that was here at Christmas?"

"The same; so you see *good* children *do not always die:* and my precious child had better ask God's help, and strive with all her might to be good at once. She will certainly *not die* the *sooner* for it. Indeed, I should say, children who do not try to be good are more likely to die than those who do. How often do children make themselves ill by disobedience—eating what they are told not, for instance. How often do children when they have told an untruth toss about on their little beds, unable to sleep! and this is likely to make them ill. And then, again, angry passions are very likely to make children ill. Now do you see your mistake?"

"Yes; thank you, dear mamma."

"Good night, then, my love. May God bless you, and help you to be His own obedient, loving child!"—*Evangelical Magazine.*

SELF-CONCEIT.

THERE are few objects from which we turn away, with more disgust than a self-conceited youth, and yet how many, even among the young, impose upon themselves by taking themselves to be what they are not. They either assume attributes and perfections which do not belong to them, or put far too high an estimate on what they really do possess. Such is the high opinion which they have formed of themselves, that they see in themselves what has no existence there, or they magnify and transform it into something altogether different from the reality; and having once formed this opinion, it is difficult for them to think otherwise. This is a sad deformity of character, and should be studiously avoided; and to show how ridiculous as well as unbecoming it is, we here quote a few lines from Thomas Hood, in which this self-conceit is held up to merited reprobation.

"To picture that cold pride so harsh and hard,
Fancy a peacock in a poultry yard:
Behold him in conceited circles sail,
Strutting and dancing, and now planted stiff
In all his pomp of pageantry, as if
He felt the eyes of Europe in his tail!
As for the humble breed retain'd by man,
He scorns the whole domestic clan—
He bows, he bridles,
He wheels, he sidles,
At last, with stately dodgings, in a corner
He pens a simple russet hen, to scorn her
Full in the blaze of his resplendent fan!
'Look here,' he cries (to give him words),
'Thou feather'd clay—thou scum of birds!'
Flirting the rustling plumage in her eyes,—
'Look here, thou vile unworthy sinner,
Doom'd to be roasted for a dinner.
Behold these lovely variegated dyes!
These are the rainbow-colours of the skies,
That Heaven has shed upon me *con amore.*
A bird of Paradise! a pretty story!
I am that saintly fowl, thou paltry chick!
Look at my crown of glory!
Thou dingy, dirty, dabbled, draggled jill!'
And off goes Partlet, wriggling from a kick,
With bleeding scalp laid open by his bill!"

THE LOVE OF COUNTRY.—When the late Dr. Thomas Brown, an eminent Scottish metaphysician, was advised, on the highest medical authority, to leave his native land for a warmer climate for the sake of life and health, he said to an intimate friend, "They want me to go to London, and then spend the summer in Leghorn, and a thousand other horrid places. 'Tis very difficult to convince them that there is such a disease as the love of one's country; many people really cannot be made to comprehend it;" and then, with a languid and melancholy smile, he added, "but there is such a disease:—

"'Nescio qua natale solum dulcedine captos
Ducit, et immemores non sinit esse sui.'"

Non sinit. How simply and beautifully expressive—it will not let us forget it!

MEMENTO OF AFFECTION.—A Queen's messenger brought from Osborne to Windsor, on the day of the funeral of the late Prince Consort, three little wreaths and a bouquet. The wreaths were simple chaplets of moss and violets, wreathed by the three elder Princesses—the bouquet of violets, with a white camellia in the centre, was sent by the widowed Queen. Between the heraldic insignia these last tributes from his widow and orphan daughters were laid upon the coffin—mementoes of domestic love and worth above all heraldry that ever was emblazoned. With this last act of grateful care the aperture to the Royal vault was closed, and thus was Prince Albert, who has lived in honour and died in fame, buried in the most profound and deserved grief that has been evinced by any nation within the memory of living man.

ERUPTION OF VESUVIUS.

ANCIENT POMPEII, AS IT WAS IN THE TIME OF PLINY, RECENTLY EXCAVATED.

VESUVIUS is a volcanic mountain in Italy about three thousand feet high, situated five miles from Naples. The base of the mount, which is nearly thirty miles in circuit, is covered with towns and villages, and presents to the eye the pleasing sight of fertility, beauty, and population. Further up, the mountain is a scene of perfect devastation, being on all sides furrowed with streams of lava, extended in wide black lines over the surface. The upper part is almost wholly covered with ashes, at the top of which is a narrow ledge of burnt earth resembling cinder, about ten miles in circumference, with the crater, which is nearly 350 feet in depth, open beneath.

In the first recorded eruption of this mount, which took place A.D. 79, such was the quantity of flame and smoke emitted, that the very atmosphere was darkened, and the cities of Pompeii and Herculaneum were overwhelmed by the burning lava, and in them more than 200,000 perished. In Naples the sun's light was totally obscured for ten days; great quantities of ashes and sulphurous smoke were carried to remote distances; birds were suffocated in the air, and fell dead upon the ground; and in the neighbouring waters, which were made hot and infected, the fish perished. It was during this eruption that Pliny, the naturalist, met his death. He was at the time stationed at Misenum, in the command of the Roman fleet; being curious to examine more closely the extraordinary phenomenon connected with the eruption, he sailed to Stabiae, where he landed. He and his company were soon obliged to leave the town for the fields; but here they found the danger equally great from the continual shower of fire that was falling around them and upon them. They hastened back to the shore, but Pliny was literally suffocated by the noxious vapours, and died before he reached his vessel.

Since A.D. 79, there have been more than forty eruptions of Vesuvius, some of them very extensive, and no less destructive of life and property. In 1794, the lava flowed over more than five thousand acres of rich vineyards and cultivated lands; the town of Torre del Grecco was a second time destroyed, and the top of the mountain fell in. The crater is said to be now about two miles in circumference.

Within the last few weeks another dreadful eruption has taken place, scattering death and ruin all around, and forcing the inhabitants of surrounding towns and villages to leave their homes in thousands on thousands, for safety and for life. Although the population of Torre del Grecco numbers about twenty-two thousand souls, the place is almost deserted. As far distant as Naples the great columns of smoke were seen rising gigantically into the air to the height of from eight to ten thousand feet, while the streets of Torre del Grecco were found covered to the depth of four or five inches with fine dust, which had fallen in heavy showers and blackened the appearance of every object. The body of lava at first sent out in this recent eruption, threatened the total destruction of the place.

Though the eruption became less violent for several days, still shocks of earthquake were more frequently felt, and in many places there were indications of the earth giving way to the subterraneous forces.

Again, however, the mountain has opened its furnaces with as much violence as ever, has been sending its pent-up fires into the air with lurid flame, been scattering its ashes for miles around, like so much hoar frost upon the ground, been covering the Bay with his smoke, as if the mantle of night had fallen upon it, while the sea, four feet from the beach, has been boiling furiously, and an earthquake has been rocking the solid land from Naples round to Sorrento; the rocks, which were covered a few days ago, are now exposed and cleft to the bottom as if rent in twain by some mighty mechanical force. As late as December 24th, 1861, we learn that the cloud of smoke and ashes rose higher and higher; and that at Torre dell' Annunziata there was a violent shock of an earthquake; that towards the evening of that day, the eruption had attained to gigantic proportions, and that on the following morning, the mountain, sky, and Bay were completely enveloped in a cloud of smoke, while it is thought that another large crater has been formed at the foot of the old one. Houses are falling, people are perishing, property is being ruined, nor is it possible to say what the end is to be.

We may speak of the grandeur of such eruptions, and gaze upon the spectacle with a sort of inexpressible admiration, but the whole is connected with a wide-spread devastation, and thousands are doomed to loss and suffering of which we can form no idea. To no such hidden and destructive forces are we subject in our favoured Isle, nor must we forget that for this exemption we are indebted to the God of nature, who has all agencies under His control.

Amusements.

ROUND GAMES.*

YES OR NO, OR ANIMAL, VEGETABLE, OR MINERAL.

The guesser enters the room, and begins asking what questions he likes, the players only answering "Yes" and "No." He may ask if the article belongs to either of the three kingdoms, as well as any other question, and will receive a direct answer.

We will give our readers a specimen of how this game is carried on, and of the method in which the detection of the most out-of-the-way objects is usually arrived at.

We will suppose the article thought of to be *The Cross at the top of St. Paul's*,—a thing it would seem almost impossible to hit upon, without any clue beyond that afforded by the rules of the game. You of course can select any object in your own neighbourhood.

The questioner begins by asking, "Have you thought of anything?"—"Yes." "Is it animal?"—"No." "Is it a vegetable?"—"No." "Is it a mineral?"—"Yes." Mineral! There is one important point gained. "Is it a remarkable object?"—"Yes." "Is it in this house?"—"No." "Is it in London?"—"Yes." "In the city?"—"Yes." "In the west end?"—"No." "In a house?"—"No." "In a public place?"—"Yes." "Is it near the Bank?"—"No." "Near St. Paul's?"—"Yes." "Is it St. Paul's itself?"—"Yes." "Is it at the bottom of St. Paul's?"—"No." "At the top?"—"Yes." "Is it the clock?"—"No." "Is it the ball?"—"No." "Is it the cross?"—"Yes."

* See notice in last number.

THE TRADES; OR MIND YOUR OWN BUSINESS.

Each player selects a trade, which he carries on in dumb show, as follows:—

The tailor stitches a coat.
The cobbler mends a shoe.
The laundress washes imaginary tubs full of shirts.
The painter paints a portrait.
The blacksmith hammers at the anvil, &c., &c.

One of the party is chosen as King of the Trades, and commences the game by exercising his own, setting an example of industry to the others, who must work away indefatigably at their various callings. When the king takes it into his head to change his trade and adopt that of one of the party, all leave off work at once, and remain inactive, except the player thus imitated, who immediately takes up the trade of the king, which he continues to exercise till such time as it shall please his majesty to change again and take up somebody else's. The individual honoured by this second choice then takes up the king's trade, and continues till a third change takes place—the other players remaining idle, till the king resumes his original occupation—the signal for all to fall to work again.

Any player making a mistake pays a forfeit.

TO KISS THE ONE YOU LOVE BEST WITHOUT ITS BEING NOTICED.

Kissing all the ladies in the company one after the other without any distinction.

FORFEITS.

THE EXILE.

The person paying the forfeit, sent into exile, takes up his position in the part of the room the most distant from the rest of the company—with whom he is forbidden to communicate. From there, he is compelled to fix the penance to be performed by the owner of the next forfeit, till the accomplishment of which he may on no account leave his place. This may be prolonged for several turns. The last person, as soon as he has acquitted himself satisfactorily, taking the place of the exile, and passing sentence on the next.

THE PARROT.

The giver of a forfeit is supposed to be transformed to a parrot. The conditions of his situation are as follows:

He must go round to all the players, and ask one after the other,—

"If I were your parrot, what would you teach me to say?"

Each player answers as his fancy may dictate. If a lady say, "Kiss poor Polly," the supposed parrot puts the suggestion in practice, and his ordeal is at an end. If not, he must repeat exactly every answer before passing on to another person.

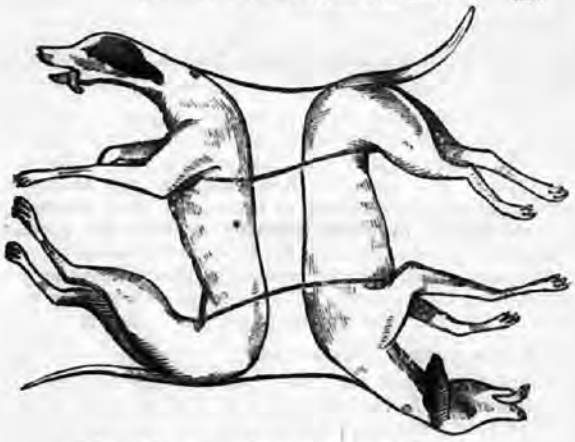
THE STATUE.

The person paying the forfeit is placed, by each person in succession, in an uncomfortable or ridiculous posture, which he is not allowed to quit, except to assume another, till he has completed the round.

A condition is sometimes added to this act—rather troublesome for the *statuary*. It is to use, for the purpose of placing the *statue* in the desired position, the hand opposite to that employed by his predecessor for the same purpose. Anybody neglecting this formality becomes statue himself.

ANSWERS TO QUESTIONS IN OUR LAST.

SOLUTIONS OF PICTURE PUZZLES.



The stripes are given, and now they go
Like hounds in swiftest Tally ho!

The mark is made, and now you can
Behold the face of a learned man.

PICTURE PUZZLES TO BE DRAWN.

1.—Draw three rabbits so that each may appear to have two ears, while you draw but three ears between them all.

2.—Draw a well with a tree by its side having its branches drooping over the well. Draw around the well, at a convenient distance, four houses, supposed to be inhabited by four poor families, to whom the well is of great importance. Draw outside these houses four others, in which are supposed to live four bad-tempered families, who wish to have all the water of the well to themselves. How would the bad-tempered families be able to build a wall so as to keep the four poor families from the well? Just show us how the bad-tempered people might make themselves disagreeable.

ENIGMAS.

What single word is there, in French or in English, which, used in its original form, and then with its letters reversed, would give the name of two very useful modes of conveyance?

Review.

Recollections by Samuel Rogers. London: Longman and Co.

We learn from an introductory notice by the Editor that

"The Recollections which form the contents of the present volume were left by Mr. Rogers in manuscript, but in a state which showed they were intended for publication.

It appears that from his first entering into society he noted down the conversation or remarks of those among his intimate friends in whose company he took the greatest pleasure; and subsequently, as these notes increased, and he felt they might become generally interesting, he proceeded, from time to time, to extract and collect those parts which he thought most worthy of perusal by others.

Mr. Rogers himself tells us that

"Lord Clarendon was often heard to say that, next to the blessing of Almighty God, he owed all the little he knew and the little good that was in him to the friendships and conversation of the most excellent men; and he always charged his children to follow his example; protesting that in the whole course of his life he never knew one man, of what condition soever, arrive at any degree of reputation in the world, who delighted in the company of those who were not superior to himself."*

REMARKS BY THE DUKE OF WELLINGTON.

Buonaparte, in my opinion, committed one of his greatest errors when he meddled with Spain; for the animosity of the people was unconquerable, and it was almost impossible to get us out of that corner. I have often said it would be his ruin; though I might not live to see it. A conqueror, like a cannon-ball, must go on. If he rebounds, his career is over.

In Spain, and also in France, I used continually to go alone and reconnoitre almost up to their Piquets. Seeing a single horseman in his cloak, they disregarded me as some Subaltern. No French General, said Soult, would have gone without a guard of at least a thousand men.

He was for ever talking as Frenchmen are, and always at my elbow. He had just left the French, and he said to me when I was reconnoitring, "Do you wish to see Marshal Soult?" "Certainly." "There he is, then!" I looked through my glass, and saw him distinctly†—so distinctly as to know him instantly when I met him afterwards in Paris, as I did several times, though never to exchange ten words with him. ‡ He was sitting on his horse, and writing a despatch on his hat; while an Aide-de-camp waited by him, to whom, when he had done, he delivered it, pointing with much earnestness in one direction again and again. "I see enough," I replied, and gave the glass to another, saying to him, "Observe which way that gentleman goes." He galloped off as directed; and I knew at once, as I thought, where the attack was to be made. "That is my weakest point," said I to myself; and I prepared accordingly; of such use, as I had always maintained, are glasses.

After the battle of Toulouse § I went to Paris, and was on my return to the army when Soult and I met half way. Each of us had six horses to his carriage, and the postillions, as usual, stopped on the road to change. I was fast asleep, and knew nothing of the matter; but Soult, learning from my courier who I was, came to the front of my carriage, as I was afterwards told, and during the operation observed me through his glass as I lay there. At Paris I knew him immediately, though I had only seen him through mine.* Massena, I remember, was at the same dinner, and said to me, "Vous m'avez rendu les cheveux gris."

Marmont throws the fault on others, but I think he was to blame at Salamanca; † for he spread his Army, thinking that we wished to make off; and with my whole force I made a sudden attack on his centre, in front and in rear. It was said, and said truly, that we defeated forty thousand men in forty minutes. He was, however, a very excellent Officer.

In Spain I never marched the troops long. Twenty-five miles were the utmost. They set off, usually, at five or six in the morning, and took their ground by one. In India they could go further. Once in one day I marched them seventy-two miles. Starting at three in the morning, they went twenty-five miles and halted at noon. Then I made them lie down to sleep, setting sentinels over them; and at eight they started again, marching till one at noon the next day, when we were in the enemy's camp. In Europe we cannot do so much. For in England we send them by a canal into the interior, and along the coast by a smack. In India they *must* walk.

The elastic woven Corslet would answer well over the Cuirass. It saved me, I think, at Orthez; ‡ where I was hit on the hip. I was never struck but on that occasion, and there I was not wounded. I was on horseback again the same day.§

In Spain I shaved myself over-night, and usually slept five or six hours; sometimes, indeed, only three or four, and sometimes only two. In India I never undressed; it is not the custom there; and for many years in the Peninsula I undressed very seldom; never for the first four years.

Buonaparte I never saw; though during the battle [Waterloo] we were once, I understood, within a quarter of a mile of each other. I regret it much; for he was a most extraordinary man. To me he seems to have been at his acmé at the Peace of Tilsit,‖ and gradually to have declined afterwards.

[He would have done better. I think, to have stood on the defensive. Six hundred thousand men would have gathered round him, and the jostling of so many would have been terrible. If he had waited for his moment and attacked when and where he pleased from the centre, his success in one instance might have been fatal to the rest.]

But two such armies as those at Waterloo, have seldom met, if I may judge from what they did on that day. It was a battle of giants! a battle of giants!

Many of my troops were new; but the new fight well, though they manœuvre ill; better perhaps than many who have fought and bled.

As to the way in which some of our ensigns and lieutenants braved danger—the boys just come from school—it exceeds all belief. They ran as at Cricket.

When all was over, Blucher and I met at La Maison Rouge. It was midnight when he came; and riding up, he threw his arms round me, and kissed me on both cheeks as I sat in the saddle. I was then in pursuit; and as his troops were fresh I halted mine, and left the business to him.

On that day I rode Copenhagen from four in the morning till twelve at night. [And when I dismounted he threw up his heels at me as he went off.] If he fed it was on the standing corn, and as I sat in the saddle. He was a chestnut horse. [I rode him hundreds of miles in Spain and at the battle of Toulouse.] He died blind with age (28 years old) in 1835 at Strathfield Saye, where he lies buried within a ring fence.

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* Abridged from a passage in the Life of Lord Clarendon, written by himself, 3rd edit. vol. I. p. 29.

† Napier mentions this circumstance.—*Pen. War*, VI. 130.

‡ I met them afterwards together at a small tea-party in London, and the respect of Soult for the Duke was very remarkable. S. R.

§ Which took place on 10 April, 1814, between Wellington and Soult, and was followed by an Armistice and Peace.

* Before the battle of Sauroren in the Pyrenees.

† Fought 22 July, 1812.

‡ In Spain.

§ Sir Wm. Napier, in a letter to Lord John Russell, says that the Duke was twice hit; once at Salamanca, and a second time at Orthez.—*Memoirs of Moore*, VIII. *at end, as a note to Vol.* V. 57.

‖ July, 1807.

GARDENING.

By GEORGE M. F. GLENNY, Jun.

It would not be easy—in fact, it would be next to impossible—to convey any adequate idea of the intensity of desire which we feel for the interest of our horticultural and floricultural friends, whose welfare we have always at heart; but as we have no wish to make any unnecessary prelude, we will walk straight to the flower garden, and at once commence showing you what operations will require performing this month.

In the first place hardy and half-hardy annuals may be sown in the open borders about the third week in February, and as such you had better prepare for the same, provided the weather is fine.

These should be sown in places where you intend them to bloom, as transplanting does not agree with them.

As many of our readers may not know exactly how to sow them so as to ensure success, we will take the liberty of describing, in as few words as possible, how to set about it.

Dig, with a trowel, small patches about six or eight inches in width, and having broken the mould up very fine, and made the surface level, draw a little of the earth to one side, sow the seed very thinly, and with the compost which you previously took off the top, just cover the seed and no more.

As soon as they appear above ground, thin them out, allowing every kind, according to its habit, sufficient room to grow.

The same directions will equally apply to hardy biennials and perennials, and therefore it will be needless to repeat them over again.

If you desire to increase your stock of Azaleas or Rhododendrons now is the time for pegging a few branches down, which is termed layering.

Verbenas which have been recently repotted should be planted in a gentle heat until they have made fresh roots, after which they may be hardened off by degrees.

Shut them up early on a sunny afternoon, as it will hasten their growth, when no artificial heat is used, and do no harm when it is.

Prune a few of your roses now, say half of them, leaving the other half till by-and-bye, so as to ensure a supply of late bloom; and also give them a good mulching of manure or rich mould.

Take up and pot any carnation layers that are still adhering to the old roots; or, if you prefer it, you may plant them out three in a patch in the borders, or in rows in the nursery bed.

Piccotees may be served in precisely the same way, therefore it will be needless to say anything further.

Remove dead and dying leaves from Auriculas, and increase the supply of water gradually as their growth becomes more active.

Pot off cuttings of Calceolarias that have become strongly rooted, and protect them until such time as they are required for bedding out.

Cuttings may be taken of Geraniums, Ageratums, Lobelias, Petunias, Salvias, Verbenas, &c.; and pot off any that are sufficiently advanced for the purpose.

Plant Ranunculuses and other bulbs, if not already done, whenever the soil is sufficiently dry for the purpose.

Should you require any great number of Dahlia plants, you had better set them to work by placing the roots in heat; and as soon as the shoots are three inches long have them taken off close underneath a leaf and potted singly into small pots, and kept in heat until such time as, by their growth, you consider they have rooted freely.

They may then be hardened off by degrees so as to fit them for planting out in May.

For the present we will refer you to our previous article, that is to say, when you have attended to these instructions.

CORRESPONDENCE.

All Letters to be adddressed to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Tobacco Smoking.—Billy Patterson wishes to bring up the subject of Tobacco Smoking, and thinks "it would call into play some good arguments."

Foreign Postage-Stamps.—J. M. M., of 4, Bancroft Road, Mile End Road, London, will be glad to make exchanges per post.

Catching Insects.—Sir, could any of your readers give me any information as to what nets and tools are requisite for a young beginner in Entomology, and also regarding the different modes of entrapping insects.—K.G.

M. Robinson.—We must see the article before we can answer the question.

Entomological News.—A "Constant Subscriber" at Darlington, asks if we will insert more of this. Certainly, if worth insertion, and properly authenticated by real name and address of writer; these last not necessarily for publication, but as a guarantee of good faith.

Paper Clothes.—Hearing they are lecturing at the Colosseum in London upon the manufacture of Paper Clothes, can you oblige by making me acquainted in your next impression who is the patentee and manufacturer of the same?—A Constant Reader.

Arseniuretted Alcohol.—I should be most happy to hear more particulars concerning the alleged potent agent in the preservation of cabinet collections of insects as given by your correspondent "Pharmakon" in the last number of *Young England*. In fact, the perfect preservation of a collection of insects, generally obtained at a cost of much time and no little labour, is a matter so important to every entomologist that I am only surprised your correspondent has not given the fullest details for the benefit of *all* who have laboured to obtain illustrations in this department of God's glorious works. —Yours truly, N. Broderick.—Inquiries are made by T. H. Wood, 39, Bondgate, Darlington, of Pharmakon, who writes in our last, for the full particulars as to its preparation and use; will he send them for insertion in our next number?

A Nightingale?—Sir, Last midsummer I was returning home about midnight, when passing a small plantation I heard a bird singing very sweetly. I immediately concluded it was the nightingale, and brought a party to hear it at the same hour, some evenings afterwards. It was still there, but its song, though clear and melodious, was short, and always commenced with several 'twits'. On carefully considering the matter since, I feel assured that I was mistaken, but am totally unacquainted with any other bird that sings during the night, and should feel much obliged could any reader of "Young England" give me information on the subject.

Shadwell, Leeds. Wm. Snowden.

W. TWEEDIE'S PUBLICATIONS.

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YOUNG ENGLAND.

VOL. I.—NO. 3.] MARCH 1, 1862. [PRICE ONE PENNY.

EARL RUSSELL.

THE house of RUSSELL has a glorious history; and from its first foundation, its noble sons have stood on the side of truth and freedom. That innocent victim of the jealousy and wrath of the Second Charles—the LORD WILLIAM RUSSELL—was a son of the first Duke of Bedford, and what distinguished him more than his nobility of birth and rank was, that he was one of the most virtuous patriots on whom God's bright sun ever smiled. Because he dared, with a pure and unselfish spirit, to oppose the course of a corrupt and profligate government, he was falsely charged with being a party in the Rye-house Plot, which had for its end the assassination of the king. He was tried before a picked jury and a brutal judge; was denied any counsel to conduct his defence; was unrighteously condemned, and amid the brightening beams of a July morning was beheaded in Lincoln's Inn Fields, in 1683. Six years after his execution, the attainder of this illustrious

EARL RUSSELL.

nobleman was reversed, his condemnation having been pronounced a mighty error, and his death declared to be nothing short of murder.

His death, therefore, left no stain upon the name or the house of Russell. On the contrary, it is the boast and glory of his descendants, that the secret and suspicious correspondence carried on in his day, leaves his character unsuspected, while History has set its seal to the fact that his patriotism was as genuine as his virtue was untainted. Nor can it be denied that the patriotic tide which coursed so livingly through his veins, has found a corresponding channel in his posterity in which to flow. The noble patriot, though dead, yet speaks; and England owes a debt of gratitude to the memory of the men, who, like him, sacrificed life itself for the salvation of their country. We are not only a freer

people, but we are a mightier people, in virtue of the part which they performed in those dark—dark days of injustice and wrong.

We revere the dead; but we honour the living. Lord William Russell the Patriot, has a noble representative in EARL RUSSELL the Minister, and once the Premier of England. If we count that man a benefactor to his nation, who has been able to open to its industry new fields of supply, or to the products of its industry new distant markets of commercial demand—if we count him a patriot who succeeds in remedying some error in the system of its government, then it is indeed impossible to estimate how great an offering he makes to society who gives it a single just law. "The reform of a single political grievance may, in its ultimate effects, be the producer of all which we admire in the thousand acts of individual patriotism—in the opener of fields of industry, the diffuser of commerce, the embellisher of a land, the enlightener and the blesser of those who inhabit it." Such is the enviable position of the present Lord Russell, and though we have no desire that he should die like his illustrious ancestor, a martyr to truth and liberty, he has as the improver of his country's laws won for himself a name which will stand out conspicuously and brightly on the page of history, survive the reign of many sovereigns, go down to posterity radiant with a thousand virtues, and tell to ages yet unborn, of a devotion to his country's weal which nothing could surpass, and which nothing could destroy.

It appears that EARL RUSSELL was born in 1792, and is therefore in the seventieth year of his age; that he received his earlier educational training in Westminster School, to which many of the nobility still send their sons as the great rival institution to Eton; that he afterwards graduated at the University of Edinburgh; that he entered on public life when comparatively young, and has been more or less mixed up with all those political changes, social improvements, and educational processes, which have marked the last fifty years.

As far back as 1823, my Lord John Russell, as he was then, brought forward in the House of Commons, the subject of Parliamentary Reform, but without any positive success. Seven years afterwards he renewed his effort to engage the attention of the Legislature to a measure which was conceived to be fraught with so much good to the constituency of the kingdom; but again he was defeated. This roused the spirit of England; and His Majesty had then to choose between reform or revolution. Parliament was dissolved. A new ministry of the Whig School was chosen, and came into power on the clear understanding, that they stood pledged to parliamentary reform. Still they could not carry the measure. They resigned; but the Conservative party refused to accept office, and the ministers were recalled, and on the 7th day of June, 1832—nearly thirty years ago—Lord John Russell had the pleasure of seeing his measure carried and converted into law.

About four years previous to this triumph, he had the felicity, in connection with the late Lord Holland, of carrying the repeal of the Test and Corporation Act. This Act was embodied in the notorious statute of the Second Charles, by which every officer, civil and military, under government, was compelled to take the oath of allegiance, and receive the Sacrament of the Lord's Supper, according to the forms of the Church of England, before entering on the duties of his office. His lordship was a party also to the Act of Catholic Emancipation, by which those civil disabilities which pressed upon our Roman Catholic fellow-subjects were wholly removed, and they became eligible to a seat in the Imperial Parliament.

It should be known also that he took part in securing that act of simple justice, by which, on the 1st day of August, 1834, it was decreed that slavery should be utterly and for ever abolished, throughout the British dominions—an Act which converted the whole of our West India Islands into something "like an Arabian scene, illuminated by the light of contentment, joy, peace and good-will towards men." He had to do with the Act passed in the very same year, for amending the law for the support of the poor; and on the renewal of the charter of the East India Company, he was a party to the depriving of that Company of its exclusive mercantile privileges, and the extending of the right of trading with the East to the whole commercial community. A new ministry then came into power, with Sir Robert Peel at its head; but when in 1846, he resigned the seals of office, he was succeeded by Lord John Russell as Prime Minister, on whom it now devolved to carry out the scheme of free trade, parliamentary reform, and national education, with all those sacred principles of civil and religious liberty to which he professed himself irrevocably pledged.

While he was in the House of Commons, his lordship was looked up to as the one indisputable authority on all constitutional questions. No other man living has the same profound and accurate knowledge of the British Constitution; nor are we aware that any one ever ventured to call in question his dictum on any given point. He has so made our history his study, as well as the history of other modern States, that he had but to speak, and his word was received as law. From the Speaker in the chair, down to the rawest and the least-informed Member, all were wont to listen to him as an oracle; and had his oratory been equal to his knowledge, he would have stood unmatched on the floor of that House. He lacks all the physical qualities of a great speaker; but what he wants in effective eloquence, he more than makes up by the depth and the soundness of his wisdom. He is the most enlightened and best-informed statesman of his age.

His elevation to the peerage, by the name and title of the EARL RUSSELL, was an act of simple justice after such a life of labour and toil—of service and sacrifice. And though the coronet was not suffered to encircle his brow till that brow had became furrowed by time, we trust and pray that his life may be spared many years, not only to wear his well-deserved honours, but to aid the counsels of his bereaved Sovereign, to adorn the senate, to serve his country, to vindicate the rights of all nations, to hasten the brotherhood of man and the peace of the world; and that, to the last, he may shed the lustre of his character over every scene and every circle.

"NE SUTOR ULTRA CREPIDAM;" OR, EVERY MAN TO HIS TRADE.—A sailor was called up as a witness. "Well," said the lawyer, "do you know the plaintiff and defendant?" "I don't know the drift of them words," answered the sailor. "What! do not know the meaning of the words plaintiff and defendant?" continued the lawyer, "A pretty fellow you must be to come here as a witness. Can you tell me where on board it was that the one man struck the other?" "Abaft the binnacle," said the sailor. "Abaft the binnacle!" rejoined the lawyer, "what do you mean by that?" "A pretty fellow you," said the sailor, "to come here as a lawyer, and don't know what abaft the binnacle means."

REALITIES.—A person being asked what was meant by realities of life, answered, "Real estate, real money, and a real good dinner, none of which could be realised without real hard work."

CALENDAR FOR MARCH.

It is the first mild day of March—
Each minute sweeter than before,—
The Redbreast sings from the tall larch
That stands before the door.

There is a blessing in the air,
Which seems a sense of joy to yield
To the bare trees and mountains bare,
And grass in the green field.

My sister ('tis a wish of mine),
Now that our morning meal is done,
Make haste, your morning task resign
Come forth and feel the sun.—WORDSWORTH.

The Sun.

The Sun passes on the 20th from Pisces, south, into Aries, north, of the Equator.

The Moon.

First quarter	21 min.	past 5	on the evening of the	8th
Full moon	17 „	5	morning	16th
Last quarter	49 „	9	evening	22nd
New Moon	45 „	7	morning	30th

The Planets.

JUPITER is in Virgo at the beginning, and in Leo at the end, of the month. To be seen in the evening and throughout the night.

SATURN, in Leo. It rises at a quarter past six on the 1st, and about four on the 31st. To be seen throughout the night about eight degrees north of the Moon, at half past eleven on the 15th.

The Earth.

[NOTE.] It appears necessary to repeat, by way of caution to our readers, that the time which we give for the appearance of flowers, birds, &c., is the *earliest* time that they have been known to appear: ordinarily they will be weeks after the time mentioned here.

FIRST WEEK.—Ivy-leaved speed-well, peach, shepherd's purse, lungwort, dog-violet flower—The frog appears—The pheasant crows—Land tortoise comes forth—Wryneck appears—Goose sits—Duck lays—Peacock-butterfly appears—Trout begin to rise.

SECOND WEEK.—Blood-worms appear in water—Black ants appear—Crow builds—Asp and laurel flower—Common alder unfolds its leaves.

THIRD WEEK.—Gooseberry in leaf—Common stitchwort, wood-anemone, muskwood, crowfoot, the elm, and the marsh marigold flower—The blackbird lays—The raven sits—The wheatear appears—The willow-wren appears—The turkey lays—House-pigeons sit—The buzz-fly appears—The sand-marten comes over.

FOURTH WEEK.—The snake, horse-ant, swallow, and marten appear—Greenfinch sings—Ivy-berries ripe—Periwinkle, spurge-laurel, golden saxifrage, double hyacinth, and wood-sorrel flower—The blackcap heard—Young geese—Ring-ousel seen. Now is the time for primroses, violets, celandines, and daises.

Above all floures in the mede,
Than love I most these floures white and rede,
Such that they callen daises in our town.—CHAUCER.

Now the mole-hunter is busy, for the moles are incessantly at work.

[NOTE.] 1st March, St. David's Day. The Welsh wear the leek, perhaps in token of one of their victories over the Saxons.—8th, Shrove Tuesday—look out for the pancakes!—25th, A gentleman once addressed a letter to the 25th of March, 6, Foley Place, London, and it was duly delivered to Lady Day, who lived there.

Fishing.

March is generally considered as the commencement of the fly-fishing season for salmon, trout, and grayling; but unless the spring be very forward, little sport may be expected till about the middle of the month. Flies for this month: the duns and browns, Hofland's fancy, and coch-y-bonddhu. A salmon was taken in the Severn last month, near Worcester, which weighed over forty pounds; it was sent as a present to Lord Palmerston.

THE POET LAUREATE AND THE LATE PRINCE CONSORT.

A new edition of Mr. Tennyson's "Idylls of the King" is enriched by the following dedication:—

These to his memory—since he held them dear,
Perchance as finding there unconsciously
Some image of himself—I dedicate,
I dedicate, I consecrate with tears,
These Idylls.

And indeed he seems to me
Scarce other than my own ideal knight,
"Who reverenced his conscience as his king;
Whose glory was redressing human wrong;
Who spake no slander—no, nor listened to it;
Who loved one only, and who clave to her"—
Her—over all whose realms to their last isle,
Commingled with the gloom of imminent war,
The shadow of his loss moved like eclipse,
Darkening the world. We have lost him; he is gone;
We know him now: all narrow jealousies
Are silent; and we see him as he moved,
How modest, kindly, all-accomplish'd, wise,
With what sublime repression of himself,
And in what limits, and how tenderly;
Not swaying to this faction or to that;
Not making his high place the lawless perch
Of wing'd ambitions, nor a vantage-ground
For pleasure; but thro' all this tract of years
Wearing the white flower of a blameless life,
Before a thousand peering littlenesses,
In that fierce light which beats upon a throne,
And blackens every blot; for where is he
Who dares forshadow for an only son
A lovelier life, a more unstain'd than his?
Or how should England, dreaming of *his* sons,
Hope more for these than some inheritance
Of such a life, a heart, a mind as thine,
Thou noble Father of her kings to be,
Laborious for her people and her poor—
Voice in the rich dawn of an ampler day—
Far-sighted summoner of war and waste
To fruitful strifes and rivalries of peace—
Sweet nature gilded by the gracious gleam
Of letters, dear to Science, dear to Art,
Dear to thy land and ours, a Prince indeed,
Beyond all titles, and a household name
Hereafter, through all times, Albert the Good.
Break not, O woman's heart, but still endure;
Break not, for thou art Royal, but endure,
Remembering all the beauty of that star
Which shone so close beside thee, that ye made
One light together, but has past and left
The Crown a lonely splendour.

May all love,
His love, unseen but felt, o'ershadow thee;
The love of all thy sons encompass thee,
The love of all thy daughters cherish thee,
The love of all thy people comfort thee
Till God's love sets thee at his side again.

Her Most Gracious Majesty the Queen, has sent to Mr. Tennyson a strong expression of approbation of these worthy English lines—worthy of "Albert the Good," the Queen, the poet, and the people.

THE YOUNG NATURALIST.

CHAPTER III.

VENUS' FLY TRAP.

THE next day, when the children went to school, they related their discovery to the scholars. "Oh," said Emily to a cluster of little girls about her own age, "I know how to make a barberry blossom move."

"How?" asked one of them.

"By tickling it."

"Ha, ha, ha!" shouted boisterous Mary Barker, "Whoever heard of tickling a flower?"

"You need not laugh so, Mary," replied Emily, "for if you don't believe me, I can prove it;"—and away she ran to a barberry bush that was growing in the field a short distance from the school-house, with a whole flock of girls after her. Emily had often told her playmates things which they did not know, which she had learned from her father; and they saw now, from her earnest manner of speaking, that she was not deceiving them. In a few minutes they all returned with a bunch of blossoms. Emily took a seat on a stone, and all the girls clustered around her to see the wonder. She then took an open flower from the bunch, and after showing her schoolmates the stamens lying upon the leaves, she gently touched them and they all arose. The children were pleasantly surprised.

"How curious!" said one.

"I wonder if I can do it!" said another.

"Let us try," replied a third; and before long each little girl was seen, with a blossom in one hand, and a pin or small piece of stick in the other, busily engaged in the experiment.

William and Robert were employed in the same manner as Emily. A group of boys was gathered around each to see the flowers move. William was grave and sober in all that he said about it; but Robert was full of sport. Whenever he touched the stamens he would make some kind of speech, as if he was talking to them. "Come, Mr. Sleepyhead, it's time for you to get up," or "Well, Mr. Lazy Loller, let's see if you have any legs to-day;" and then he would make them rise. In a short time all the boys were engaged as the girls were. The poor barberry bush in the field, which was the only one near the school-house, was soon stripped of its blossoms to afford materials for experiments.

It was very amusing to hear the remarks which were made by the different children. "I don't see," said James Barker, "what makes those little threads or stems rise up so."

"I suppose we hurt them," said Henry Randolph, "and they try to get out of the way."

"I think so too," said Richard Arnold, "for it is very reasonable to suppose that plants bleed. My father says, if you trim a grape-vine too much, or too late in the season, it will bleed to death; and if plants bleed, I don't see why they can't feel."

"Poh," said Robert; "he only meant that so much sap would run out that they couldn't live."

"Do you mean to say," replied Richard, with considerable warmth, "that plants don't bleed?" but without stopping for an answer, he added. "If you had dug as much blood-root as I have, you wouldn't say so; I have coloured my fingers many a time with it; besides, just break off a sprig of celandine, and see if it don't bleed yellow blood." At this moment the conversation was interrupted by the ringing of the bell—the signal for them to enter the school and commence their studies.

After the school was dismissed, as the two brothers were on their way home, Robert told William what Richard Arnold had said, and asked him if he thought that plants could bleed. "I know," said William, "that if you cut blood-root it looks very red, and a red liquor runs from the wound; but how it is with celandine, I don't know. We can easily tell, however, for there is plenty of it growing this side of Mr. Riker's barn, and we have to pass right by the spot."

After continuing the conversation a few minutes longer, they arrived at the barn. William pointed out to his brother the celandine, and told him he might test what Richard had said. Robert immediately broke off some branches, and found that wherever he wounded the celandine, a yellow liquor oozed out. On the ends of all the stems that he broke was hanging a little yellow or orange-coloured drop. He showed it to his brother, and asked him if he would call that blood.

"Why, no," was the reply; "you might just as well say that milk-weed bleeds white blood—because, when you break it, there comes out a white, milky substance—as to say, that celandine bleeds yellow blood."

"The truth is, that the sap of some plants is coloured; in blood-root it is red, in milk-weed it is white, and in celandine it is yellow. When the limb of a tree or plant is cut off, and the sap runs out, farmers call it bleeding; and if so much sap escapes that the tree or plant dies, they say that it 'bled to death;' but they do not mean, by such language, that trees and plants have feeling."

In the evening the children reminded their father of his promise to tell them more about Sensitive Plants.

"Oh, yes," said Emily; "I don't think I shall get sleepy before bed-time, if you will talk about sensitive plants, it is so interesting. Will they do anything besides folding up their leaves, pa?"

"Yes, my daughter. It is said that there is a species of fern in our country, which is so sensitive that it will wither upon being touched by the human hand, though no such effect is produced if it be touched by any other substance."

"Indeed! it must then be a very tender plant."

"Perhaps it is. I have often thought that it was a very appropriate symbol of many of the pleasures of the world, which wither and perish even whilst we are enjoying them. I once saw a sensitive plant more singular than that, and under circumstances which I think would make quite an interesting story."

"Do tell it to us, pa. We are always glad to hear your stories."

"Some years ago," commenced Mr. Rogers, "I had a brother, who was settled in Newbern, in South Carolina. He was afflicted with a lingering and dangerous illness. The family kindly wrote to me every week, informing me of the gradual change which was produced by the progress of the disease. Like individuals afflicted with other lingering complaints, he was sometimes better, at other times worse. Finally, I received a letter stating that the disease was reaching a crisis, and so rapidly was my brother's constitution sinking under it, that it was evident to all he could remain here but a few weeks, perhaps only a few days longer. The letter also stated that he had repeatedly expressed an earnest desire to see me before his death, but had never requested the family to inform me of it. When, however, I knew his strong desire to see me, I did not wait for an invitation. I had evidence to believe that the distance at which we were apart, and the trouble and expense of the journey, were the reasons which prevented him from requesting a visit. But to me these were not insurmountable objections. I immediately made preparations for the journey, or rather, I should, say, the voyage; took the stage the next day for New York, when I embarked on board a packet. In less than two weeks I stood by the bed-side of my dying brother. He was exceedingly weak and emaciated, though sensible. The second day after my arrival he breathed his last. He died in the triumphs of faith. Being 'absent from the body,' I have no doubt 'he is present with the Lord.' Even at this distance of time, it affords me pleasure that I gratified the last wish of my brother, and allowed him the satisfaction of an interview before his death."

Mr. Rogers was sensibly affected as he narrated these events of the past. The tears filled his eyes, and he was obliged to wipe them repeatedly away. Emily, fearing that her father had forgotten the subject of his story, and not sympathizing very deeply in his feelings, said, in a low tone of voice, "The sensitive plant, pa, the sensitive plant."

"Yes, my daughter, I am coming to it. One morning

after I had been to visit my brother's grave, and was returning to the house by a circuitous route through a pleasant valley, where I thought I could indulge in religious meditation without interruption, I heard the loud, coarse laugh of some individual a short distance ahead. Upon raising my head from the ground, I saw one of the coloured domestics of the family sitting down, and apparently watching something. He did not perceive my approach, and soon roared out again with a broad southern negro laugh, 'Yah, yah, yah! Got him now; no get away dis time, massa fly.' My curiosity was awakened. I stepped up to the slave, and accosted him with 'Good morning, Billy; what have you found that pleases you so much?'

"'Flower catch de fly, massa, an hole im fast,' said he, at the same time pointing to the object that had interested him. It was a fly caught in the folds of a leaf, and struggling for liberty."

"How did it get there, pa," interrupted Robert?"

"I will tell you in a moment, my son. I examined the flower somewhat closely. The leaves seemed to grow from the root. The stems or stalks were long, full of veins, and had a fleshy appearance. At their ends were two lobes of peculiar form, something like the half of a round ball. These were united at the back by a kind of joint or hinge, so that they could open and fold together. The edges of these lobes were notched something like the teeth of a saw, only a great deal narrower, and on the inside of these lobes were three little thorns. Two of these lobes were closed, and in each was an imprisoned insect. It occurred to me that perhaps it was a sensitive plant, and caught any unwary insect that might light upon these lobes. As I had plenty of leisure, I resolved to watch, and see whether my conjecture was true. So I seated myself upon a stone, at a short distance from the plant, but where I could distinctly see the open lobes. I had not sat there long, before an insect of some kind lighted upon one of them, and immediately the two parts of the lobe came together, and made him a prisoner."

VENUS' FLY TRAP.*

"It was a real fly-trap," said Robert.

"Yes," replied his father; "and upon inquiring, I learned that it was called Venus' fly-trap."

"Was there anything to draw the flies to it?" asked the thoughtful William.

"Yes, there was a moist, dewy substance on the leaves, of a sweet taste, and of which insects are fond. It was a delicious bait placed in a fatal trap. I thought, as I gazed upon it—such is sin; it presents to us sweet enticements, and if we yield to them they become our ruin. How many have been destroyed by its deceitful allurements. It sparkles to the eye, is sweet to the taste, and fatal to the soul. As you would advise all little insects to avoid the honeyed flower, so I would advise all little children to shun sin, however pleasant and sweet it may seem to them. At first it biteth like a serpent, then stingeth like an adder."

"How long," asked William, "did the lobes that caught the flies remain closed?"

"Whilst I was watching the plant," replied his father, "one of those that were closed when I first saw it, opened again, and a dead insect fell out. The lobes remain closed until the fly which is entrapped dies, and then they return to their open position. It is one of the most singular plants with which I am acquainted."

* *Dionæa muscipula*, Venus' fly-trap, is a North American plant. The Sundews are the representatives of the family in this country. The round-leaved Sundew, flowering in July and August, also catches flies.

HOME AND FOREIGN NEWS.

LONDON, MARCH 1, 1862.

PARLIAMENT was opened by Royal Commission on Thursday the 6th day of February; but Her Majesty's Speech, as read by the Lord Chancellor, is comparatively void of topic, and the Session promises to be one of quietude—free from party conflict, and anything but fruitful of new and important measures. It is something to be at peace with all the world; and it is in the absence of war that our surplus power should be employed in building up our social fabric—adding at once to its strength and beauty, and rendering it more than ever the object of universal admiration.

In opening the French Chambers a few days before the assembling of our Parliament, the Emperor delivered a speech, which, for the fulness and the freedom of its utterance, for its strength and tone, its boldness and unreservedness, forms a perfect contrast to that so recently read within the walls of St. Stephen's. His Imperial Majesty contemplates the relations of France with Foreign Powers with entire satisfaction; he promises to Austria, sympathetic and disinterested advice; he congratulates Prussia as a nation steadily advancing in progress; he fights shy of the Roman question, but leaves America in no doubt as to his real feeling and sentiment. Free from foreign cares, that Royal Man has directed his attention more especially to the state of the national finances. The fact that there is a floating debt of £46,000,000 sterling, does not disturb his equanimity, since France owed quite as much in 1841, when her income was not one half of what it is now. He has "passed ten years in the midst of a satisfied people, and the union of the great bodies of the State," and though the expenditure during that period has been great, he can point to the rebuilding of religious edifices and of public monuments, to the laying down of new railways, to a completed system of telegraphs, to the improvement in the condition of the army, and to a great variety of public works, as the justification of so great an outlay in the past. He speaks of the dignity of France, promises retrenchment, breathes peace, and tells the world to be at rest. Well, it is a grand utterance, and holds out no common boon to the Empire and to the nations.

THE COURT.

HER MAJESTY.—It is with great pleasure that we can report, on the best authority, the continued health of the Queen, together with the calm fortitude of her mind. She is most fully alive to the claim which the country has to her energy and activity, and it is her daily care to act as becomes the Sovereign of a loyal and devoted people.

THE PRINCE OF WALES.—His Royal Highness has left England for the East. He is accompanied in his travels through the Holy Land by the Rev. Dr. Stanley, than whom no one is better qualified to sustain such a relation, or to fulfil its duties. He has been over the whole ground before, and has laid the world of letters

under no common obligation by his published volume on Palestine. The influence which such a man may exert on the mind and the heart of the Heir to England's throne, cannot but be healthful and invigorating. We pray God that his Royal Highness may be guided and guarded in all his travels, that his health and life may be preserved, that recreation may be combined with the accumulation of useful knowledge, and that he may return to his native land better qualified to share with his widowed mother, the Queen, the duties and the responsibilities of her high office.

THE MEMORIAL OF THE LATE PRINCE CONSORT.—It appears from the report of the Committee appointed to conduct this great national undertaking, that the amount already subscribed is nearly £40,000. To whom then is this question to be referred? The Government have most prudently declined to interfere or even to give an opinion; but Lord Granville, in his place in the House of Peers, distinctly intimated that if the character of the Memorial should be referred to Her Majesty, he had reason to believe that she would be prepared and willing to express Her Royal will; and in that will, we feel assured the whole nation will at once acquiesce. Her Majesty has referred the matter to a Committee, and has signified the royal choice to be, "A monolith on the site of the Great Exhibition of 1851.

HOME.

LAY AGENCY IN THE CHURCH.—In Convocation, the Bishop of Lincoln presented a petition from a large number of clergymen in his diocese, praying that measures might be adopted for a more extended lay agency in the Church. He said, that in moving that a committee be appointed to take this subject into consideration, he was venturing on a subject beset with many difficulties. He thought that a measure such as was advocated in this petition was one to which the mind of the clergy had been gradually coming. The two points insisted upon were—first, the great and increasing population of the country compared with the agency to provide for its spiritual welfare; secondly, the presumed existence of men who, though engaged in their own vocations, were willing to employ their leisure for the glory of God and the welfare of His creatures. After the year of the Census it was impossible to contemplate the rapid advance of the population without very anxious thoughts. In 1801 the population of England and Wales was about 9,000,000. When half a century had passed, it had reached 18,000,000; and in 1861, it somewhat exceeded 20,000,000. It was obvious, then, that the spiritual provision ought to be greatly increased, and he calculated that 300 clergymen ought to be added to the existing number every year, to meet the growing wants of the population. They had not the data for ascertaining what the proportion of candidates for orders now was compared with the beginning of the present century, but the increase was certainly nothing compared with the increase in the demand. Of late years, in the remote dioceses, very great difficulty had been found in obtaining proper candidates for holy orders. They were absorbed into the southern and more favoured dioceses. Then, again, the Civil Service and the Indian Service took many away who would otherwise have been dedicated to the ministry of the Church. Then the question recurred,—What is to be done? Were they to reduce the standard of qualification? He believed that none of them would be prepared to take that step. They knew too well that the standard of qualification was by no means too high, and could not be reduced without reducing the efficiency of those who were admitted to the ministry. Another mode of meeting the difficulty was, that of the appointment of Scripture Readers—an agency to which the Church owed a great deal. It might be said that there was nothing now to prevent men from going out to hold short services if they pleased. Some, indeed, did it; but they were persons who had no high opinion of Church order and Church authority. Many others who could render valuable aid abstained from doing so, because they considered that they had no right to take such a course without due authority. The question was, whether such men could not be authorized by the Church to visit the sick, to hold short services, to catechize, and to take part in the charitable trust of their parishes. Several other prelates spoke on the subject, and in general concurred in the expediency of employing such an agency in co-operation with and in subordination to the regular clergy. The Levite must be united with the Priest, if we are to overtake the acknowledged spiritual destitution of the country.

ETON COLLEGE.—On Tuesday, the 11th ult. the royal sanction was given to the election of the Rev. Dr. Guildford to the Provostship of this far-famed institution, in the room of the late Dr. Hawtrey, over whose mortal remains the grave has so recently closed. The elevation of the Head-master to this high position, is but an act of simple justice. The man who has spent at least nine years in fulfilling the duties of principal tutor, would strike us as of all others the best qualified to fill the higher office of Provost, and would be sure not only to identify himself with the various interests of the college, but at once to enlist the sympathy and the co-operation of his fellow-teachers.

THE WINDHAM CASE.—Never was the jurisprudence of England more insulted—more degraded, than in the recent trial of this young man. In the effort to establish the charge of lunacy, there was such a revelation of his profligacy and sin as ought never to have been made manifest in the face of God's bright sun. Never before was an English court of law so polluted—so debased. It is true that the man has been pronounced of sound mind, and entitled to the freedom of any other of Her Majesty's subjects; but of his moral insanity there can be no doubt. If this trial, with all its disgusting disclosures, does not put a halt upon his step, and turn his feet into the path of purity and virtue, he is ruined both for time and eternity. Let his case be a warning to Young England, and let them shun his course as they would the mouth of hell itself.

During the trial, it came out in evidence, that this young man had been allowed more than once to take charge of the engine on our public railways, and thus endangering thousands of lives. Are we to be told this without protest? Are railway directors to be held irresponsible? Is life to be sacrificed to gratify the whim of a profligate youth? It is high time that Parliament interfered in the management of our railways, and that the public had some better security for life than what is guaranteed by these various companies. Let the nation speak as if with one voice, and her word will leap to its effect.

AN AMUSING TRIAL.—On Monday, the 4th ult. an amusing trial took place in the Exchequer Court before Mr. Baron Martin and a jury, which turned upon the musical excellence of some bells that had been supplied to the town of Hythe. The inhabitants of that very ancient town were so dissatisfied with the bells sent

down by the plaintiff, that they refused to pay for them; but it appeared in the evidence, that the original disgust arose as much out of some London ringers going down to show off their merits by some new scientific "touches," thus superseding for a time the respectable old ringers of the place, as from any defects in the bells themselves. At the suggestion of his Lordship the case was withdrawn with a view to effect a compromise.

Loss of Life in Coal Mines.—It appears from a parliamentary return, that in the 10 years commencing with 1851, not fewer than 605,154,940 tons of coal had been raised in Great Britain, and the number of lives lost at the work had been 8446, that is, one life for every 71,480 tons of coal raised. The 5,000,000 tons which are brought to London every year, must therefore occasion, on an average, no less than 70 deaths, or the loss of one life in every five days. In some mining districts the deaths are described as being far beyond this average; in South Wales, for instance, and in the South Staffordshire and Worcestershire district, they have been double the average.

The Great Exhibition Building.—The eastern and western domes are now completely riveted. The "centres" have been taken from under the eastern dome by the Thames Iron Company, so that nothing remains to be done but to paint and glaze these portions of the great structure, which is being carried on with all possible speed. By the terms of their contract, Messrs. Kelk and Lucas were bound to deliver the building to the Commissioners on the 12th ult., completed. Practically, the building is finished, and too much cannot be said in praise of the energy, skill, and determination of the contractors, who, though beset by difficulties of no common magnitude, have triumphed over all, and kept their agreement to the letter. On the 13th of February the delivery of goods commenced, and by the first day of May, the building will present a very imposing appearance, both within and without.

Mudie's Library.—Since its commencement this library, we are told, has issued to its subscribers not fewer than 1,263,000 volumes. It is true, a vast number of these are duplicates; nevertheless they represent the amount of reading issued to the public by one establishment alone. At the present moment, the house owns no less than 800,000 volumes.

FOREIGN.

The French Loan.—The French Government have abandoned the idea of asking our English millionaires for a loan of £4,000,000, and M. Fould is to be congratulated on the fact, that he is able to dispense with a mode of assistance which might have helped him in present emergency, but which could not have added to his reputation as a public financier.

Rome and the Pope.—Notwithstanding the *non possumus* of the Holy Father and his redoubtable Cardinal Antonelli, we are informed that popular demonstrations are taking place in several of the Italian towns, and that everywhere the *vox populi* is—"Rome the Capital of Italy!" Were the Pope wise, and were he surrounded by wise councillors, he would at once renounce his temporal power in favour of Victor Emmanuel, and enthrone himself in his spiritual authority as the head or chief of the Papal world.

The following circular is said to have been addressed by Baron Ricasoli to his prefects:—

"The Government still pursues the execution of the national wishes, and has formally stated by what means and ways it intends to proceed to Rome. The Ministry alone will decide upon these means, and the opportunity of employing them. The dignity and the interests of the nation alike will not permit of its allowing itself to be preceded or hurried away. It is especially important in the Roman question to obtain a great moral triumph, in which the consciences of sincere Catholics of the civilized world and of Italy are interested above all others. The Government has reason to be satisfied with the success it has obtained. The free Church and the free State together will inaugurate a new order of things, of which the Italians may become the originators. In carrying out the programme of effecting a reconciliation between Italy and the Papacy, the Government desires that its labours may not be impeded by inconsiderate acts of enthusiasm and clamorous manifestations. The Prefects should enlighten public opinion, and make use of their authority in order to prevent these popular manifestations taking place."

Russia.—An article in the *Northern Post*, St. Petersburgh, states that the emancipation of the Russian serfs and the changes in the financial system are occasioning much uneasiness, impatience, and dissatisfaction. The dissatisfied feelings of the nobility are much aggravated by the fact that the payments of the dues made by the peasants are not punctual or regular. The Government has, however, guaranteed the full payment, and will keep its word. "The nobility," says the *Post*, "must be prepared to accept the new situation of affairs and to assist the Government. The solution of the question will be found in the final accomplishment of the emancipation."

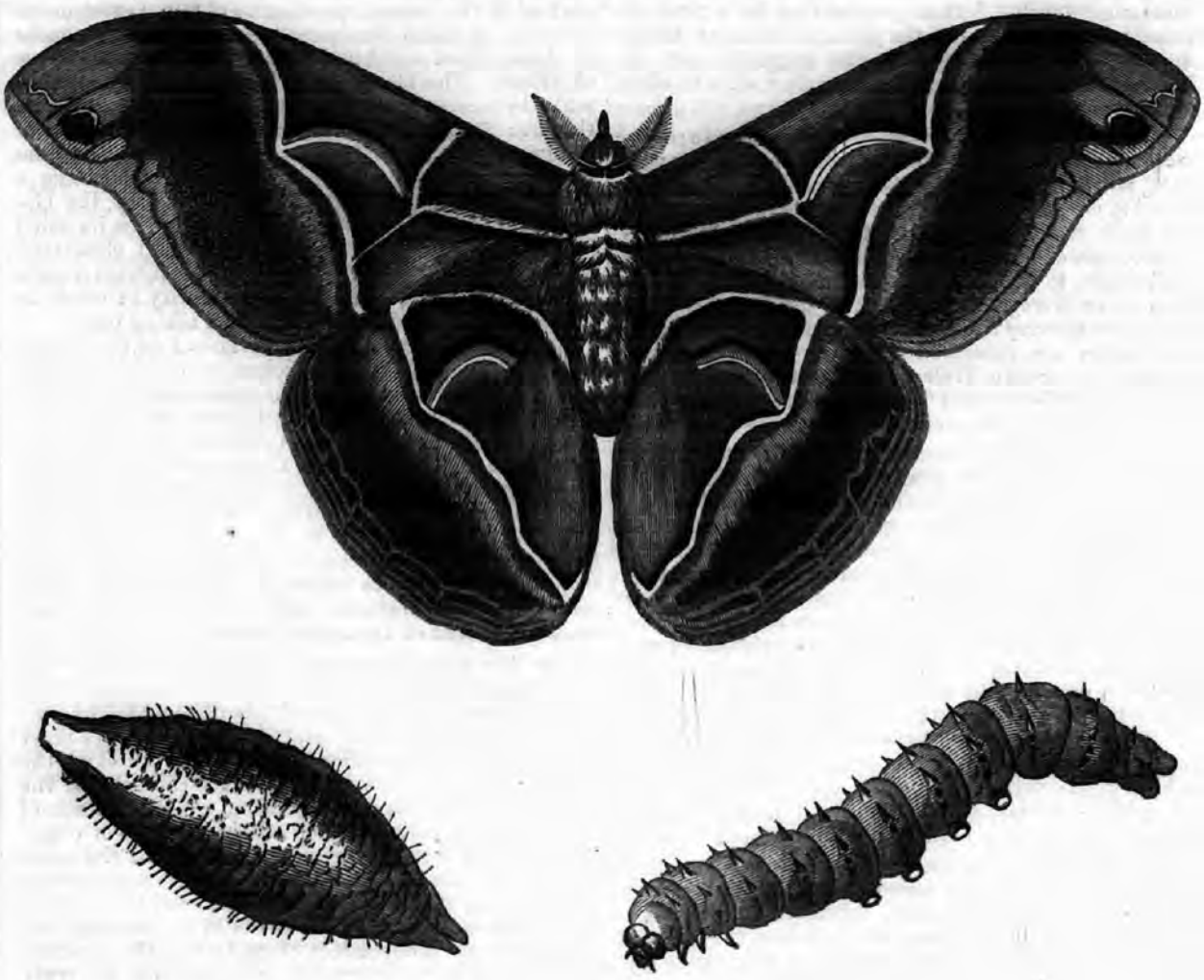
The American Blockade.—It is now notorious that this blockade is anything but effective, and on strictly legal grounds it might be utterly disregarded by ourselves and by every other neutral Power. Still we must not overlook the peculiar circumstances in which the Federal States are now placed, nor the difficulty of the task which they have undertaken. The Cabinet of Washington is calculating on a large measure of consideration and forbearance on the part of the European Powers, and the British Government have acted wisely in conceding it. Whether the South has the right or the power—although the power would involve the right—to form an independent State, is not the question which we have to determine; and therefore the truly wise course is to leave the Federals to take their own course, and do their own work in their own way, provided they intrench not on the rights of other nations.

It has been said with some show of truth, that "perhaps the very best thing in the long run for Lancashire and for England would be the maintenance of the blockade for six months more. The unhappiest thing for our interests would be an influx at this moment of American cotton. Now the whole world is beginning to work for us. The present prices tempt the cotton growers of every country to send the staple to our markets, and any check to the confidence of the foreign merchant would just now throw us back into that state of miserable dependence on America from which, at some cost of present suffering, there is now a chance of our getting free."

British Troops in China.—In the Queen's Speech we are told that "the improvement which has taken place in the relations between Her Majesty's Government and that of the Emperor of China, and the good faith with which the Chinese Government have continued to fulfil the engagements of the Treaty of Tien-tsin, have enabled Her Majesty to withdraw her troops from the city of Canton, and to reduce the amount of her force on the coast and in the seas of China."

ATTACUS CYNTHIA, OR AILANTUS;

THE NEW AILANTUS SILKWORM.



THIS fine and beautiful Moth is exciting great interest among us, which probably will increase to a "rage" among entomologists and ingenious persons given to experiments. It is said it will furnish the means of a new and profitable branch of industry. If so, after the trials have been made, and the necessary proofs obtained, a few quiet, painstaking men, backed by heavy capitalists will step in and realize immense profits.

The moth comes originally, so far as we know, from either or both China and Japan. It was drawn and published by Drury before the close of the last century, from a specimen which he says he obtained from China—ours, above, is taken from nature, in the British Museum. The moth feeds on the *Ailantus glandulosus* or Varnish-tree of Japan. The word Ailantus is Monkish Latin for the Japanese words *Ai lanto*, which we believe means Tree of Heaven. The tree belongs to the order *Zanthoxylaceæ*, or *Xanthoxylon* family. It is said to be hardy, to grow fast, and to be ornamental. We are informed by Dr. Hall that there are two of these trees of good size on the lawn before the house of George Wilson, Esq. at Wandsworth. We ourselves saw thousands of slips of the tree a few days ago at Tyne Hall, Ilford, Essex, which have made good roots and promise to be vigorous and healthy. They require the shelter of a hedge—perhaps the warm valleys of the south of Devon would suit them well. If the tree should flourish in our country, be easy of culture, and give food to the caterpillar, it will henceforth be famous, for supplying the raw material for a new branch of silk manufacture.

Both the worm and tree are acclimatized in France, where they both flourish.

Lady Dorothy Neville has the honour of introducing this welcome guest to the English public. A pamphlet is about to appear by her ladyship on the subject, which will contain valuable information as to the culture of the tree and insect at Dangstein, near Petersfield, Hants, her ladyship's residence,

Great confusion has existed among scientific men, and will be found running through all the accounts we have seen as to the identity of this moth and another very much like it. Roxburgh confounds the two in his account, published in the Seventh Volume of the Linnæan Transactions. The other similar moth is the so-called *Arrindy* silk-worm—now properly known as *Attacus Ricini*. This worm feeds on and gets its name from *Ricinus communis*, or *Palma Christi*, from the seeds of which we obtain Castor-oil. This last worm inhabits India. We have some doubt, now, about the recent separation of the species and identification of the caterpillars with their respective moths. We shall be glad to receive any further information on this novel and interesting subject. The first thing to do is to get the trees, and then the eggs.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

THE OSPREY. (*Falco haliætus.*)

CHAPTER III.—THE OSPREY. (*Falco haliætus.*)

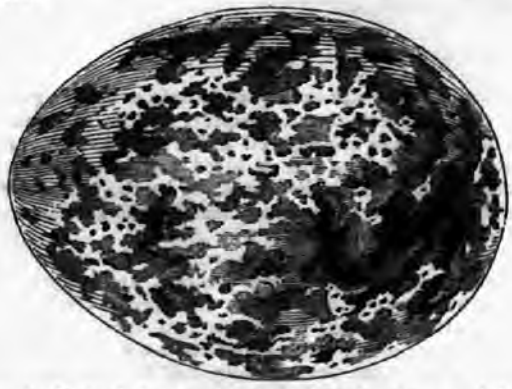
THIS bird, like the eagle, is indocile and intractable. It is essentially a fish feeder, and therefore constantly frequents the sea-shore and the larger lakes. I have already alluded to his fishing propensity when describing the White-tailed Eagle. His favourite fishes are mullet, salmon, and trout; but one which we had at the Zoological Gardens was not at all particular as to his food, but would clutch at fish presented to him without appearing to care about or examine the species. Directly a fish was thrown to him, he would grasp it with one foot, spreading out the four toes in the form of a cross. Having secured the fish firmly in this way, he never relinquished his hold, but picked out the flesh bit by bit, glancing every moment at the spectator with a mingled expression of fear and defiance: in fact he reminds me of a cur, that, having secured a bone, bristles up the hairs of his back, and mutters a series of defiant growls, while he retreats to a place of safety. The appetite of the Osprey is enormous, and the quantity of fish he consumes almost incredible: his ordinary flight is heavy, and reminds me rather of a great sea-gull than of a hawk; but he will sometimes sail on outspread and unmoving pinions, and then there is something inexpressibly graceful in his appearance I have had opportunities of watching him pretty closely in the west of Ireland, and have been particularly struck with the variety of his flight; sometimes he will descend head foremost, as though about to plunge fathoms deep into the water, and then suddenly stop in mid career, and hang suspended on gently-winnowing pinions, over some particular object that seems to have riveted his attention. In this position he seems to fascinate the fishes, for they come to the surface of the water as though seeking his deadly embrace. When the bird has once fixed his eye on the form of some large fish, looming through the wave, he falls like a thunderbolt upon his prey, often disappearing entirely beneath the water; after a few seconds they rise together to the surface, and then comes the struggle for life; the muscular pinions of the bird, and the powerful tail of the fish combine together in lashing the water into spray, so that both the strugglers are for a time hidden from our view. Instances are recorded in which the fish, too powerful for the bird, has dragged him down and consigned him to a watery grave—a fruitless conquest, for the Osprey, unable to relax his grasp, has remained self-fettered to his intended prey, until that also has died from loss of blood and exhaustion; the skeletons of the two, washed on shore by the storm-stirred waves, have been found bleaching side by side in a sheltered bay of the restless Atlantic.

The colour of the Osprey is varied: the crown of the head brown, the feathers long, pendant, and pointed, and every feather is edged with white; the back of the head and neck are almost white; but there is a very conspicuous broad brown stripe on each side of the neck, running down to the shoulder; the breast, belly, and thighs are almost white, with a few faint brown markings; the back and wings are brown; the beak is bluish horn-colour; it has a tooth on each side, is much hooked, and is extremely sharp at the point; the feathers on the thighs are not loose and long like those of eagles and hawks in general, and together with the other feathers of the bird have a great power of throwing off the water, so that however often the Osprey dashes in the water, his feathers never appear wet and sodden like those of a canary-bird or sparrow that has been washing himself. The legs and toes are quite without feathers, and are covered with large coarse bluish scales; but I will say something more about the toes: you must have observed that in those birds with which we are best acquainted—for instance, the common fowl, the sparrow, the robin, or the pigeon—that three of the toes are directed forwards, and one backwards; now in the Osprey, the outer toe of those three, which usually point forwards, moves in a ball-and-socket joint with the greatest possible ease, so that the bird can turn it backwards, or forwards, or sideways, just as he pleases: when he clutches a fish, all the four toes point different ways, or stand at right angles to each other; they are also of equal length, and the claws, which are black, are long, very much hooked, and very sharp pointed, so that the fish is held by a grappling instrument of the most perfect and formidable kind: but this is not all; the under surface of every toe is thickly studded with short, sharp points, so that it is as rough as a file; and no fish, not even the slippery eel, has the slightest chance of escape when once within the Osprey's formidable grasp. It seems to me impossible to gaze on this foot of the Osprey, with

its perfect adaptation of means to an end, without reflecting on the wonderful care that has been bestowed on every creature to enable it to maintain its station in the world of animals, and to obey in the most ready manner those innate instincts which have been given it. We shall, perhaps, never know why an Osprey was created to prey on fishes which seem to enjoy so innocent a life, and which supply man with such delicious and nutritious food; but we know that it has been created, that fishes have been assigned to it as its only food, that it is qualified by a skill far more than human to lead that life which, for some inscrutable but no doubt wise purpose, has been allotted to it.

The Osprey is an inhabitant of the northern countries of both continents, but is particularly abundant in America: he would be common in Britain were he not so persecuted. Wherever he makes his appearance fire-arms are brought, and, from his large size, he becomes a conspicuous mark for every gunner. I have seen him in England at Kensham Pond, in Scotland at Loch Lomond, Loch Tay, and Loch Awe, and in Ireland at the Lakes of Killarney; at Killarney he is invariably called the eagle, and an abrupt and striking cliff is called the "Eagle's Nest," doubtless from his using it as a favourite resort.

The Osprey builds an enormous nest on ledges of rock, the towers of deserted and ruined castles; it is composed of huge sticks and is a most unshapely and unsightly mass: the female lays two or three eggs of a dirty white or very pale red-brown colour blotched with darker markings at the end.



In the United States this bird is migratory, arriving in the spring with the shoals of fishes, which afford such abundance of food and such profitable occupation for the fisherman. From this cause the Osprey is a great favourite with the Americans, and the theme of many a song: I give an example—

Soon as the Sun, great ruler of the year,
Bends to our northern climes his bright career,
And from the caves of ocean calls from sleep
The finny shoals and myriads of the deep;
When freezing tempests back to Greenland ride,
And day and night the equal hours divide;
True to the season, o'er our sea-beat shore,
The sailing Osprey high is seen to soar,
With broad unmoving wing; and, circling slow,
Marks each loose straggler in the deep below:
Sweeps down like lightning! plunges with a roar!
And bears his struggling victim to the shore.
The long-housed fisherman beholds with joy,
The well-known signals of his rough employ;
And, as he bears his nets and oars along,
Thus hails the welcome season with a song.

THE FISHERMAN'S SONG.

I.

The Osprey sails above the Sound,
The geese are gone, the gulls are flying;
The herring shoals swarm thick around,
The nets are launched, the boats are plying;
Yo ho, my hearts! let's seek the deep,
Raise high the song, and cheerly wish her
Still as the bending net we sweep;
"God bless the fish-hawk and the fisher."

II.

She brings us fish, she brings us spring,
Good times fair weather, warmth and plenty,
Fine store of shad, trout, herring, ling,
Sheep's head and drum and old wives' dainty.
Yo ho! my hearts, &c.

III.

She rears her young on yonder tree,
She leaves her faithful mate to mind 'em;
Like us, for fish, she sails to sea,
And plunging shows us where to find 'em,
Yo ho! my hearts, &c.

Wilson, in his "American Ornithology," has some admirable observations on the flight of the Osprey in the United States. "The flight of the fish-hawk," says this elegant writer, "his manœuvres while in search of fish, and his manner of seizing his prey, are deserving of particular notice. On leaving the nest, he usually flies direct till he comes to the sea, then sails round in easy curving lines, turning sometimes in the air as on a point, apparently without the least exertion, rarely moving the wings, his legs extended in a straight line behind, and his remarkable length and curvature or bend of wing, distinguishing him from all the other hawks. The height at which he thus glides is various, from one hundred to one hundred and fifty and two hundred] feet, sometimes much higher, all the while calmly reconnoitring the surface of the deep below. Suddenly he is seen to check his course, as if struck by a particular object, which he seems to survey for a few moments with such steadiness that he appears fixed in air, flapping his wings. The object, however, he abandons, or rather the fish he had in his eye has disappeared, and he is again seen sailing round as before. Now his attention is again arrested, and he descends with great rapidity, but ere he reaches the surface, shoots off on another course as if ashamed that a second victim had escaped him. He now sails at a short height above the surface, and by a zigzag descent, and without seeming to dip his feet in the water, seizes a fish, which after carrying a short distance, he probably drops, or yields up to the Bald Eagle, and again ascends, by easy spiral circles, to the higher regions of the air, where he glides about in all the ease and majesty of his species. At once from this sublime aerial height, he descends like a perpendicular torrent, plunging into the sea with a loud rushing sound, and with the certainty of a rifle. In a few moments he emerges, bearing in his claws his struggling prey, which he always carries head foremost, and having risen a few feet above the surface, shakes himself as a water spaniel would do, and then directs his heavy and laborious course directly for the land."

"CHARACTER—EVERYTHING TO THE YOUNG."

WHAT an impressive sentence, and how *true*. It includes the element of every good for which the young can hope; and there is no counsel more frequently given or more urgently pressed upon them, than to fix upon a high standard of character. The desire of reputation, like that of happiness, seems to be instinctive; and it is a thing which cannot be too earnestly pressed upon every mind, that every individual should be *in fact* what he would *seem to be*. Would he have a reputation for virtue and intelligence, he must *be* virtuous and intelligent. Would he *be thought* to be pious or patriotic, he must be so in fact. These qualities should be inwrought into the very feelings of his heart, and purposes of his life, and be developed in his conduct. Would he be *thought* to be a lover of his country and his God, he must actually love his country and his God, and act accordingly.

In the formation of character, much advantage may be derived from an attention to the *biographies* of those who have been *good* as well as great.

The names of some who have been benefactors of mankind are handed down with honour, while others, who have been the scourges of our race, are marked with indelible infamy. The former presents a picture upon which we

may look with pleasure—the latter gives us pain. And so when we recur in memory to those who, within the sphere of our own knowledge and observation, have passed away from among the living, we find a pleasant emotion arising from a contemplation of the *character* and example and *influence* of such as were good and lived to do good, and filled up the measure of their days with usefulness. And on the other hand, how painful is the emotion which often arises, when the mind turns upon those of an opposite character, concerning whom, we may perhaps have reason to believe, that it would have been better for themselves and better for others, if they had never been born. In relation to the former, we may experience an emotion of sadness, when we think of the loss which their friends and society sustain by their removal, but it is greatly alleviated by a contemplation of their blissful triumphs and their unfading joys, and we love to think of them escaped from all the dangers and perils of their way, and wearing a crown of righteousness and exulting in the song of victory.

You live in a world where you find different and opposing influences, and you may trace them to different and opposite sources. You may find the cause of truth and virtue to have been sustained in the world in the midst of great opposition, and through many conflicts and trials. You live in the enjoyment of the means of religious knowledge, and influence, and instruction—of institutions formed for the promotion of order and piety, good morals and good government. But whence do they come? These things have been, and still are, the objects of indifference, or of inveterate opposition, from a large portion of mankind. But their existence reminds us of those who have lived before us, and who lived for the benefit of those who were to come after them.

The character of unostentatious and unpretending virtue—the character signalized in the walks of usefulness—whether found in the splendid mansion or the humble cottage, is that which fills the mind with pleasing and grateful recollections. Those who have lived to *bless* mankind by their deeds and their influence, will have their names embalmed in the memory of multitudes, who will rise up and call them blessed. Howard lived to do good, and his name will have a place in the annals of philanthropic effort and achievement while the world shall stand. But we come down from these high examples to the more common walks of life. And the fact that all who live are exerting an influence which will be felt when they are dead, is a circumstance which invests the present state of our being with immense importance, and connects with the existence of every individual inconceivably interesting consequences. And it calls upon you to determine where you will stand, and how you will stand, and how you will exert your influence. But let it be understood that the appeal which it makes is not to any unholy aspiration after human applause, but directly to the conscience, to the inherent sense of right and wrong, to that which lays the foundation for all virtuous action. Remembered you will be, whether you desire it or not Your influence will be felt, whether you intend it shall be or not. It is felt even now, in whatever circle you move. It will reach another generation, and still another, and will go on widening and extending even after your name is forgotten. It will pass beyond the limits of time, and, stretching on through eternity, will appear in the everlasting songs of heaven, or in the wailings of despair.

And the feeling of solicitude in regard to young men is increased from the fact that important interests and destinies are soon to be committed into your hands. We look forward to the time when you will stand in the place of your fathers, and bear the burdens, and responsibilities which others have borne before you. In a little time you will stand in a different position from that you now occupy. You must come up into the high places of responsibility—and sustain the institutions of your country, and your God; and it will be yours to co-operate with your own contemporaries in action and effort in sending down to those who shall come after you the blessings of this goodly heritage, which shall be committed into your hands.

Review.

Recollections by Samuel Rogers. London: Longman and Co. *Continued from our last.*

TALLEYRAND.

That despatch which Bonaparte published on his return from Moscow, was it written by himself? By himself certainly.

Which is the best portrait of him? That which represents him at Malmaison. It is done by Isabey. The bust I gave Alexander Baring, done by Canova, is excellent. It stands too low at present.

Did he shave himself? Always; though he was long about it, shaving a little and then conversing, if anybody was with him. "A king by birth," said he, smiling, "is shaved by another. He who makes himself *Roi* shaves himself."

When Lord Londonderry attacked Talleyrand in Parliament, and I defended him, saying, in everything as far as I had observed, he had always been fair and honest, Talleyrand burst into tears, saying, "Il est le seul homme qui ait jamais dit du bien de moi."—*The Duke of Wellington to S. R.*

THOMAS LORD ERSKINE.

Two old maids in a country town, being quizzical in their dress and demeanour, were not unfrequently the sport of the idle boys in the market place, and being once so beset on their way to church, a young curate who had been just appointed there, reproved the urchins as he passed by in his gown and cassock, and, offering an arm to each of the ladies, conducted them triumphantly into their pew near the pulpit.

A great intimacy followed, and, dying not long afterwards, they left him all they had. The will was disputed, and, when I rose in my place to establish it, I related the story, and said, "Such, gentlemen, is the value of small courtesies. In my first speech here I was brow-beaten by the judge upon the bench, and honest Jack Lee* took my part. When he died he left me this bag, and I need not say how much I value it. It shall serve me while I live, and when I die I will be buried in it."

WALTER SCOTT.

There was a boy in my class at school who stood always at the top; nor could I with all my efforts supplant him. Day passed after day and still he kept his place, do what I would; till at length I observed that, when a question was asked him, he always fumbled with his fingers at a particular button in the lower part of his waistcoat. To remove it, therefore, became expedient in my eyes; and in an evil moment it was removed with a knife. Great was my anxiety to know the success of my measure; and it succeeded too well. When the boy was again questioned, his fingers sought again for the button, but it was not to be found. In his distress he looked down for it; it was to be seen no more than to be felt. He stood confounded, and I took possession of his place; nor did he ever recover it; or ever, I believe, suspect who was the author of his wrong.

Often in after-life, has the sight of him smote me as I passed by him; and often have I resolved to make him some reparation; but it ended in good resolutions. Though I, never renewed my acquaintance with him, I often saw him; for he filled some inferior office in one of the courts of law at Edinburgh. Poor fellow! He took early to drinking and I believe he is dead.

RICHARD PORSON

Thanked Heaven he could at any time go without a meal cheerfully—breakfast, dinner, or supper.

Two parties must consent to the publication of a book, the public as well as the author.

All wit true reasoning.

I had lived long before I discovered that wit was truth.

* See Lord Erskine's mention of Lee, *supra*, p. 166.

"I cannot dig; to beg I am ashamed."* Who from that day to this, has seen a Jew who was a beggar or an agriculturist.

Wit is in general the finest sense in the world.

JOHN HORNE TOOKE.

An illiterate people is most tenacious of their language. In traffic the seller learns that of the buyer before the buyer learns his. A bull in the field, when brought to town and cut up in the market, becomes bœuf, beef; a calf, veal; a sheep, mouton; a pig, pork;—because there the Norman purchased, and the seller soon learns *his* terms; while the peasantry retained their own.

On sea-bathing—suppose a fish-physician were to order his patients ashore.

Reasoning is only addition and subtraction.

Read few books well. We forget names and dates; and reproach our memory. They are of little consequence. We feel our limbs enlarge and strengthen, yet cannot tell the dinner or dish that caused the alteration. Our minds improve though we cannot name the author, and have forgotten the particulars.

A child is fluent because it has no wish to substitute one word for another.

Those who know nothing of education, think there is a magic in it, when in fact it does little for us. Plain common sense plainly exprest is worth all it has to show.

I wish women would purr when they were pleased.

Pieces of money are so many tickets for sheep, oxen, &c.

All men rank the dead languages thus—Latin, Greek, and Hebrew—and trace them upwards in that order—because they learnt them in that order in the schools, and have ever since kept up the association. Latin a compound of Greek and Gothic.

Bacon, Hooker, and Milton—great writers, and the best we have. Temple a paltry one.

If a man has a single fact or observation to communicate, he writes a book on the whole subject of which that is a part. Hence the multiplicity of books.

I attend to the derivation of such words as right, wrong, power, &c.; but the names of towns deserve little notice. Such knowledge may assist Chronology; but that is *of little use*. If a man knew the circumstances of Cæsar's assassination, and placed it a hundred years sooner or later, what would it signify? The line between Europe and Asia runs somewhere in the Turkish dominions—I don't know where, perhaps nobody knows; but of what use would it be to know it?

In a dispute between father and son, I have almost always sided with the father. The son's extravagance is generally the cause; and it is hard that the father should suffer for the folly of two youths—his son's and his own.

When in company at College, a general question arose among the young men—what were their fathers? When it was Tooke's turn to answer it, he said, his was "a Turkey Merchant." He was a poulterer in Clare-market.

The great use of education is to give us confidence, and to make us think ourselves on a level with other men. An uneducated man thinks there is a magic in it, and stands in awe of those who have had the benefit of it. It does little for us. No man, as Selden says, is the wiser for his learning.

Man is a little kingdom, and if he makes one passion a favourite at the expense of the rest, he must be miserable. The rest will demand satisfaction.

You and I, my dear brother, have inverted one of the laws of nature; for you have risen by your gravity, and I have fallen by my levity.†

* St. Luke, xvi. 3.

† In Thos. Moore's Memoirs, edited by Lord John Russell, vol. vii, p. 181, Moore attributes this saying, on the authority of Mr. Shiel, to an Irish barrister, Keller, Moore's godfather, addressing some judge. Mr. Rogers's record must have been the earlier in date.

Amusements.

ROUND GAMES.*

THE BIRDCATCHER.

This game is strongly recommended to families, where the gentleman next door is not an invalid, and the baby sleeps at the top of the house.

A Birdcatcher is appointed. He forms the centre of an admiring circle, composed of the entire strength of the company, seated on chairs. Each of the players (exclusive of the Birdcatcher) takes the name of a bird—as *Goose*, *Tom-tit*, *Eagle*, *Parrot*, *Wren*, *Duck*, *Canary*, &c. The selection of birds is a perfectly optional matter, with one exception—there must be an *Owl* in the collection. The necessity of which will be seen hereafter.

The Birdcatcher tells a story—introducing the names of the various birds as often as possible. Every bird, when his name is mentioned, must immediately utter the crow, screech, chirrup, or splutter, peculiar to his species, with the accuracy usual in such representations; the slightest delay or mistake to be punished by a forfeit.

So long as the *Owl* is not mentioned, all the players sit with their hands before them, resting on their knees. At the first mention of his name, all hands must be put behind their owner's backs, to avoid being caught by the Birdcatcher, who is on the watch. If, after having named the owl, he succeed in seizing a hand not yet raised from the owner's knee, the individual so caught pays a forfeit, and becomes Birdcatcher in his turn (the late official taking his name and position in the aviary). If, on the contrary, the players are too quick for him, and he cannot make a single capture, *he* pays a forfeit and continues his narrative. The birds, at the first name pronounced, replace their hands on their knees—not till then. A sharp Birdcatcher will probably name the *owl* twice running. No notice should be taken of the second mention. When the owl is named by the Birdcatcher, he must give his cry as well as the rest.

When the Birdcatcher names "*all the birds in the air*," all utter their respective cries at once. Any bird neglecting to do so, or forgetting his identity and uttering the cry of another bird, pays a forfeit, as must the Birdcatcher himself in case of his inadvertently naming a bird not in the collection.

An arrangement may be come to that when he has paid a certain number he may be at liberty to resign his post; his successor to be appointed by lot.

As we have already stated, the selection of birds (with the exception of the *owl*) is purely an optional matter. The exact sounds to be uttered will depend on the amount of ornithological knowledge and imitative powers possessed by the players. To prevent mistakes, however, it will be as well, on commencing the game, for each to give a specimen of the sort of thing he considers a fair illustration of his peculiar department of natural history.

The following is a list of the most available birds, with their various modes of expressing themselves—compiled from the most unquestionable authorities:—

The *Cock*. "Cock-a-doodle-doo!"
The *Canary*. "Pretty Dick!"
The *Turkey*. "Gobble-obble-obble!"
The *Magpie*. "Jack wants his dinner!"
The *Sparrow*. "Chip! chip!"
The *Duck*. "Quack! quack! quack!"

* See notice in No. 1.

The *Curlew*. "Pe-wit! pe-wit!"
The *Parrot*. "Pretty Poll!"
The *Crow*. "Caw! caw! caw!"
The *Owl*. "To-whit: to-whit! to-whoo!"
The *Goose*. "Hiss-s-s-s!"
The *Raven*. "Cro-a-ak!"

These may be varied according to the humour of the performers. The parrot and magpie may express themselves in any facetious terms. These corrections must, however, be properly understood before the commencement of the game, and rigidly adhered to.

Considerable amusement may be excited by giving the different players the names of appropriate birds. For instance the duck should be a very nice young lady; a talkative individual the magpie: and so on.

All preliminaries agreed on, the Birdcatcher commences his narrative something in the following manner.

"I went out the other morning with my gun and nets to catch a few birds. I didn't intend poaching, much less robbing a farm-yard, but just on the top of a railing I saw a fine young COCK. (*'Cock-a-doodle-doo.'*) There was nobody looking, and I couldn't resist it, when all of a sudden up came an enormous TURKEY. (*'Gobble-obble-obble.'*) 'Oh! oh!' said I, 'a TURKEY! (*'Gobble-obble-obble.'*) Well, a TURKEY (*'Gobble-obble-obble,'—these repetitions are quite right and proper, being generally unforeseen, and seldom fail in bringing in forfeits—the sole aim and end of the right-minded Birdcatcher*)—is worth rather more than a wretched SPARROW (*'Chip, chip'*), and there's more to eat on it than on a CANARY (*'Pretty Dick'*). And as I'd made up my mind to steal a COCK (*'Cock-a-doodle-doo'*), why not a GOOSE (*His-s-s-s'*) or a TURKEY! (*'Gobble-obble-obble.'*) I crept up to him, when all of a sudden a rascally MAGPIE (*'Jack wants his dinner'*) flew out of a bush, making such an abominable noise that ALL THE BIRDS IN THE AIR—(*general cry without moving the hands: the Birdcatcher can generally secure a few forfeits by saying* all the birds in the hedge, in the field, &c., *the* air *only should be attended to as a signal*)—took flight at once. Off went the TURKEY (*'Gobble-obble-obble'*) on one side, and the COCK (*Cock-a-doodle doo'*) on the other, scattering a complete flock of DUCKS. (*'Quack, quack.'*) There wasn't a single bird in sight except an OWL. (*'To-whit, to-whit, to-whoo.' All hands up. A forfeit given either by the unlucky Birdcatcher, who has not succeeded in catching a hand, or by a bird whose hand he has caught. In either case, he who remains or becomes Birdcatcher continues.*)—As I was saying, the OWL (*dead silence—all hands still up*) suddenly began making such an extraordinary noise, no doubt thinking himself a NIGHTINGALE (*the nightingale sings—all hands down on the knees immediately. Forfeits from those too late, or in too great a hurry to replace them*) that ALL THE BIRDS IN THE AIR (*general cry*) flocked round again to see what was the matter. Up came the SPARROW (*'Chip, chip'*), the CROW (*'Caw, caw'*), the RAVEN (*'Croak'*), the wild DUCK (*'Quack, quack'*), even the farmer's PARROT (*'Pretty Poll'*)—in fact ALL THE BIRDS IN THE FIELD (*dead silence*). 'Oh! oh!' I said, 'now I shall put same salt on your tails'; when, to my horror, the OWL—(*'To-whit, to-whit, to-whoo.'—All hands disappear as before. The Birdcatcher catches or doesn't catch,*) &c., &c.

This game, which may be prolonged to any extent, will be found highly entertaining, not only to the parties engaged in it, but (if played in a front room, and conducted with proper spirit) to the boys in the street as well—not forgetting the policeman.

ANSWERS TO QUESTIONS.

[For the Questions see page 13 in the January Number, and page 29 in the Number for February.]

1. The Temple of Avebury, in the county of Wiltshire.

2. Life admits of development, while inert matter remains unchanged. Put a seed and a pebble side by side in the ground, and the living principle in the seed will soon develope itself, while the pebble will be found unaffected.

3. The teeth—because as soon as the beetle comes into life it begins to gnaw, and nibble its food.

4. The hand, and in the hand the thumb, without which the fingers would be comparatively useless in taking or in retaining hold of any object.

5. The proud man thinks more of himself and looks down upon every one else, whereas the humble man thinks every one better than himself, and is continually looking up to them for something to admire and copy.

6. CAB—a vehicle too well known to need any description. Taking the letters from right to left we have BAC, the French word for a ferry-boat.

ANSWERS TO PUZZLES IN OUR LAST.

These are the rabbits drawn as required.

This is the well with the wall built by the disagreeable neighbours.

PUZZLES TO BE ANSWERED IN OUR NEXT.

1.—NINE TREES.

Little friends, we pray you show
Nine trees, you can so bestow
Ten rows to form, in each row three;
Tell us at once, how this can be!

2.—THE HORSE-SHOE.

Cut a piece of paper into the form of a horse-shoe, do it neatly, and then, by two cuts, divide it into *seven pieces*.

GARDENING.

By GEORGE M. F. GLENNY, Jun.

Examine the foliage of Tulips frequently for the purpose of detecting any signs of canker, and where you are convinced that such a disease does exist, lose no time in removing the offending portion with a knife.

Keep the beds perfectly free from weeds, the heart of the plants from mould as well as water, which, in spite of every attention, will occasionally lodge there; and in favourable weather let the surface be loosened to the depth of two inches.

Sow Stocks, both the German and ten-week varieties, as well as French and German Asters; the former in a cool frame or one that will soon cool down, and the latter heat.

Cuttings may be taken of Chrysanthemums, which will strike freely in a cold frame; these, when rooted, should be potted off singly into small pots, and as soon as they have made fresh growth, topped back to three or four eyes for the purpose of making them dwarf and bushy. The tops thus taken off, will, if wanted, make very nice cuttings.

Calceolarias may be hardened off, by removing them to a cold frame, in which they can have a plentiful supply of fresh air. For the sake of encouraging the young stock to throw out new roots from the lower part of the stems, it will be policy to shift them, in doing which place them very deep in the pots. As soon as they have made fresh growth, stop them in the same manner as advised for Chrysanthemums, to ensure dwarfness of habit. Cuttings may be taken off now, as they will root readily in gentle bottom-heat.

Put in cuttings of every kind of bedding plant that is likely to be required, and pot off such as have struck. Well-rooted plants of Verbenas, Petunias, Scarlet Geraniums, and Lobelias, intended for bedding out by and by will be as well removed to a cold frame, as the first step towards hardening them off for planting out when the time arrives. In a word, push on the propagation and seasoning of these young plants, so that they may not feel the hardship of being turned out of doors when the time draws nigh for such harsh measures.

Keep Auriculas as near the glass as possible, and give them an ample supply of fresh air whenever the weather will permit, by drawing the lights completely off the frame, shade them from the sun, which they cannot endure nicely, and water them as often as necessary; but take especial care to let them have sufficient as they are very apt to become cramped in the bloom when water is only sparingly given.

Fuchsias require to be grown in a warm, moist temperature, and to be frequently syringed, or they will not thrive so well as they otherwise would. Stout cuttings taken off the old plants during this month, and stuck into a pot of silver-sand, kept moist and placed in moderate heat, will strike freely; and if potted off as soon as rooted, and carefully attended to afterwards, will make very fine blooming plants.

Roses may be increased by cuttings, layers, or grafts, any time during this month—a fact which will stimulate every lover of this beautiful flower to action. The out-door varieties should be pruned, that is to say, all the old wood should be cut, leaving the young shoots, which will have to be shortened at regular distances.

New beds may be made of the Russian, Double White, and Double Blue Violet, but in doing so, the best young runners should be selected, provided seedlings cannot be had, which, after all, make the handsomest plants.

Seedling Pansies, which have been wintered in frames, should now be planted out. Stir the surface of the soil between those which were planted out in the autumn, fill up any vacancies, and for the purpose of increasing your stock, sow seed.

Mow lawns, roll gravel-walks, sweep up and collect together litter of every kind, which will not only give the garden a neat appearance, but be very valuable for manuring purposes.

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

New Species of Honey-Bee.—At a meeting of the Apiarian Society, Mr. Tegetmeir described the successful introduction into this country (by Mr. Woodbury, of Mount Radford, Exeter,) of the *Apis Ligurtica* or Ligurian bee—a distinct species from the ordinary honey-bee. It is regarded of great value as an abundant honey collector, and has been recently introduced into Germany with great success. Colonies of the new species were stated to be at work in the Apiary of the society, Mewswell Fill, and also in Devonshire.—B.

A New Ailantus Silk-Worm.—The "Journal of Horticulture," has a very interesting article on a domestic manufacture, which may rival bee-keeping in its cheapness of production, and be very valuable to the cottager. "Many of our readers may be aware that there has recently been introduced into France a new species of silk-worm, which promises to rival, if not supersede, that which has been so long the sole producer of all the silk commerce. Unlike the old species, which is known to be of delicate and tender constitution, and has of late been the subject to disease which has produced great mortality in the silk producing districts, the Ailantus worm is said to be very much more hardy and more easy of cultivation. Some months ago, we had numerous inquiries about this new entomological introduction, and several of our readers were successful in becoming possessed of some of the eggs. Until now we have been totally ignorant of the results of any experiments that have been made in rearing the worms. It is to Lady Dorothy Neville, of Dangstein, that the great merit is due for being the first to make known the perfect success of this hardy species of silk-worm in this country. From this, the first attempt—Lady Dorothy's—we entertain high hopes that this will become, not only a pleasing, but a profitable pursuit. Experience will, doubtless, bring out many points in the management, of which is yet to be discovered; but there can be little doubt, that from the following communication from Lady Dorothy, there is great encouragement to persevere in the work. 'I am very much pleased with my worm success, and I have no hesitation in saying the worms might be hatched and brought up to their end, by the commonest persons, and without the slightest care after they are placed on the leaves. We made a mistake in having standard Ailantus trees growing too far from each other. The poor worms descend the stems in order to find food, and perish on the ground; whereas, were the trees planted like our copses, the worms would go from one to the other without risk. I am certain that, in consequence of the little food (for we have to put them on cabbage, which they ate very little of,) they spun prematurely, and then their cocoons are not so big as under favourable circumstances they would have been. I send you two as specimens. Next year, I shall (D.V.) set about this new experiment in earnest. The worms, themselves, are most beautiful, very like the *Sphinx* (Bombyx) *ligustri* of a bright emerald green, with torquoise blue spikes. We shall be most happy to receive any further information on this important subject; and we, and the public, are much indebted to Lady Dorothy Neville, for the disinterested publicity she has given to her experiments, which will serve both as information and a stimulus to others to prosecute what may yet prove to be an important branch of industry. These insects are perfectly hardy, and have only to be placed in the trees where they take care of themselves. Birds do not appear to touch them."—B.

Startling Facts.—I suppose there is now scarcely one throughout our land who has not heard of the recent terrible and appalling Hartley Colliery accident? The idea of 200 lives being sacrificed under such sad circumstances has struck every heart with sorrow, from the Queen on the throne down to the humble cottager; and we hope and doubt not that this calamity will cause measures to be adopted to prevent the repetition of such an awful occurrence. Now, suppose another accident had occurred a few days after, and before a week had elapsed another! Or suppose, that in spite of all the precautions used by miners to guard against accidents—what with gases, foul air, and other causes—about 100 people were killed every day by working in coal mines! Why, England would almost rise up as one man, exclaiming, "Well, if we cannot have coals, *useful as they are*, without this fearful risk and loss of human life, we had better do without them altogether!" But suppose these accidents had gradually increased, and you had become so *accustomed* to these deaths every day, that you were to begin to think very little or nothing of them, and not even, perhaps, to know of them. Impossible, say you, that we could become *accustomed* to such a fearful state of things, or that they could exist without our knowing of it! Alas! it is possible; and such a state of things *really do exist*. For there are intoxicating poisonous drinks used all through our land, and we are informed, upon good authority, that they are the cause of the death of more than 40,000 human lives every year. You see the *cause* is different, but the *effect* is the same. Nay, *worse*; for what about the *souls* of those who drink themselves dead?—when the Bible declares that "No drunkard shall inherit the kingdom of God." When reading of the poor miners in their living sepulchre, calmly and prayerfully waiting death, our sorrow has been somewhat relieved by seeing the "solid comfort" religion can give, and by knowing that they are now happy and safe from every danger. But, oh! how dark, how fearful the con-

dition of those who, by drink, have deprived themselves of many precious days and years God had given them;—have dared to make themselves lower than God had made them, and then to go reeling into his presence self-murderers. Do you not think we should do our very utmost to get rid of such an awful state of things? For, remember, *it is in our power*—we are, therefore, *responsible* for the existence of this evil, although we have become so accustomed to it, and although many may, perhaps, say "we did not know it." This excuse will not avail us, in as far as we might have known it, and ought to know it. Hear what God says to us in His word—"If thou forbear to deliver them that are drawn unto death, and those that are ready to be slain? If thou sayest, 'Behold, *we knew it not*;' doth not he that pondereth the heart consider it? and he that keepeth thy soul, doth not he know it? and shall not he render to every man according to his works?"—Prov. xxiv. 11-12. "Think of these things." HOPEFUL.

INCUBATION.—It is desirable to call Mr. Newman's attention to the fact that there is now in the Zoological Gardens, in Regent's Park, a Pythoness actually incubating, or hatching, its young from eggs, and that therefore his definition of a bird as the only animal that incubates is no definition at all. Perhaps Mr. N. may say that the Python, being a cold-blooded animal, is only guarding its eggs, and not communicating vitalizing heat; but, in a similar case at Paris, it is expressly stated that the heat of the mother's body was sensibly increased; and, at any rate, the young are brought forth by the eggs being so closely kept together, and the external air excluded by the serpent's body, and this, surely, is incubation. As to the old definition of a bird, a feathered biped, which Mr. N. rejects, it surely does not follow that because a butterfly has something like feathers on its *wings*, that, therefore, feathers cannot be a distinctive mark of birds at all. Only say a bird is an animal with feathers on its *body*, and you give a definition which includes all birds, but excludes every other creature besides.—W. R.

THE TORTOISE.—Sir,—I am induced to apply to you for information respecting the habits of the tortoise during the winter season. I bought one about Midsummer last, and it appeared healthy and in good condition (eating lettuce-leaves) up to about September or October, when it refused to eat, and from that time apparently ate nothing, yet crawling about as usual: but during December it became more and more sluggish in its movements, and within the last fortnight appeared unable to crawl from weakness, and on the 17th inst. I found its limbs stiff and the head drawn closely within the shell, and it appears to me to be dead, and in this state it remains immovable. Now, sir, I beg to ask whether I am right in considering it dead or in a torpid state? If in a torpid state, may I ask how I am to know this, and what method had I better adopt to preserve it through this state? Your kind answer would greatly oblige, sir,—A. Z.

*** Most probably it is torpid, and will soon revive.—ED.

CATCHING INSECTS.—In answer to "K. G." about "catching insects" I will be brief:—1. A hoop-net, order at a tin-worker's. Diameter, 16 in.; tinman's work, 4*d.*; the net part, 2 ft. deep, price 8*d.*; a light wood stick, 6 ft. long, 2*d.*: total, 1*s.* 2*d.*—2. Collecting box. When opened out, inside area, 100 sq. in.; cork top and bottom; price of box, tin or wood, 6*d.*; cork, 3*d.*: total, 9*d.*—3. Setting-boards, 20 different sizes. The set cost about 1*s.* at any reasonable joiner's; or better *make them yourself*.—4. Pins, four different sizes—you cannot make them yourself; 9*d.* to 2*s.* per oz. For moths a poison bottle, containing chloroform, and prick the thorax with oxalic acid when at home. An empty hair-pomade bottle, with wide mouth. Chloroform, 1*s.* per oz.; oxalic, 2*d.* per oz.—*Time, patience*, and *perseverance* are much better than *money* in this case. Yours truly,

A FRIEND IN NEED.

OUR PLANS AND PURPOSES.—Many of our readers must be disappointed in not seeing answers to their questions as to what we intend to do in "Young England." We have no objection to be chatty and communicative; but it would be very inconvenient to give the information sought. Our friends must, therefore, excuse. We prefer they should wait and see, rather than promise anything.

DEATH'S-HEAD HAWK MOTH.—I have a death's-head hawk moth, which has never properly expanded its wings. Can you, or any of your readers, inform me of a mode of doing so?

Lewes. A. B.

*** The wings cannot be expanded now. The moth must have been injured before its development in the chrysalis, or previously in the caterpillar.

LEPIDOPTERA.—I have a quantity of insects for exchange, and shall be glad to send a list of same on receipt of a list of duplicates from parties desirious of exchanging. FREDERICK BUCKTON, 6, Beechgrove Terrace, Leeds.

CAN A CHRYSALIS LIVE WITHOUT AIR.—Would you inform me whether chrysalises can live without air, as a friend of mine keeps his in an air-tight bottle and wishes me to try the same plan, which I do not think advisable, till I hear further advice?

Hull. W. R. CROSS.

*** The answer is yes, but they had better be kept as nearly as possible in the natural state. The above is not a good plan.—ED.

ENTOMOLOGICAL INTELLIGENCE.—Mr. Richard Borthwick, of Alloa, and other persons who have written us on the subject are informed, that we shall be happy to publish well-authenticated intelligence. Real name and address must be always sent.

THE BIRDS OF AUSTRALIA.—We shall be glad to hear from Mr. Philemon any information he may please to send us on this subject.

TOBACCO-SMOKING.—W. Wyleson, of Newcastle, writes to say if "Billy Patterson" has any views to put forth on the subject, we shall all be very willing to discuss them.

SETTING DIPTERA, &c.—Sir, can any of your readers inform me, in your next number, whether there is any peculiar method used in setting Diptera and Hymenoptera?—WM. COLE.

INSECTS.—Richard Borthwick, Chemist, Alloa, Scotland, has a number of insects to exchange for Imagos and Pupæ. He has a number to distribute. Write him.

"YOUNG ENGLAND."—We are much obliged to Mr. John Philemon for the interest he takes in our paper, and are pleased to hear he intends circulating it in Australia.

A NIGHTINGALE.—Mr. Philemon suggests the bird Mr. Snowden heard (see correspondence of last No.) was the Sedge Warbler.

ROWLAND.—The best thing you can do is to consult a naturalist. No.

AQUARIUM.—Can any of our readers tell the best way to stock a fresh-water aquarium?

DOUBLEDAY'S LIST.—What is the meaning of W.V., in Doubleday's Synonymic List?—WM. COLE.

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YOUNG ENGLAND.

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PRESIDENT LINCOLN.

MORE than two hundred and forty years have rolled away since a little band of Christian men who had fled to Holland to escape the flame of religious persecution which was then burning in England, left Delft-haven on board the *Mayflower*, for the New World. They had a rough and trying passage; but their thoughts were fixed upon the future; and ere they landed, they formed themselves by a solemn, voluntary compact, into a body politic; so that in the cabin of the *Mayflower*, humanity recovered its rights, and government was instituted on the basis of equal laws for the general good. In December, 1620, they planted their foot on Plymouth Rock, and there found a home for themselves and their little ones. Their sufferings during the first three years beggar all description. Yet how heroic was their spirit! Before a single hut or habitation was yet erected to cover their homeless heads—when as yet they occupied nothing but

PRESIDENT LINCOLN.

a desert, where their voice could fall on no human ear, they met to worship God, and avow their still deeper attachment to the principles of Truth and Freedom.

No ordinary men were these PILGRIM FATHERS—such is the name by which they are known—and for no every-day purpose did they live. We are told that "they were the most remarkable men which the world has ever produced; men to whom New England owes her religion, with all the blessings—social, civil, and literary—that follow in its train; men whose blood still flows in the veins of thousands, and into whose inheritance others have entered." And though "the winds of two centuries have swept over their graves," they still live in the immortal principles which they taught, and in the enduring institutions which they established. A Constitution was drawn up which was to serve as a sort of Magna Charta, embracing all the fundamental principles of just government—a government such as the laws of natural justice warranted,

uniting all interests by the operation of equal laws, and which has been continued with but slight modification to the present day; so that everywhere legislation and religion left their blessing behind. It is in the principles and sentiments of the Pilgrim Fathers that we have the true elements of the present greatness and enterprise of the New World. Beyond all question, America owes her present position among civilized nations to the high destiny for which those men lived, and toiled, and endured.

We English folks believe in a limited Monarchy, while the Americans believe in a Great Republic, or the union of separate and independent States into one confederate body, with a President at its head. The Presidential Chair is now filled by a man whose private character, and whose official position as the elect of a great nation of free and united citizens, peculiarly entitles him, we are told, to our sympathy, our respect, and our admiration.

ABRAHAM LINCOLN, the President of the United States of America, whose portrait adorns our present Number, and whose history illustrates the power of natural talent, when conjoined with persevering industry, to overcome all those difficulties which lie in the path of a successful enterprise, was born in Harden, in the county of Kentucky, now included in Larne County, on February 12th, 1809, so that he is now in the fifty-third year of his age. His ancestors belonged to the Society of Friends, but he himself is not a member of that community. In 1816, his father removed to what is now called Spencer County, Indiana, where Abraham, not yet eight years old, but a great child for his age, was set to work, with axe in hand, in clearing the forest; and for the next ten years was mostly employed in field or agricultural labour, in connection with his father's farm. He went to school at intervals, but the whole period spent in his education did not exceed twelve short months. At the age of nineteen, he made a trip to New Orleans as a hired hand upon a flat boat. At twenty-one, he removed with his father from Indiana, and settled in Macon County, Illinois, where he took part in constructing a log cabin for the family, and in splitting rails to fence in some ten acres of land. In the year following, he was engaged, at twelve dollars per month, to assist in building a flat boat, which he afterwards conducted to New Orleans. On his return from this voyage, he was put in charge, as clerk, of a large store and mill in New Salem. His history gathers interest as we proceed. On the breaking out of the Black Hawk War, in 1832, he joined a volunteer company, of which he was chosen captain. Not long after this, he was appointed postmaster in New Salem, when he turned his thoughts to the study of the law. He now entered on a new path, and his course opened before him. In 1834, he was chosen to fill a seat in the Legislature; and was re-elected to this honour in 1836, 1838, 1840. In 1846, he was chosen to sit as a representative in Congress; but it was his memorable senatorial contest with the distinguished Stephen H. Douglas, in 1858, that brought him more prominently before the public, and finally led, first to his nomination, and then to his election, by the Republican party, to the Presidential Chair, as the highest pinnacle of office which his country could hold out to him. But he has been called to Washington in the midst of difficulties unprecedented in the history of any President who has preceded him. Never were circumstances more embarrassing—never was the line of action more difficult to determine. Before he came to the Chair, the South had adopted the principle of secession, and the measures decided upon by which that secession might be effected. He was sworn to preserve the Constitution of his country, but he found himself surrounded by men, in almost every department, who were declared enemies to that very Constitution, and with an army not only undisciplined and inefficient, but to a large extent corrupt and treasonable. Now, till we understand the circumstances under which Mr. Lincoln was elected, and the nature of those obligations which he assumed on the day of his election, we are not in a position to judge of his official conduct. He may have failed to do what seemed most obvious to us—he may have been wanting in some of the elements of fortitude and self-reliance—still we must keep in mind that he could not possibly do all that he himself would have done, had he been left to the freedom of his own will.

Present events are in his favour. We rejoice in the victories which have crowned the arms of the North. We have not the shadow of a doubt that the North will be ultimately triumphant over the South. We do indeed regret, most deeply and sincerely, that anything should have taken place calculated for a single moment to disturb the peace of the great Republic; and, though the Eagle of America is now looking out from its nest on the dark and troubled elements which sweep over the land, carrying death and desolation on their wings, we regret that any portion of the Union should have dared to throw out the flag of an open rebellion, and trample under foot the principles of the Constitution. We regret still more that anything should have taken place to disturb the good understanding between England and America; but we trust that England and America will both forget the affair of the *Trent*, and from this day live and act as if that affair had never transpired. If, at the foundation of this Civil War there lies—as, we believe, there does lie—the question of SLAVERY, then we say broadly, distinctly, emphatically, (and may our words find their way through the length and breadth of the great American Republic,) that if the South imagine that because they supply England with slave-grown cotton, therefore we have any sympathy with them in their slave-holding, or with their slave preferences, they are greatly mistaken. And if the North think that England has no sympathy with them or with their interests, or is unconcerned about the issue of the great conflict in which they are engaged, they too are mistaken. The English people are pledged—solemnly, irrevocably, for ever pledged to the cause of human freedom. By our own act of Negro Emancipation, passed in 1834; by the costly oblation of twenty millions which we laid upon the altar of liberty; by the genius of that Constitution under which we live; by the spirit and the teaching of that Christianity which we profess, we are solemnly and irrevocably pledged to the cause of human freedom. Nor can we but hail with supreme satisfaction, the glad tidings which have this morning reached our shores, that President Lincoln had sent a message to Congress, in which he proposes to abolish Slavery in the South, not at once, but by the gradual process of buying up the Slaves out of the revenue of the Federal States—a revenue which is now being wasted in intestine war, and which is more than sufficient, in the event of hostilities being brought to a close, to effect the great philanthropic end which the President now proposes to himself and the nation. Though the message has taken all parties on the other side of the Water by surprise, and produced the most powerful excitement, we confess that we could doff our bonnet and throw it into the air in perfect joy. There is now hope for the Republic, and her salvation, we trust, is not far off. It

is true, that the American journals are divided in their opinion as to the effect of the President's proposition: while some conceive that it will utterly fail to induce a single Slave State to give up their property in man, others think that the whole civilized world will receive it as an acknowledgment that henceforth the union and liberty are one and inseparable; while some imagine that as an expedient it is far too expensive, others believe that it seals the fate of the war. Our sympathies are all with those who have received the message with favour; and if President Lincoln can carry out his object, he will stand only second to Washington in the history of his country, and will rear for himself a monument more precious and more enduring than the most polished brass or the most costly marble. If the South is wedded to Slavery, the North is now and anew sworn to Liberty. Let the North, then, only prove faithful to her own professed principles, and England will stand by her up to the last possible point of her present struggle; in token whereof we would with them clasp hands inseparable, and vow, in the presence of Heaven and earth, that we will neither halt nor hesitate in our course till the last link of the chain has fallen from enslaved humanity, and man everywhere walks forth in the freedom of a redeemed, renewed, uplifted nature; and, having thus clasped hands, and having thus solemnly vowed, we may then with consistency and confidence of faith turn to the Throne of Universal Love, and in the words of the immortal Milton, say:—"Come forth out of thy royal chamber, O Prince of all the kings of the earth! put on the visible robes of thy imperial majesty; take up the unlimited sceptre which thy Father hath bequeathed thee; for now the voice of thy Bride calls thee, and all creatures sigh to be renewed."

CALENDAR FOR APRIL.

THY open'd leaves and ripen'd buds
The cuckoo makes his choice,
And shepherds in the greening woods
First hear his cheering voice.

And to thy ripen'd blooming bowers
The nightingale belongs,
And singing to thy parting hours
Keeps night awake with songs.

With thee the swallow dares to come,
And cool his sultry wing,
And urged to seek his yearly home,
Thy suns the marten bring.

Oh, lovely month! be leisure mine
Thy yearly mate to be,
Though May-day scenes may brighter shine,
Their birth belongs to thee.

The Sun.

The Sun passes from Aries to Taurus on the 20th.

The Moon.

First quarter	13	min. past	12	on the morning of the		7th
Full moon	58	"	2	" afternoon	"	14th
Last quarter	3	"	6	" morning	"	21st
New moon	27	"	11	" evening	"	28th

The Planets.

JUPITER is in Leo all the month, and will be the most brilliant object in that part of the heavens.

SATURN also is in Leo.

The Earth.

FIRST WEEK.—Nightingale sings—Snipe pipes—Cuckoo heard—Ash, chequered daffodil, cowslip, ground ivy, box-tree, gooseberry, currant, pear-tree, dog's mercury, wych-elm, lady's smock, and blackthorn flower—Spider's webs on surface of ground—Death-watch beats—Gudgeon spawns, and elm tree puts forth its leaves.

SECOND WEEK.—Redstart, middle yellow wren, swift, second willow wren or laughing wren, and whitethroat appear—Titlark sings—Crown imperial and whitlow grass flower—Beech and larch trees put forth their leaves—Shell snail comes out in troops—Stinging fly and red ant seen, and the mole cricket churs.

THIRD WEEK.—Red nettle, wild cherry, garden cherry, plum, harebell, hawthorn, and male fool's orchis, flower—Common flesh fly, lady cow, and grasshopper appear—Willow wren's shivering note heard—Turtle coos—Middle willow wren and grasshopper lark appear.

FOURTH WEEK.—Apple-tree, wild wood strawberry, sauce alone, wild or bird cherry, and sycamore flower—Blue flesh fly, apis hypnorum, musca meridiana, wolf fly, and dragon fly appear—Black snail or slug abounds—Large bat and the cabbage butterfly appear.

Remarkable Days.

1st. All Fool's-day.—"Sir, there's something out of your pocket!" "Where?" "There!" "What?" "Your *hand*, Sir."—"Ma'am, I beg your pardon, but you've something on your face." "Indeed, my man! what is it?" "Your *nose*, Ma'am!"

Then in-door youngsters club their wicked wits,
And almost frighten servants into fits.

*** The noble game of Cricket fairly begins at Easter.

Fishing.

FLY-FISHING.—Most of those flies taken in March will be taken in April. The favourite flies for this month are the dark-brown dun, dubbed with the hair of a dark-brown spaniel or calf, little whirling dun, and yellow dun; also granam or greentail.

LEPIDOPTERA.

MOTHS AND BUTTERFLIES EXPECTED IN APRIL.

P. Brassicæ.	T. Laricaria.
P. Rapæ.	N. Pelveraria.
A. Cardamines.	F. Carbonaria.
S. Ægeria.	A. Esclaria.
L. Argiolus.	A. Badiata.
T. Rubi.	A. Derivata.
C. Bicuspis.	S. Vacciniana.
D. Coryli.	C. Fagella.
D. Mendica.	S. Douglasii.
X. Conspicillaris.	I. Pectinea.
T. Piniperda.	A. Cuprella.
S. Illunaria.	M. Purpurella.
N. Gonaria.	S. Apicella.
A. Prodromaria.	O. Piniariella.
H. Abruptaria.	E. Rufocinerea.
T. Crepuscularia.	L. Bremiella.

In this month M. Carmelita should be looked for on birch trees and palings near.

M. Purpurella, and others of that genus, may be obtained by sweeping the twigs of birch.

CATERPILLARS TO BE LOOKED FOR IN APRIL, AND WHAT THEY FEED ON.

Alder.
T. Sphegiforme, in the stems.
T. Culiciforme, ditto.
E. Apiciaria.

Birch.
T. Scoliaforme, in the stems.
C. Bilunana, in the catkins.

Currant.
T. Tipuliforme, in the stems.
C. Dotata.
I. Capitella, on the twigs.

Fir.
E. Fasciaria.
T. Variata.
T. Firmaria.

Oak.
T. Cynipiforme, in the bark.

Plantain.
M. Artemis.
N. Plantaginis.

Poplar.
T. Vespiforme, in the stems and roots.
S. Apiformis, ditto.

"AWFUL CHARGES."—In an advertisement by a railway company of some uncalled-for goods, the letter L has by an accident been dropped from the word lawful, and it reads now, "People to whom these packages are directed are requested to come forward and pay the awful charges on the same."

GARDENING FOR BOYS AND GIRLS.

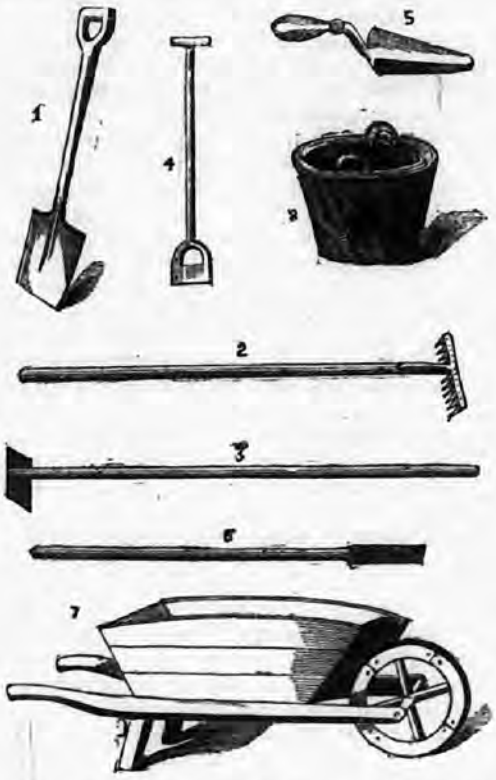
By GEORGE M. F. GLENNY, Jun.

There is no denying that the culture of Flowers, Fruits, and Vegetables is, if not positively the best, one of the most healthful and delightful recreations to which the mind and body can have its powers applied; and hence how necessary it is that an early taste for a pastime, possessing so much of all that is pleasing, all that is instructive, all that is wonderful, should be engrafted on the minds of the youth of our land of either sex. The art is, in most instances, alike welcome to the lady, who *could* keep a gardener, but prefers waiting personally upon the wants of her favourites: the gentleman, who, after business hours, walks and works too in his garden, to relieve his mind and invigorate his body; the mechanic, who toils all day long, and yet thinks it no hardship to work on till dusk in his own plot of ground; the cottager, who feels as proud of his allotment as the wealthy do of their many acres of land; the professional gardener who lives by his trade: and the amateur, who gives his whole and sole attention to the requirements of his floral family. In a word, there is not a class of whom there are not some thankful to the Giver of all good for these delightful companions within the reach of every one. For our own part, we can only repeat, what we have many times said, that we have tasted those pleasures abundantly, and knowing, as we do, the value of them, we have a very great desire to increase the taste, by unveiling the mystery surrounding it; to instruct those who know but little of the work, by showing them what to do, and what to avoid; and thus cause the cultivation of flowers to become even more general than it is at the present day; the practice, if possible, easier than it ever has been; and the owners of a garden, as a natural result, happier by far than they were before. Should our expectations become realized—our desire accomplished—we shall indeed have reason to be thankful to an All-Wise Providence, who created everything for our use and enjoyment.

CHAPTER I.

Tools.—The *Spade* (1) is an implement used for digging and trenching. The former operation being the act of thrusting this tool into the ground as far as it will go, by pressing the iron blade with the left foot, and when the earth is lifted, by a twist of the right hand, turning it upside down. The latter is accomplished by first digging a row of spadefuls all along the piece of land to be dug, and after removing that taken up to the other end, digging out a second row which should be placed with the first. Then you will be able to place the second top *spits*, or spadefuls, to the bottom of the ditch, and the bottom spadefuls on the top of them, by which means, the bottom soil is brought to the surface; as soon as you have completed the work fill the last ditch with the earth taken out of the first, and it will be ready for

The *Rake* (2), a tool used for levelling newly turned-up ground, burying seeds, removing rubbish and the like, by a series of forward and backward movements.



The *Hoe* (3) is of essential service for clearing away weeds, thinning the various crops, loosening the surface soil, drawing drills, earthing-up, &c. It should be handled something like a chopper, bringing it towards you at each blow given, in a slanting position.

The *Dutch Hoe* (4) is requisite for loosening the surface soil, and also for cutting up weeds; this should be pushed before you at a depth of from two to three inches, so as to cut up or divide anything in the shape of wild plants.

The *Trowel* (5) will be useful for planting and removing small quantities of earth.

The next instrument a *Spud* (6) we come to is in form somewhat resembling a chisel with a spade handle, and is very necessary for cutting up docks and other deeply-rooted weeds, the suckers round about fruit-trees, and other things which could not be reached by the hoe.

The *Barrow* (7) is useful beyond description for the removal of manure and the like, to various parts of the ground, as well as other things too cumbersome to be moved by hand.

The *Hand or Rubbish Basket* (8) answers the same purpose as the barrow, on a smaller scale, and therefore needs no further description.

The *Shears* (9) are very convenient for clipping the verges of grass-edgings, regulating quick and other hedges, and in fact whatever the knife is unable to perform.

The *Pruning Knife* (10), as its name indicates, is used for the purpose of keeping fruit and other trees in order—thus enabling them "to be fruitful and multiply."

The *Small Saw* (11) is frequently needed in grafting, where the stocks are of a description too tough for the pruning-knife—the surface afterwards being smoothed with the latter instrument.

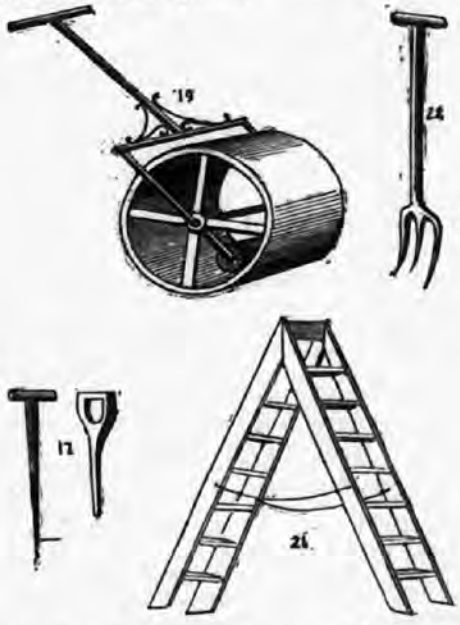
The *Large Saw* (12) is required for the lopping of trees, where the knife would cut but a very ridiculous appearance.

The *Pick-axe* (13) is necessary for turning gravel-walks, loosening rubbish that has become too hard for removal by

any other means—operations which form no mean item in a well-regulated garden.

The *Smaller Knife* (14) is used for budding, grafting, & c and is positively indispensable for such delicate work as the larger one would be unfit for.

The *Watering Pot* (15), of which there are various sizes, is very requisite for giving moisture to plants in dry weather, for the want of which they would suffer severely at times, if they did not perish.



The *Line* (16), as it is called, is necessary for drawing drills perfectly straight, for which purpose it should be strained as tight as possible. It is also useful for planting straight rows of anything, such as cabbages, &c., and for keeping the edges of lawns, and the like, regular.

The *Dibbles* (17) are two; for planting cabbages, &c., a short one is used, while for potato planting one with a handle, resembling that attached to a spade, with a piece of iron projecting at the side for the foot to rest upon, is used.

The *Turf-Cutter* (18) is an implement not unlike a cheese-cutter, with a long spade-like handle, and very handy in a garden for cutting grass turfs, paring the edges of lawns, and similar work.

The *Garden Roller* (19) is likewise needed for keeping the surface of gravel walks level, and flattening grass; both of which operations should be performed in damp weather.

The *Two-pronged Fork* (20) is required for turning over manure, making up hot-beds, shaking out dry litter, and distributing the dressing spread over the ground previous to its being dug or trenched in.

The *Garden Steps* (21) is a kind of double ladder, and will be found of great service for gathering fruit, as well as for the purpose of training trees, or doing anything that is beyond your reach while on *terra firma*.

The *Three-pronged Fork* (22) answers the purpose of a spade in many instances, but is most useful for taking up Potatoes, Parsnips, Carrots, and so forth, where it would be dangerous to use the latter instrument. It is also particularly adapted for loosening the soil between shrubs, &c.

The *Water Barrow* does immense service, and saves a deal of trouble, inasmuch as it enables the gardener to carry a large body of water to a distance, and from it fill his waterpot; or, if he choose, he may to the tap fix a hose, which, having a roll at the further end, may be moved about in any direction, and the water distributed to a great distance, resembling a shower of rain.

(To be continued.)

THE MOTHER AND HER SAILOR BOY.—When the sighing of the midnight storm sends a dismal foreboding into the mother's heart, to whom of all her offspring are her thoughts and her anxieties then wandering? Is it not to her sailor boy, whom her fancy has placed amid the rude and angry surges of the ocean? Does not this, the source of his apprehended danger, concentrate upon him the whole force of her wakeful meditations? And does not he engross, for a season, her every sensibility and her every prayer? We sometimes hear of shipwrecked passengers thrown upon a barbarous shore, seized upon by its prowling inhabitants, and, hurried away through the tracks of a dreary and unknown wilderness, sold into captivity, and laden with the fetters of irrevocable bondage; and who, stripped of every other liberty but the liberty of thought, feel even this to be another ingredient of wretchedness; for in such circumstances what can they think of but home? And as all its kind and tender imagery comes upon their remembrance, how can they think of it but in the bitterness of despair? Now when the fame of all this disaster reaches his family, who is the member of it to whom is directed the full tide of its griefs and its sympathies? Who is it, that for weeks and for months usurps their every feeling, and calls out their largest sacrifices, and sets them to the busiest expedients for getting him back again? Who is it that makes them forgetful of themselves and of all around them? Is it not their Sailor boy? And who can assign a limit to the pains, and the exertions, and the surrenders which a fond but anxious mother and weeping sisters would make to seek and to save him!

HOME AND FOREIGN NEWS.

LONDON, APRIL 1, 1862.

EVENTS are taking place in such close and rapid succession that it is difficult even to chronicle them. Each event has its consequences; and these again touch a thousand points in the great circle of humanity, and run out into a distant future. Change is incident to everything human; and yet these changes are all included in that one grand comprehensive system of arrangement and result, which we understand by the word PROVIDENCE, and are essential to place anything on a more sure and settled foundation. If in the circle of physical creation, there is not an atom that could be spared, we may be quite sure that in the government of this world things could not be otherwise than they are; and they are what they are, that from the whole there may be evolved something better and more enduring.

We do not like the face of things on the Continent. It is true that the Emperor of the French has very adroitly freed himself from his difficulty by withdrawing the Bill which threatened to infringe upon the dignity and the privilege of the ancient nobility, and to bring him into serious collision with his Chambers or Parliament. That he should ever have put himself in such a position is rather difficult to explain, but the method by which he extricated himself was indeed a *coup de maître*—the stroke of a master mind; and it remains to be seen whether by his new Bill he may not ultimately succeed in gaining his object, by making a new *noblesse*, which will lend grandeur to his dynasty. The Emperor knows what he is about; and it will be no easy task for the National Assembly either to thwart or defeat him. Strange to say, however, that at the very moment he was working out his deliverance, the Royal Man of Prussia should have put himself in direct antagonism with the legitimate representatives of his people. Not only his Ministers, but even the Crown Prince advised him to a different course; but he was bent on having his own will; and though he has retained his Ministers, he has dared to dissolve the representative body, and to make his appeal to the nation. The belief is, that he will rather lose than gain by taking this step. Nor can we think of Italy, at this moment in another crisis of her history, without anxiety. The fall of RICASOLI was not altogether unlooked for, and yet it is not an event in which we can exult. His successor RATAZZI is said to be more inclined to defer to French authority; while he enjoys, in a higher degree, the confidence of Garibaldi and the united patriots; yet in no sense, we believe, is he less devoted to the cause of Italian freedom and independence. It is not on him, however, but on Garibaldi that the eye of Europe and of the world is fixed, as the Saviour of his country. The purpose of the General no one knows; and it is well that he keeps his secret to himself; but of this we may be sure, that when the time for decisive and heroic action comes, Garibaldi will not be wanting either in wisdom or in power, in either fortitude or fidelity.

The Civil War in America is far from being at an end. The Federals have had some signal successes; and there are those on both sides of the Great Waters, who predict that ere three months have rolled away hostilities will cease, and peace overshadow the land with her bright and beauteous wing. We are not so sanguine. Make what we will of the victory of Fort Donnelson, it will take many such victories to decide the war. The South are resolved not to yield; and already they have exchanged their provisional for a permanent government, and have chosen a president to fill the office for six years. In all this we see the elements of a sterner conflict. The struggle will be longer and severer than many are prepared to believe; and as our sympathies and our solicitudes are all on the side of humanity and of freedom, we would say to the North, see to it that you lift no broken shield, and present no divided ranks, and let the shout of victory be suspended till the field is fought and the battle is won. Nor are our American cousins the only parties at present engaged in Civil War. The Celestial Empire is greatly disturbed; and though Pekin, the immediate seat of royalty, is quiet, the spirit of rebellion is widely spread, and the interests of society are suffering in a thousand ways. China is a problem yet to be solved, with the rule which is best adapted to its yet uncounted population; and in seeking the solution of the problem, we must not only take up the events which time is now disclosing, but wait for those which eternity is still concealing. Whether the present dynasty is to continue much longer, we have no prophetic intimation to inform us; or whether the rebels are preparing the way for the final establishment of British rule we do not affect to say. We believe in God, and therefore we believe in the coming reformation and happiness of all nations.

At home, our Parliament-men, for the want of something better to fill up their time, and more likely to benefit the country, have been amusing themselves with the Military Estimates—the lawfulness or unlawfulness of marrying a deceased wife's sister—the Revised Code of Education—the effectiveness or insufficiency of the American blockade, and many other little things scarcely worthy of the paper and ink to print them. An exception, perhaps, should be made in favour of the return which was called for and obtained from every gaol and house of correction in England and Wales, of all the cases in which corporal punishment, by whipping, has been inflicted, with the age of each person so punished, and his particular offence or crime. It appears that this is a mode of punishment which leads, on the part of the magistrates, to a great deal of capricious, heartless cruelty; and we are glad to find that the Government have promised to turn their attention to the subject with the view of introducing some improvement. Nor can we overlook the subject of education—a subject which is challenging the utterance of the whole nation, from the stately eloquence of the House of Lords, down to the not less manly words of the blacksmith's shop. Every system of national education has hitherto failed; and though the main principles and provisions of the Revised Code are said to be unassailable, we are more and more confirmed in our belief that the education of the child must be left to the parent as his solemn, and not to be transferred, duty. Let the demand create the supply; and if the supply be of the right kind, it will of itself increase the demand. A voluntary education will be found incomparably the best for parent, teacher, and pupil. There are sufficient channels in which to pour the stream of our benevolence and charity besides that of education. We have but to refer, for example, to such institutions as those which the late Rev. Dr. Reed founded, and which he so recently bequeathed to his country as no common inheritance. To provide for infant orphans, for fatherless children, for idiots, and for those afflicted with incurable disease, was an end worth living for, and will give to their founder a name and a place among the benefactors of his race till the

end of time. He rests from his labours, but his works will follow him.

Little more is known of the Prince of Wales and his movements than that he is pursuing his journey in the East, and everywhere maintaining the utmost privacy. His visit to Corfu happened to be not just at the right season to give him a favourable impression of that first of the Ionian Islands; nor could he go through the classic grounds of Greece, owing to the existing insurrection. His foot is now pressing another soil, and his vision being filled up with other objects. Meanwhile his widowed mother, the QUEEN, with the other members of the Royal Family, have returned to Windsor, where, as in Osborne, they feel the influence of time in assuaging grief, and gradually preparing the mind to engage in those pursuits which fill up not only the busy hours of action, but even the very hours of meditation and repose.

A gold field of surpassing fertility has been recently opened in British Columbia, which is an immense territory stretching northward from Vancouver's Island, over nearly seven degrees of latitude, with a delightful climate and great agricultural resources. Till within a year or two this region was almost wholly uninhabited; and though reports of its wealth were in circulation, they were deemed rather fabulous than true. But gold is a magnet of wondrous power; and of late, people have found their way thither to this field of wealth, and we are told that, so easily is the soil worked, and so near the surface are the auriferous particles, that "very little skill is required in collecting it, and that men who had never mined before, tradesmen, mechanics, and labourers new to the work, did just as well as the old practised miner." That while 2*l.* a day, and more than 60*l.* per month, were offered even for this unskilled labour, there were rockers washing out five hundred ounces in one single forenoon—seventeen hundred dollars' worth was dug out of two crevices in a rock, less than three feet under the surface—and in one instance, nine hundred dollars' worth was obtained in one panful of dirt! The accounts of success in these new diggings seem incredible, and lest any of our young readers should be tempted thither in pursuit of wealth, let them remember that every article of food and clothing is so extravagant in price as to reduce the gain to a comparatively low figure.

PERSONAL IDENTITY.—Some years ago, when metaphysics were a favourite study, it was a question gravely entertained and discussed, how a man could be conscious to himself that he was the same individual that he was twenty years ago, since every particle of his corporeal nature has been changed two or three times within the same period of time? This question was deemed by a Society of Freethinkers, which then existed, to be capable of a very plain answer, and which they illustrated by the following familiar example:—"Sir John Cutler had a pair of black-worsted stockings, which his maid darned so often with silk, that they became at last a pair of silk stockings. Now, suppose these stockings of Sir John's endued with some degree of consciousness at every particular darning, they would have been sensible that they were the same individual pair of stockings both before and after the darning, and this sensation would have continued in them through all the succession of darnings, and yet after the last of all, there was not, perhaps, one thread left of the first pair of stockings, but they were grown to be silk stockings as we have just said." The identity is not in the material and perishable portion of our nature, but in the immaterial and immortal—in mind; because the mind itself is indivisible, and the presence of the one indivisible mind is essential to personality.

"STRONG DRINK."

WHY is it called strong? Why? because it is so strengthening, some people will say. But they are not aware that science has now proved this to be a mistake, a "popular delusion"! Indeed? say you. Yes, it is proved that strong drink cannot strengthen any more than spurs can strengthen a horse, it will spur *you* on, and help you to use up what you have much quicker than you should. This, in reality, is taking *away* your strength and shortening your days, instead of making you strong!

Then why is it called strong? Well, I think it is a mistake to call it strong, unless, as I once read, it is because it can do such strange-strong things. For strong drink is stronger than the strongest man. It will throw any man down that likes to try it. It can destroy the strongest bodily frame. But the mind is strong as well as the body, and strong drink can overcome the strongest minds. There are some very strong things in the mind—these are called feelings or principles, and are like gates and pillars to it. Now strong drink can carry away these gates, and pull down these pillars as easily as Samson carried off the gates of Gaza, or pulled away the pillars of the house of Dagon.

There is love;—a very strong thing, but it has often destroyed even that, making the father curse his children, and the husband kill his wife. There is shame; but it can take that gate away too, and make men well enough pleased to be like beasts, the wealthy content to go like beggars, the well-bred to do the meanest things, and those who were once patterns of good conduct to commit abominable crimes. There is fear; a mighty pillar, but strong drink can pull it down, and self-respect also, that pillar of true majesty in man, so that neither jails, nor banishments, nor the gallows shall be any terror; ay, and it has made many who once would have trembled at the thought of death and judgment, laugh them to scorn, so that they have neither the fear of God nor man before their eyes. It is like taking away the helm from a ship, which you know would leave it at the mercy of the waves. The fear of God is the great helm of the mind, but strong drink takes it away, and the soul is shipwrecked. You see drink is strong and mighty in doing evil, it may thus be truly called strong, and should receive *strong* condemnation from all who love God, their fellow-creatures, their country, and themselves.—"HOPEFUL."

RELIGION AND SOUNDNESS OF MIND.—If it be in health that we must give ourselves to the faith and the duties of Christianity, there is a soundness of mind which is still more necessary than health of body, in attending to the concerns of the soul. If reason be lost, the gospel is nothing to us; we have gone, as it were, into another world, where the message of salvation cannot reach us. And if we have allowed the season of improvement to pass away without having stamped upon our character those features which the eye of God would have recognised amidst all the ruins of our intellectual frame, what is there that we can plead when we go from the wilderness of dreams and fancies into the realities of the eternal scene? The book of life is opened, and our names are not there. We foolishly waited till the mind could no longer lay hold of an offered Saviour; and even reason may now again assume her throne, or wield her sceptre, or throw her light upon the shaded soul; but intelligence is extinguished, and consciousness may not return, and we shall stand guilty of folly infinitely greater than the madness of the fatuity in which the taper of our mental life is to expire.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

CHAPTER IV.—The Gyrfalcon (*Falco Gyrfalco*).

The Falconer (*after Landseer*).

ALCONRY! A charm stills hangs upon this word: it carries you back to the age of richly-caparisoned steeds, noble knights in slashed doublets, hats turned up in front, and parti-coloured plumes floating on the breeze—of ladies fair and pretty pages, of retinues of gaily-dressed servitors, of silver bugles slung on golden cords, of mirth and merry-making, of hired jesters, and of feudal lords. Imagination fails in its attempts to picture in colours sufficiently brilliant, a royal or noble cavalcade issuing in all its pride of pomp from some baronial castle of the olden time, the tramp and neighing of the steeds, the baying of the dogs, the clang of the bugles, the merry laugh of the ladies, and the cheerful voices of their gallant companions.

The origin of Hawking is lost in the mists of antiquity; we seek it in vain through the dim vista of departed years; but we have abundant evidence of its splendour when in the zenith of its existence, and we are able to trace its decay and extinction, with the same minute exactness and melancholy pleasure which Gibbon exhibited while dwelling on the decline and fall of imperial Rome.

In past ages Falconry was the pastime of kings, and was conducted on a scale of regal magnificence. Francis the First of France, he of "the Field of the Cloth of Gold," showed himself every inch a king, in his love of unbounded display, and falconry was one of his favourite hobbies. His head falconer was a lord, who had fifty gentlemen under him and fifty servitors to do their bidding. They were clad in scarlet or green, and their dresses were stiff with gold: each of the gentlemen wore a silver bugle under the right arm suspended by a golden band, which passed over the left shoulder; the left hand held the rein, not as now, a mere leathern strap, but a broad belt loaded with gold; the bits were ornamented with gold and jewels. On the right hand, covered with a buckskin gauntlet, sat the hawk, hooded and jessed, the hood surmounted by an exquisitely delicate tuft of feathers, and the jesses of purple silk; on each leg was a silver bell, which ever and anon sent forth a sound as silvery as itself. Louis the Eleventh of France was as great an enthusiast in falconry as Francis; and a story is told of him, that shows how dangerous it is to trespass, even in seeming, on that sanctity which doth invest the person of a king. Louis was hawking: a retinue of obsequious courtiers were around him, fluttering in all the gaiety of the age. An eagle was descried soaring aloft—an eagle, the emblem of royalty, the bird sacred to crowned heads: it was an unusual sight, and the bird was the only one at which the falcon could not be flown, but the king resolved to sacrifice the hawk as a tribute to the superiority of the nobler eagle. Away went the falcon after his unaccustomed quarry, but the eagle evinced no disposition for the encounter: after a few circles, he fairly shunned the contest, and sailed away on majestic pinions; the falcon mounted above his quarry, and descending with irresistible force, with a single blow cleft the eagle's skull, and laid bare the brain. The wings of the eagle flapped listlessly and in vain; like a drunken man, he reeled to and fro, turned over and over in the air, and at last fell ponderously on the ground. The courtiers shouted, the bugles proclaimed the victory of the king's falcon, and all but the king were in raptures of delight. The king's countenance fell; and when the falcon, after performing a series of proud and triumphant evolutions high up in the blue and cloudless sky, at last obeyed the call and descended to the lure, his life was paid forfeit to his prowess; the king commanded that his neck should be wrung, and while the wings were yet trembling on the decapitated body which had been thrown on the ground, his Majesty improved the opportunity by a homily on the sinfulness of nobles attempting the sacred life of a king.

And falconry was not confined to the gay and the worldly. Edward the Confessor, that pattern of sanctity, devoted a portion of each day, "after divine service" says his chronicler William de Walmsley, to the noble occupation of hawking. Even popes yielded to the fascination of hawking, and carried the gentle falcon on their glove. Leo

THE GYRFALCON.

THE PEREGRINE.

the Tenth devoted himself to this pastime, and, strange to say, a man of peace and humility on all other occasions, he became a tyrant, a perfect fury, when thwarted in the indulgence of this favourite pursuit. In falconry he was a complete martinet, and the slightest infringement of its laws was sure to bring down on the head of the unfortunate offender, whether of noble birth or simply a servitor, a perfect hurricane of curses both loud and deep.

In Domesday Book, we find that a Gyrfalcon was then valued at £10, a sum almost equalling £300 in our day; and that none but the nobility were allowed to keep them. In the thirty-seventh year of Edward III., it was made felony to steal a hawk; and in the same reign, a certain Bishop of Ely excommunicated a man—actually drove him out of the pale of Mother Church—for stealing his (the Bishop's) falcon during divine service; but in this instance the crime of sacrilege was superadded to the theft—the hawk was the property of a Bishop. I cannot help thinking that this aggravation of the crime aggravated also the measure of punishment.

By an enactment, dated eleventh year of King Henry VII., a man was liable to be fined £10 for frightening a wild falcon away from the place where she was breeding: one moiety of this sum went to the man who laid the information, and the other half to the king who made the law. It is not recorded that this illustrious monarch was particularly given to the sports of the field, but certain historians do hint at his love of money. I fear that readers disposed to be censorious will regard this enactment as an illustration of the latter trait in his character. But whatever may have been the tastes of King Henry VII., there is no doubt about those of his son and successor, Henry VIII. We learn from his chronicler, Hall, that this monarch was as keen a falconer as ever lived—following up the sport in the fen counties, where herons were reckoned the noblest game. In the sixteenth year of his reign, while engaged in this sport in a country intersected with ditches, over which it was usual to vault with the assistance of a long pole, the king attempted a terrific leap on a pole not sufficiently trustworthy to bear so weighty and dignified a monarch. The wretched pole snapped while Henry was still in mid-air, and the king was plunged head over heels into the black mud, and must have been smothered but for the timely assistance of his serving man, one John Moody, who lugged the monarch out by his shoulders; "and thus," concludes Hall, "God, in his goodness, preserved him." Whether his six queens and his loving subjects expressed their perfect unison in this pious reflection of Master Hall's, I am quite unable to say.

We have pictures of Queen Elizabeth going out hawking, gorgeous in the stiffest ruff, and sitting in that position which the ladies of our day would scorn to imitate, but which, in the days of good Queen Bess, was not considered indelicate; indeed, she is represented as being surrounded by a troop of approving courtiers of both sexes; and in the reign of this virgin queen, we learn from Sir Thomas Elyot, that he entertained grave fears that our domestic fowls would be exterminated by the demand for poultry which this "delectable solace" occasioned. I am, however, somewhat doubtful whether the falcons or the falconers were the more active agents in this extraordinary consumption. James I. did everything orderly; so sagacious a monarch cannot be suspected of abandoning himself heart and soul to what Sir Thomas Elyot calls "this delectable solace;" nevertheless, he thought it desirable to appear a princely falconer in the eyes of France. He commissioned Sir Thomas Monson to give £1000 for a cast of hawks to exhibit before the French ambassador, and Sir Thomas Monson was most graciously permitted to defray the cost of this display out of his own resources. Of his son, Prince Henry, we learn a fact far more to his credit than this story is to that of the father. When out with hawks, he uniformerly refused to ride through standing corn, and compelled his followers to imitate his example.

Charles I. loved horses, dogs, and hawks, and kept up a large and expensive hawking establishment when Prince of Wales; he even went courting to Spain with a falcon on one fist, and the Duke of Buckingham in the other hand; but

whether the lady did not like the hawk, with its various mewings, and scourings, and operations of all kinds, or whether the Prince of Wales did not like the lady, it matters but little; it is certain that nothing came of this falcon-courtship. When the poor king lost his head, the Roundheads determined to "put down" falconry, the rage for which had now grown among Royalists to an alarming extent. In a curious document, dated soon after the king's execution, we find hawking regularly anathematized and forbidden. The author of this document very properly confounds hawking with hunting; for, indeed, whether considered as crimes or mere pastimes, there is no essential difference between them. He, however, seems to have experienced some difficulty in reconciling the prohibition of field sports with the narratives in the Bible; but this he successfully achieves as follows: "Esau was a great hunter, but a reprobate; Ismaell was a great hunter, but a miscreant; Nemrode was a great hunter, but a vessel of wrath."

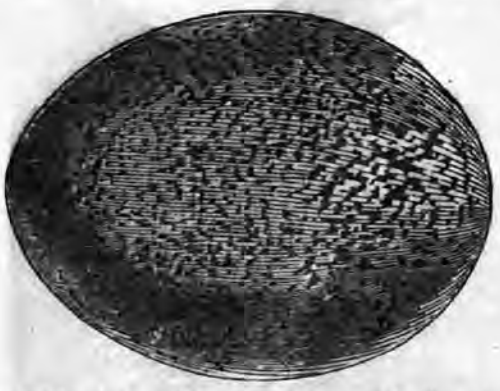
Charles II. revived falconry in all its splendour, and accompanied by the ladies of the court, pursued the sport with all the zest and energy of which his feeble nature was capable: but now the fowling-piece was fast superseding the falcon, who might truly exclaim, "Othello's occupation's gone." Many and most energetic have been the endeavours to revive falconry in this country, but all have resulted in failure; and this once regal pastime has left amongst us nothing more than a brilliant and almost incredible history.

The bird in highest estimation for this royal pastime was the Gyrfalcon, and those bred in Iceland and hence called Iceland falcons, always fetched the highest prices; they possessed greater strength and more courage than any others, and had a peculiarity about their flight by which they were instantly recognized. An attempt has been made, even in our own time, to distinguish three different races of this bird: the Greenland falcon, of North America; the Iceland falcon, peculiar to the island whence it derives its name; and the Gyrfalcon, a well-known inhabitant of Northern Europe: but I cannot admit the minute differences which have been pointed out, as sufficient to distinguish these birds; and therefore combine them under the name of Gyrfalcon, by which they have been known from time immemorial.

The colour of the adult Gyrfalcon is almost white, each feather having a dark mark in the very middle; these marks combine together to form narrow transverse bars on the upper parts of the body, giving the bird a very beautiful appearance: the beak is horn-colour; the naked space around the eye is yellow; the thighs are clothed with long and ample feathers, hiding the leg almost as far as the toes, but still the leg does appear between and below the feathers, and is bright yellow, as well as the toes; the claws are black, very curved, and very sharp.

The food of the Gyrfalcon in a state of nature is the ptarmigan; and as this species of grouse abounds in all the countries in which these falcons are found, it is never without a supply of food. I have said it is an inhabitant of northern regions; in Britain it is almost unknown, but quantities of the skins, in the most perfect state of preservation, are brought annually to London for sale as British—a practice that cannot be too much condemned; and I would earnestly recommend every purchaser to insist on the skin being a foreign one; he will then obtain the same article at a much more reasonable price. I have known three and even four guineas given for a fine Norwegian skin when the credulous purchaser insisted on having a British one. Notwithstanding this constant practice of deception, we have the evidence of this bird having visited the British Islands now and then, and his wonderful strength of wing renders it an easy task to cross the German Ocean; still we must regard them as stragglers, and not as resident natives. It has never been my good fortune to see this noble bird on the wing.

The Gyrfalcon builds on ledges of rock facing the sea, and lays two large eggs of a dingy white colour, mottled all over with reddish brown. The nest has rarely been examined, and the attempt at a minute investigation does not seem to be altogether unattended with danger. Sir



John Richardson, when in America, made the attempt: he says, "In the middle of June, 1821, a pair of these birds attacked me as I was climbing in the vicinity of their nest, which was built on a lofty precipice on the borders of Point Lake, in latitude 65½° They flew in circles, uttering loud and harsh screams, and alternately stooping with such velocity, that their motion through the air produced a loud rushing noise: they struck their claws within an inch or two of my head. I endeavoured, by keeping the barrel of my gun close to my cheek, and suddenly elevating its muzzle, when they were in the act of striking, to ascertain whether they had the power of instantaneously changing the direction of their rapid course, and found that they invariably avoided the obstacle, turning with the quickness of thought, and thus showing equal acuteness of vision, and power of motion."

Chapter V. The Peregrine (*Falco Peregrinus*).

A Poet who lived in Italy nineteen hundred years ago, understood the natural history of many of our birds and animals quite as well as we do, although the observations of nineteen centuries have been recorded, from time to time, by observers in all parts of the world, and the records most carefully preserved. The name of that poet was Virgil, and the description to which I now more particularly allude is that of the Peregrine. "How smoothly," says Virgil, "the Peregrine, sacred bird, sails from some lofty rock where he has perched himself, and dashes after the timid rock-dove, borne on his rapid pinions even among the clouds! How firmly he clutches her, and digs his sharp, curved talons into her palpitating heart! Her life-blood falls drop by drop into the ocean; and her feathers float on the breezy air." So have I seen the Peregrine sitting in cruel and solitary pride on some rock-peak of the Atlantic coast; so have I seen him dart after the rock-doves, which, every now and then, sallied forth from the deep crevasses of the storm-beaten cliffs on the west coast of Ireland; so have I seen the dove soar upwards towards the sky, in vain striving to escape him; so have I seen the Peregrine grasp her with his fearful claws, a grasp from which no power of the poor dove could possibly enable her to escape, while a cloud of her feathers floated on the air, and were carried far over the land by the boisterous breezes of that restless ocean.

The Peregrine shared with the Gyrfalcon the honours of royal favour in the palmy days of falconry; but it is quite a mistake to suppose that the bird ever fetched those fabulous prices which were once given for hawks: thus, the courtierlike extravagance of Sir Thomas Monson, who gave a thousand pounds for a cast or couple of hawks, for our Scottish Solomon to exhibit before the ambassador of France, was not wasted on this common but noble bird, but was given for a cast of Gyrfalcons, brought at great expense from the north of Europe, and trained at the village of Falconsward near Bois-le-Duc, in Holland; a village, by the way,

that has attained a world-wide reputation for the exceeding skill of its falconers, who have migrated thence to all parts of the world.

In the sixteenth century this bird became, *par excellence, the* falcon; the expense of obtaining the Gyrfalcon acting almost as a prohibition, and it is, therefore, the Peregrine that Landseer has chosen in his exquisite illustrations of falconry. The strength, courage, and power of endurance possessed by the Peregrine, added to his great docility, rendered him invaluable as a substitute for the Gyrfalcon; and the comparative ease with which he could be procured was another reason why he should be preferred by a people who were becoming thrifty and mercantile. I should here, however, observe that although I have spoken of this falcon as a male, and called it *he*, the pronoun is technically incorrect. All the trained falcons of value are female or hen birds; they are one-third larger than the male, stronger, hardier, and more courageous: in the language of falconry the female alone is the "falcon," the male being called the "tercel." There is a bird in the Mediterranean called the Lanner, a name that has also been sometimes transferred to the male Peregrine, but certainly in error; the Lanner never having been known to the falconers of Britain.

It has been my good fortune to see a good deal of the Peregrine in a state of native freedom, and I have had more opportunities of really studying him than has fallen to the lot of most men. In the Isle of Wight, I have frequently seen this noble bird soaring about the cliffs between Fresh-water and Sun-corner; and in the distant Island of Achill, against whose precipitous cliffs the surges of the Atlantic have been dashing ever since the creation of the world, I have watched the Peregrine, as well as the Osprey, to my heart's content: I was there in 1839, and walked over the island in every direction with no other object than to study its natural history. Under cover of a thick cloud I reached the summit of Slieve Croaghan, a cliff two thousand feet in height, that seemed to have been sliced perpendicularly down to the surface of the Atlantic; I could see scarcely a dozen steps before me, but I knew by the billowy masses of cloud rising around, and by the almost irresistible power of the breeze, that I was on the brink of some mighty precipice; I laid down, and, crawling forward slowly and carefully, was at last able to look into the abyss; clouds were rolling tumultuously below, the sport of every current of air: here I heard the now familiar screams of the white-tailed eagle, the groans of the guillemots, and the mewing of innumerable gulls; but a shrill and piercing cry of distress, totally unknown to me, was almost incessantly repeated from below. At first I saw nothing but clouds, but soon a burst of sunshine illumined all around, and lighted up the clouds with glory; it lasted but a minute, and then for another half hour all was mist and drizzle. Then came an opening below, and I saw green sea, and a distant sail; at last the clouds drew up all round as a curtain, and exposed such a sea! and such a cliff! bathed in unclouded sunshine. Far below, on a ledge of rock, visible only when he moved, was a hawk which I soon knew to be a Kestrel, and evidently the author of the unknown cries: a Peregrine was flying in short, easy curves around his head; and as he stooped from time to time, the Kestrel avoided the blow by leaving his perch, and rising above him; as soon as the Peregrine recovered from the impetus of his own descent, the Kestrel returned to his perch. At last, escape was impossible; the Peregrine struck his ignoble quarry a blow that silenced him for ever, and clutching him with those fearful talons, bore him aloft, and carried him without any seeming exertion to the flats above the cliffs at Cim: there I saw him alight, and, no doubt, he deliberately proceeded to tear in pieces his helpless congener. I followed over clumps of ling, blackberries, and huge stones, sown broadcast, to the place where he had settled, and saw him rise slowly, the mangled bird still dangling from his talons, until he was lost to sight over the projecting cliff. When I reached the spot, I found the ground was strewed with the feathers of a female Kestrel. In the course of the following day I found three other places where Kestrels had been plucked, and in all probability by the same merciless tyrant of the cliff. Some years previously I had witnessed a similar scene in the Isle of Wight.

It is a singular fact that wherever Peregrines once take up their abode, a pair is constantly maintained, however frequently either male or female may be killed. This is a problem that no one has hitherto been able to solve; and nearly thirty years have elapsed since I first noticed it. One of the pair that for so many years frequented the cliffs at Freshwater has often fallen a victim to the skill of the gunner; but whenever this has been the case, it matters not the sex of the departed, a partner for the widow or widower has always appeared within two days of the period of widowhood.

The Peregrine is a very handsome bird, his beak is blue-black, the head and a long spot below the eye, proceeding from the extremity of the gape, is dark brown, almost black; the back is dark brown, barred with darker markings; the front of the neck, and upper part of the breast are white tinged with red, and marked with longitudinal streaks of dark brown; the lower part of the breast, the belly, and thighs are white tinged with brown, and beautifully barred with dark brown; the legs and toes are uncommonly strong and large, and of a bright yellow colour; the claws are very large, curved, sharp, and quite black.

The Peregrine inhabits all the Arctic and temperate countries of both continents, and is by no means uncommon round the sea-coast of Britain, but is not so frequently seen inland. It builds in sea-cliffs, forming a large and conspicuous nest, the vicinity of which is marked by its castings which generally contain the bones and feathers of sea-birds, and the bones and fur of rabbits. It lays three eggs, about two inches in length, of a dingy white mottled with brown.* Wilson, the great ornithologist of America, only knew the bird by reputation, and by a single specimen he received from Egg Harbour; he objects to the name of Peregrine, and proposed that of Greatfooted Hawk, which has not been adopted. It is more commonly called the Duck Hawk in the United States, and with good reason, for it preys more greedily on the ducks which inhabit the northern States in such multitudes. Our English ornithologists Montagu and Selby were well acquainted with the bird, and studied him in a state of nature with great exactness and interest. Montagu's account is particularly interesting.

THE EYE OF THE COMMON FLY.

A FACETIOUS dignitary of the church, now no more among us, was in company one evening with a number of very accomplished Naturalists, whose conversation turned on the comparative largeness of the eye of the fly. He listened very patiently and attentively to the conversation, but just at the moment that the Naturalists were drawing their remarks to a close, the Divine interposed, and ventured to express his difference of opinion;—instead of agreeing with them as to the size of the insect's eye, he took just the opposite view. The point was re-argued; authorities were pleaded and even quoted; still the son of the church would not yield. At length he was asked for his authority:—he maintained that he had the very first and highest authority, but yet refused to give it, till having almost provoked his opponents, he quietly said:—

"Who saw Cock Robin die?
I, said the fly—
I, with my *little* eye,
Saw Cock Robin die."

The effect was irresistible. The laugh on all sides was genuine and hearty. The Divine and the Naturalists bade each other good night, and then parted.

MORTAR.—Does the word come from "Mort?" Does it mean a thing to kill? It may perhaps be thought difficult to decide which is the more destructive—the mortar in the battle-field or the mortar in the drug-shop.

* For egg see No. 5, in large cut, next Number.

Review.

Recollections by Samuel Rogers. London: Longman and Co. *Concluded from our last.*

THESE "Recollections" are so characteristic as well of their author as of those whose conversations they professedly embody, as to impose upon us the necessity of giving a few more extracts from the lips of the Great Duke. Mr. Rogers, who held a high place in our national literature, was a man of very refined taste, and his writings are all beautifully chaste and finished. Although his daily vocation was that of a banker, he was familiar with almost every author, orator, and artist of note in his day. His house was always open to his friends, whom he received with a generous yet unostentatious hospitality. His conversation, we are told, was "rich and various, abounding in wit, eloquence, shrewd observation, and interesting personal anecdote." Of this last element in his conversation, the extracts which we have already given, and which now follow, furnish abundant proof, and though the Duke has already been allowed to speak, we are not unwilling that he should be heard again. If he is not so great in speech as he is in fight, he is always honest, and full of good common sense. He makes no parade, but there is always force, more or less, in what he says. Keen in perception, he is quick in decision. Free from anything in the form of cant, he speaks like a man who believes. Then let him speak:—

The Duke arrived, and, walking up and down the apartment in a state of the greatest agitation, burst into tears, and uttered these memorable words: "The next greatest misfortune to losing a battle is to gain such a victory as this." *—*Note by Samuel Rogers.*

[The Duke of Wellington, has, naturally, a great gaiety of mind; he laughs at almost everything, as if it served only to divert him. Not less remarkable is the simplicity of his manner. It is, perhaps, rather the absence of everything like affectation. In his account of himself he discovers, in no instance, the least vanity or conceit, and he listens always readily to others. His laugh is easily excited, and it is very loud and long, like the whoop of the whooping-cough often repeated.—S. R.]

At Woburn Abbey and Apsley House, April and June, 1821.

Moscow, I am very sure, was burnt down by the irregularity of his [Buonaparte's] own soldiers. That pamphlet, published by the Government of Moscow, states what, I am persuaded, was the truth.

I hear nothing by my left ear. The drum is broken, and might have been broken twenty years ago, for aught I know to the contrary. A gun discharged near me might have done it.

I speared seven or eight wild boars in a forest in Picardy—an Eastern practice. The largest struck the sole of my foot with his tusk, when I thrust my lance into his spine, and was turning my horse off at the instant, as I always did. The rest of the party set up a shout, and I believe it gave me more pleasure, this achievement, than anything I ever did in my life. Lord Hill killed one on foot, but the difficult thing was to kill one on horseback. Whoever threw the first lance into a boar claimed it as his.

Elephants used always in war [in India], for conveyance of stores or artillery. I had once occasion to send my men through a river upon some. A drunken soldier fell off, and was carried down by the torrent till he scrambled up a rock in the middle of the stream. I sent the elephant after him, and with large strides he obeyed his driver. When arrived, he could not get near the rock, and he stiffened his tail to serve as a plank. The man was too drunk to avail himself of it, and the elephant seized him with his trunk, and, notwithstanding the resistance he made, and the many cuffs he gave that sensitive part, placed him on his back.—*Cassiobury,* 2 *and* 3 *Oct.* 1824.

When I lay down my office to-morrow, I will go down into my County, and do what I can to restore order and peace. And in my place in Parliament, when I can, I will approve; when I cannot, I will dissent, but I will never agree to be the leader of a faction.—*At Arbuthnot's, over the fire. Sunday evening,* 21 *Nov.* 1830.*

Scott's Life of Napoleon is of no value. The tolerable part of it is what relates to his retreat from Moscow. I have thought much on that subject, and have made many inquiries concerning it. I gave him my papers. He has used some,† not all.

On the 18th June, 1832—Monday—I rode to Pistrucci, in the Mint. He had made a bust of me, but wished for another sitting. So I went without giving him notice, on that day at 9 o'clock, and mounted my horse at half-past 10 to leave him; when I found a crowd at the gate, and several groaned and hooted. Some cried, "Buonaparte for ever!" I rode on at a gentle pace, but they followed me. Soon a magistrate (Ballantine) came and offered his services. I thanked him, but said I thought I should get on very well. The noise increased, and two old soldiers, Chelsea Pensioners, came up to me. One of them said he had served under me for many a day, and I said to him, "Then keep close to me now;" and I told them to walk on each side; and whenever we stopt, to place themselves, each with his back against the flank of my horse. Not long afterwards I saw a policeman making off, and I knew it must be to the next station for assistance. I sent one of my pensioners after him; and presently we got another policeman. We then did pretty well, till I reached Lincoln's Inn, where I had to call at an attorney's chambers [Maule's]. Sugden and many others came out of the Chancery Court to accompany me, and a large reinforcement of police came from Bow-street.‡ The conduct of the citizens affected me not a little. Many came out of the shops to ask me in. Many ladies in their carriages were in tears, and many waved their handkerchiefs from the windows, and pointed downwards to ask me in.

I came up Holborn by the advice of a man with a red cape. At first I thought it might be a snare, but found him to be a City Marshal. I was forty minutes in coming from the Mint to Lincoln's Inn. A young man in a buggy§ did

* Mr. Rogers has preserved in his Common Place Book a similar remark made by the Duke at another time. "What a glorious thing must be a victory, Sir!" said * * * to the Duke. "The greatest tragedy in the world, Madam; except a defeat."

* This was at the moment of Earl Grey's accession to office, on the resignation of the Duke of Wellington.

† The following note by Sir Walter Scott appears in Lockhart's Life of Scott, VI. 387:—"16 Nov. 1826. At eleven, to the Duke of Wellington, who gave me a bundle of remarks on Buonaparte's Russian Campaign, written in his carriage, during his late mission to St. Petersburgh. It is furiously scrawled, and the Russian names hard to distinguish; but it *shall* do me Yeoman's service."

‡ This adventure is told in the Annual Register, and in the newspapers of the day, with the omission of several of the details. The Annual Register states that the Duke took shelter in the chambers of Sir Charles Wetherell, in Stone Buildings, Lincoln's Inn, until a body of police arrived. Wetherell had been Attorney-General under the Duke's Government in 1828, and perhaps it is to him the Duke referred, as "an Attorney;" or he may have had to call on Mr. Maule, then Solicitor to the Treasury, whose chambers were also in Stone Buildings, Lincoln's Inn.

§ In a letter addressed to the Editor of the Edinburgh Review, dated 7 March, 1845, and printed also in Hayward's Essays, vol. I. 450, the name of this individual is fortunately preserved: viz. William Joseph Cooper, of 21, Sackville Street, Piccadilly. The letter deserves to be read.

me great service, flanking me for some time, and never looking towards me for any notice.—*At my house, Friday, June* 22, [q. 1832.]

What is that rara avis—Common Sense? It is, I believe, a good understanding, moderated and modulated by a good heart.—*Ellis's Hotel, March* 20, 1838.

[As he said these words his voice dropped, and I never knew him speak with more feeling.—S. R.]

Had Cæsar's Commentaries with me in India, and learnt much from them, fortifying my camp every night as he did. I passed over the rivers as he did, by means of baskets and boats of basket-work; only I think I improved upon him, constructing them into bridges, and always fortifying them, and leaving them guarded, to return by them if necessary.—24 *Nov.* 1840.

Walking some years ago [about 1838 or 1839] through the park with the Duke of Wellington, I [S. R.] said to him, among other things, "What an array there is in the House of Commons against Lord John Russell:—Peel, Stanley, Graham, &c.!" "Lord John is a host in himself."

Amusements.

ANSWERS TO PUZZLES IN OUR LAST

1.—The Nine Trees.

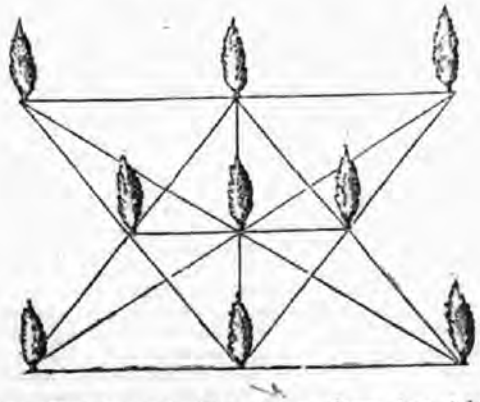
Now place *three* trees so as to form
An Angle Tri—hope not forlorn!
Then plant *a* Tree half-way between
The other three, so fresh and green.

Six Trees so far I only use;
The rest you'll surely not refuse;
Then on *each side* the lonely one
Firm plant a Tree; stay, I've not done!

Eight Trees I've planted, just one more
I've yet to add to my great store,
Which, if put in its proper place,
Will to the rest be no disgrace.

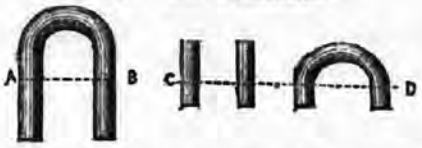
Then plant this proud but lonely Tree
Among the rest—they'll all agree;
Yea, in the centre let it stand,
Where it will sure look very grand.

And now, dear friend, I have you shown
Nine trees, no more, you sure must own;
Ten rows, they form, in each row *three*,
As by the figure you will see.



Note.—The trees by this figure form two triangles, each one having its vertex in the centre of the base of the other, with one tree in the centre of both.

2.—The Horseshoe.

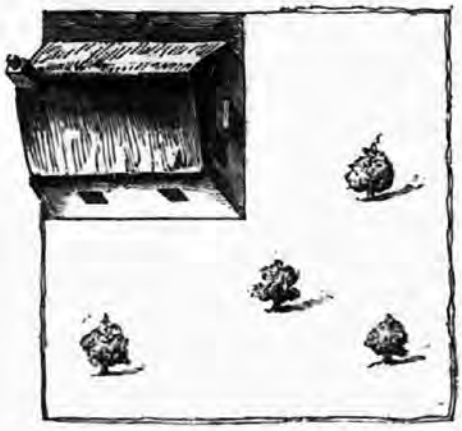


The first cut from A to B gives three pieces; a second cut, then, from C to D, *through the three*, gives seven.

PUZZLES, TO BE ANSWERED IN OUR NEXT.

1.—The Plot of Ground.

Mr. F. C. L. Wratten, of Hellingly, sends this sketch of a square plot of ground, in one quarter of which a house is built, let to four tenants. They are allowed to divide the remaining ground into *four equal parts, alike in shape*, each part containing one of the four apple-trees. If they succeed they are to have the gardens, without any increase of rent, as a reward for their ingenuity. How can it be done?



2.—The Geometrical Solid.

Form a regular geometrical solid, which shall fill up a circle, a square, and a triangle.

3.

Why are riflemen like Nelson at the battle of Trafalgar?

4.

A farmer is sent to a cattle-show to purchase 100 animals, and has £100 given him for this purpose. He purchases bullocks at £5 per head, sheep at £1, and geese at 1*s*. How many of each does he buy so as to make the number of animals equivalent to the number of pounds, viz.—100?

5.

During the French revolution of 1793, a member of the National Assembly was written to by a lady in the country who was anxious to learn the state of affairs in Paris; fearing to write plainly, lest the letter should fall into other hands, he sent the following:—

Feu

Feu — La Religion — Feu

L'—Et-a-t
Le Roi d-c-d
La Noblesse a-b-c
(*La Gloire.*)*

Feu

Feu

* Blotted out.

CROSS READINGS.

[These are genuine readings, taken from newspapers of more remote as well as of more recent times. And similar readings may be gleaned now.]

The Sword of State was carried
Before Sir John Fielding, and committed to Newgate.

This morning the Right Honourable the Speaker,
Was convicted of keeping a disorderly house.

A certain Commoner will be created a peer.
*** No higher reward will be offered.

A fine turtle, weighing upwards of eighty pounds,
Was carried before the sitting alderman.

'Tis said that the Ministry is to be new modelled,
The repairs of which will cost the public a large sum annually.

This has occasioned a Cabinet Council to be held
At Batty's fruit-shop in St. James's street.

He was examined before the sitting alderman,
And no questions asked.

Genteel places in any of the public offices,
So much admired by the nobility and gentry.

This morning will be married the Lord Viscount,
And afterwards hung in chains, pursuant to his sentence.

The Budget for the current year was
Exotic flowers.

The special aim of this school is to prepare
Osborne's Peat-Smoked Breakfast Bacon.

The elements of algebra designed for
The United Kingdom Alliance.

Amusement for the winter evenings, is
The competition of the Fourth Dorset Rifles for prizes.

My wife can speak no English, I no Welsh;
And we must consider the question on general grounds.

"Keep Bees! Keep Bees!"—Some years ago, a bishop was holding his first visitation of the clergy of his diocese in a town in one of the midland counties, and agreed to spend the day with a poor curate who had been an old college friend of his. On reaching the parsonage, he was surprised to find his friend's wife an elegantly-dressed lady, who received him without any of the embarrassment which a paucity of means too frequently occasions in those who feel its pressure. The children, too, were well dressed. But the good bishop's astonishment was still greater when he sat down to partake of a repast worthy of the fattest of fat rectories, and was invited to "take wine" of the purest flavour. When left alone with his friend, the bishop said, "I must congratulate you, I suppose, on having received a fortune with your good lady." "No, my lord," replied the poor curate, "I had not a shilling with my wife." "Then how is it possible for you," asked the bishop, "to have those comforts I see around you out of a hundred a-year?" "Oh, my lord, as to that, I am a large manufacturer as well as a clergyman, and employ many thousand operatives, which bring me in an excellent living. If you will walk with me to the back of the premises, I will show you them at work." He accordingly took him into the garden at the back of the house, and there was a splendid apiary with a large number of bee-hives, the source of the curate's prosperity. The bishop never forgot the circumstance, nor did he ever fail to make use of it as an argument; for, when he afterwards heard some poor curate complaining of the scantiness of his income, he would cut the matter short by exclaiming, "There, there, no grumbling, keep bees like Mr. ——; keep bees, keep bees!"

The Cathedral of Salisbury, which is one of the finest ecclesiastical structures in the kingdom, has in it doors and chapels equal to the number of months in the year, windows equal to the number of the days, pillars of Purbeck marble equal in number to the hours; "so that all Europe," says Fuller, "affords not such an almanac of architecture;" and he tells us, that when he was once walking through this sacred edifice, he met a countryman, who seemed filled with wonder and admiration as he surveyed the beautiful structure, and who said to Fuller, "I once admired that there could be a church that should have as many pillars as there be hours in the year; but now I admire more that there should be as many hours in the year as I see pillars in this church." Let our young readers try and find out, and tell us why.

Family "Jars," the right Sort.

Jars of jelly, *jars* of jam,
Jars of potted beef and ham,
Jars of early gooseberries nice,
Jars of mincemeat, *jars* of spice,
Jars of orange marmalade,
Jars of pickles, all home-made;
Jars of cordial elder-wine,
Jars of honey, superfine;
Would the only *jars* were these
That occur in families!

Audi Alteram Partem;" or, Two Sides to a Question.—A railroad engineer at Harrisburg, having been discharged, applied to be reinstated. "You were dismissed," said the superintendent austerely, "for letting your train come twice into collision." "The very reason," said the other party, "why I asked to be restored." "How so?" "Why, sir, if I had any doubt before as to whether two trains can pass each other on the same track, I am now entirely satisfied. I have tried it twice, sir, and it can't be done, and I am not likely to try it again." He regained his situation.

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Catharine Thomas.—Will find all needed in the current Numbers;—otherwise we cannot help her.

Edward S. Bentley.—An answer would be an advertisement.

W. V.—In Doubleday's Catalogue.

In reply to Mr. William Cole's inquiry in last month's Number, as to the meaning of the letters "W. V." in Mr. Doubleday's list, I beg to inform him that they are the initials of the words "*Wiener Vergeichniss*" (Vienna Catalogue), signifying that the name after which they are placed was given to the species by the compilers of the Vienna Catalogue.

Entomologicus will see by our announcement, that we are publishing the Moths in extra numbers, 6d. each.

Foreign Postage Stamps.—Mr. W. R. Cross, Dock Co.'s Mytongate Offices, Hull, has 160 different sorts to exchange for other stamps or Lepidoptera. Mr. John Wilson, jun., 93, Great Russell Street, Bloomsbury, London, will purchase stamps at a reasonable price.

Queen Elizabeth's Shilling.—"What is it worth?" The value depends upon the specimen. The common ones may be bought, at from one to five shillings each.

Miss C. Smith.—Suitable.

Benefit Societies at Public-houses.—Mr. John Evans writes to say that he is a member of a Benefit Society called the "United Friends," the meetings of which are held in a public-house, the landlord being the treasurer. Each member is compelled to pay threepence a month for beer, whether he drinks it or not, and he is desirous to know whether such a rule is legal. We shall be glad to have any information upon the subject.

T. Britten.—When we can find room.

RARE BIRDS NEAR RINGWOOD.—J. B. C. and G. M. C. inform us they are beginners in Ornithology. That they have during a few months "shot five Crossbills, three males and two females; a fair specimen of the Hawfinch, also a Merlin—in the vicinity of Ringwood," and that they have "heard of an Eagle in those parts." The Eagle, we suppose, got off without being shot—but why this, shall we say wanton and cruel destruction? It is by such wholesale shooting, added to the reckless and greedy taking of eggs from the nests, that our British Birds are sensibly diminishing.

VITUPERATIVE.—A correspondent complains of the editors of the Brighton press, because they will not insert a communication of his on "Temperance," because, as they say, it is "Vituperative."—He has looked in the dictionary and cannot find the word. We are asked to explain it. It means "to censure or blame intemperately."

THE WORKS OF NATURE.—How beautiful and perfect are the works of Nature! How superior, even, is the simple daisy of the field to the grandest work of Man! What delight does not the botanist experience in the valley, the field, and the wood, pursuing his search for some specimen of Flora's gifts. The entomologist, with utmost zeal, pursues and investigates the insect tribe; and what pleasure does he find when after the gay butterfly, the beetle arrayed in green and gold, or any other representative of the articulate division of Nature. The study of Nature must always refresh the inquiring mind. Every branch of natural history, whether it be the study of plants, insects, or that of birds and other animals, shells, or philosophy, &c., beams with interest and joy, and will well repay the zealous student with one of Nature's choicest gifts—knowledge. Knowledge and virtue claim relationship, while ignorance and vice often go hand in hand.—WM. E. WILLIAMS, Jr., Haverstock Hill.

WILLIAM ASHTON.—Yes, very well.

THE AQUARIUM.—We have received two very good descriptions, for which we shall be happy to find room as soon as we can.

FUNGI FOR THE CABINET.—J. B. of Butley, will be obliged if some one will tell him how to preserve Fungi for the Cabinet.

IS THERE A NATURALIST IN BIRMINGHAM?—Can any of your subscribers inform me where the different kinds of pupæ, butterflies, collecting boxes, and other entomological apparatus, can be procured in Birmingham?

POLYOMMATUS ACIS.—In Mr. Stainton's Manual I find the following paragraph respecting Polyommatus Acis. Mr. Allis writes to me:—"I know of no captures within the last seven years. The Birmingham collectors used to take it in plenty, but none have occurred recently that I know of." Can any of your readers inform me if it has been taken recently?—A YOUNG COLLECTOR.

SKELETON LEAVES.—Can any one tell me the best method of obtaining them?

St. Margaret's Rectory, Canterbury. H. ALDER.

X. Y. Z. should send a specimen for a month: it should be condensed.

PAINTING THE FEET OF STUFFED BIRDS.—Will any of your readers inform me whether the *bills* and feet of birds which have been stuffed need to be painted, as the colours fade? Mr. Newman, in his admirable paper on British Birds, rather denounces this plan. By answering these questions you will greatly oblige Yours truly, G. B. C.

THE RAVEN'S NEST.—Sir, observing an account in the March Number of "Young England," giving the third week in March as the earliest time the Raven (*Corvus corax*) sits, I beg to inform you that on the first of March I took a nest (near the Gurnards Head, in Cornwall) of five eggs, which were at least four days sat. Hoping the above will prove interesting to some of your readers,

I remain, yours truly,

Penzance, March 13, 1862. T. J. CARDEW.

TO PRESERVE PLANTS IN THEIR NATURAL COLOUR.—Will any of your readers be so kind as to inform me how to preserve plants in their natural colour?—ALFRED J. W. H.

A SLY FOX AND A CUNNING DOG.—J. B. sends us the following.—"Lately, as I was this day (November 2nd, 1841,) informed, a coastguardman's dog, to the eastward of this place (Rottingdean), disturbed a fox, which, on being pursued, made towards the cliff and threw himself over, holding on the edges by his fore-paws, in the evident expectation that the dog would dash at him, and so occasion his own death. The dog, however, knowing the contrary too well to be taken in, contented himself with *biting the paws of the fox*, which thereby lost its hold, fell to the bottom and was killed."—*Mrs. Merriford's Natural History of Brighton.*

QUINTIN MATSYS, THE BLACKSMITH OF ANTWERP.

By W. Crossing.

The clever son of Vulcan looked pretty as he stood,
Gazing 'pon the river, which wound through the old green wood;
Ah! what was in his heart? Not the horrid din of wars,
Nor of the clank of hammers; but the thoughts of Agnes Flors.
Ah! she was all he cared for, and one whom he did love;
Her hand was like a lily, her breast that of a dove.
And would she ever be his? That question he did ask:
For you see that to win her would be no easy task;
For he must be a painter, it was thus her father said,
'Twas this that made him very sad and turn away his head.
But this resolve he made, a painter he would work,
And then he would return unto the fair Antwerp,
And then he would make her his; and he turned away and wept.
This was the resolve he made, this was the resolve he kept.

W. TWEEDIE'S PUBLICATIONS.

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"'*Carine Steinburgh*' is the title of a new work (published by Mr. Tweedie) which has just appeared on the horizon of Temperance literature. Of an originality the most remarkable, and filled with incidents of an absorbing intensity, it cannot fail to attract all readers, and will doubtless give rise to much discussion of its very peculiar merits. We intend devoting more space to some notice of this volume in our next issue."—*Weekly Record.*

"This is a life-story, illustrative of the baneful effects of the drinking customs of society. The first chapter presents Carine Steinburgh as a bride in the last week of the honeymoon, anxiously awaiting the return of her husband, whose intemperance has kept him from his home for the first time. The book is calculated to do great good amongst a very numerous body of people, whose objections to the safe road of total abstinence can be better refuted by a minute detail of every-day circumstances and their influence on personal character, than by mere anecdotes, or a string of logical deductions. It is devoid of affectation, and is true to life. Unvarnished it may be; but it is cleverly written, and answers well its purpose."

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Just published, pp. 300, crown 8vo, price 3s. 6d.,

THE DEEPER WRONG ; or, the LIFE of a SLAVE GIRL.

"Rise up, ye women that are at ease! Hear my voice, ye careless daughters! Give ear unto my speech!"—Isaiah xxxii. 9.

Edited by L. MARIA CHILD.

"Every line of these pages deals with fact: personal experience has tested every statement there put forth. It is the more necessary that we lay some stress upon this, that some of the incidents related are of a nature which might well be deemed incredible, no less for the honour of humanity than as being inconsistent with any preconceived idea of its powers of endurance and long-suffering. We had imagined that 'Uncle Tom,' and a host which followed in its wake, had done the worst that could be done in laying bare the horrors and the licentious baseness of slavery. The volume now before us tells how far that which fiction dares may be surpassed by the experience of fact. Vividly does the author, in her relation, set before us life upon a plantation, than which the imaginary reign of fiends upon earth might seem less terrible. Become the mother of two children, all her anxiety centred upon procuring their freedom, all the warmth of her affections devoted to them, the horrors of her situation yet press so strongly upon her, as almost to stifle even maternal instinct. She escapes, but still remains in their vicinity. Seven years she endures the captivity of a hole where a dog could scarce have found shelter; and, while search is made far and wide, she, lying hid, listens to the plans for her recapture, hears the maledictions of her persecutors, with threats of the tortures which await her on discovery, and by stolen glimpses obtains sight of her children. The graphic description of her own sufferings and final escape, the stratagems resorted to, the disguise contrived, the fearful instances of cruelty, oppression, and the thousand nameless indignities which go to make up slave life (sufferings shared in no small part by the persecutors themselves), give to this volume the absorbing interest of a skilfully-planned romance; while the truths which it enunciates, the facts which it conveys, are of a nature the most startling and novel, even to those who may have fancied themselves to be conversant with every recorded feature of slavery."—*Weekly Record.*

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YOUNG ENGLAND.

VOL. I.—No. 5.] MAY 1, 1862. [PRICE ONE PENNY.

GENERAL GARIBALDI.

GARIBALDI! a name, this, dear to Italy—dear to every man throughout the world of the free. Let this name be but pronounced, and every heart—from that of the schoolboy, amid the fun and the frolic of the playground, up to that of the old and grey-headed senator, surrounded by his blue-books and parchments that shun the light—thrills with no common emotion. Here is a man, the son of a sailor, and the grandson of a sailor, and whose education was very limited and imperfect, and who spent his earlier years on board ship, drawing to himself, at the age of fifty, the eye of the whole civilized world, and converting his name into a household word wherever freedom is known, or country is loved. If Italy has the greatest past of any nation, never has Italy had a more devoted son than Garibaldi, a truer patriot, or a man of more self-sacrificing devotedness. He lives for Italy; and the unity of Italy is the one end at which he aims.

It appears that Garibaldi was born at Nice in July, 1807, not only in the same house, but in

GENERAL GARIBALDI.

the same chamber, in which Massena first drew the breath of life. His father had not much of this world's goods, and left him but little money. His mother, who was a woman of deep piety, loved him as a mother only can love; who prayed for him as a mother only can pray; and to whom, he confesses, he is indebted for whatever virtue or charity is to be found in his character. Just as his father obtained much of his education on board the vessel of his grandfather, so young Garibaldi tells us of himself that he "learned gymnastics by climbing among the shrouds, and in slipping along the ropes"; that "the use of the sword he learned in defending his own head and in giving his best endeavours to split the heads of others; and equitation by following the example of the best horsemen in the world, that is to say, the *Gauchas*."

Though he passed his earlier years amidst smiles and tears, fonder of pleasure than of work—of amusement than of work,—his master initiated him in his maternal language by the constant reading of Roman

history, into whose spirit he drank. His father wished him to be a priest, an advocate, a physician; but he himself was bent on going to sea; and to sea he did go. At the age of twenty-four, and when captain of a vessel, he got the first glimmer of light in relation to his unhappy country, and the resurrection of Italy was in him an inspiration. He began to think and reason on the question of nationality, on the broader, grander question of humanity; and at length he became possessed with the fact, that the man who makes himself a cosmopolite, and goes to offer his service and his blood to any people struggling against tyranny, is more than a soldier, more than a patriot—he is a hero. To him a ship was "no longer a vehicle charged with the exchange of the products of one country for those of another, but a winged messenger, bearing the word of the Lord, and the sword of the Archangel." His vessel was destined for Marseilles, and at Marseilles he met with Mazzini, whose doctrine was that if the Italians would prove themselves worthy of the name, they must be prepared to mingle their blood with that of the Piedmontese martyrs. Garibaldi told Mazzini that he might depend on him; entered himself in the service of the State; and, learning that a movement was to be effected at Genoa, he professed his willingness to serve the republican interest at the hazard of life itself. In Genoa he found himself in immediate danger; made his escape; and then began his life of struggle, exile, and persecution.

From the age of twenty-six, when he consecrated himself to the salvation of his country, the course of the man was truly remarkable. Now, we find him engaged in warfare, and then a prisoner bound hand and foot; now, he marries an interesting young girl, and then he "strains her corpse to his breast, and weeps tears of despair"; now, he sets out on a daring expedition, and then he suffers shipwreck; now, he escapes the peril of the sea, and then he is "obliged to fly like the damned of Dante, who walk straight forward, but whose twisted heads look behind them"; now, he cruises, and then engages in conflict; now, he retreats, and then he fights again; now, he sets out for South America, fights the battles of liberty there, and that gloriously; writes to the present Pope, because in his elevation to the Chair of St. Peter, he thinks he sees the dawn of the rise of liberty for Italy, and assures His Holiness of his willingness "to serve under him who was called upon to be the political Messiah of Italy"; but receiving no reply, and resolving to return to his own beloved Italy, then comes back to Europe, for the future of that Italy is in HIM; now, he is in Lombardy, heroically sustaining, with four hundred men, the attack of four thousand Austrians, then making his escape, as if by miracle, making his way to Piedmont, and going back to Genoa; now, sets out for Rome, where he is received with unbounded enthusiasm, and then, on the flight of the Pope, is seen at Ravenna enrolling a strong legion of volunteers; now, he attacks the French, who had resolved to make themselves masters of Rome, with a legion of twelve hundred men, or one-sixth of the number of his enemy, and then he bows to the orders of the Minister of War; now, he undertakes an expedition against the Neapolitans, and with two thousand five hundred men he completely routs some six thousand Neapolitans, then returns to Rome; now, he takes the field against the Neapolitan army, encamped twenty thousand strong at Valletri, and scatters them like chaff before the wind, and re-enters Parma amid the universal exultation and joy of the people; now he is in the very midst of the unavoidable butchery of Vella Corsini, then in the siege of Rome, in which Rome was lost; but "the fall of Rome, after such a siege, was a triumph for Democracy to all time."

Garibaldi quitted Rome to carry into the provinces revolt against the Austrians, the King of Naples, and the Pope. But how can we describe the campaign of 1859, and the expedition to Sicily? Garibaldi having retired to the island of Caprera, which is situated on the northern coast of Sardinia, towards the eastern entrance of the Straits of Bonifacio, by the side of the Ile de la Maddalina, and almost opposite the southern point of the Island of Corsica, he then devoutly employed his hours in the profoundest study of the opening page in the chapter of Providential events, and patiently waited for the hour to strike which should call him to action. That hour came. With a little band of true heroes, he left his island-home, and in a few months he made kings and princes bend before him, and gave back one-half of Italy to a potentate who had solemnly pledged himself to, not the mere confederation, but the UNITY of his country, and who called to his people to join themselves into legions of free brethren, and rally round him as their leader, ready to conquer or die with them.

Such was the fruit of Garibaldi's expedition in 1859, the incidents of which are as interesting as any romance; but the land, which owes its liberty to Garibaldi and his volunteers, gave itself to Piedmont only to insure a united Italy; and with nothing short of this will the Italian people be satisfied. Rome is still held by the French, and Venice is still in the hands of Austria. How long? Who will answer that question? Garibaldi's mission is not yet fulfilled; his work is not yet done. Nothing will divert the hero of 1859 from his sublime purpose and end. The unity of all Italy under one monarchy, with Rome as her capital, is the goal to which he is pressing; and which, we believe, he is destined to reach. The God of truth and freedom is on his side.

In pursuing his triumphal march, the excitement everywhere awakened by the presence of the hero beggars all description. For each place which he visits, he has his chosen word to the youth of his country, to the priesthood, to the civil authorities, and to the people. At Cremona, he addressed a deputation of young men from the various educational institutions, in the following wise and stirring words:—

"Youth should indulge no vices, for vice is the disease of the soul; youth should love instruction, because an uneducated man is no better than a monkey. He who acquires most knowledge, rises nearest to his Maker, from whom his soul springs. Instruction should be grounded on solid moral education; and on this the sacred edifice should rest. Do you care for honour? Honour can be acquired only by virtue and instruction. Nations, like individuals, when weak, are insulted and enslaved. Bear with other people's weaknesses; submit to no insults; love instruction—instruction is bread and independence. It availed me in foreign lands to place me above want. Love instruction—it was the want of it which prevented our joining together in a single family. Had Italy been better instructed, she would long before this have known that her boundary was not the wall of a town, nor the hedge of a garden, but the high Alps and the broad sea. She would have swept from her all that degrades and defiles her."

Can we wonder that the municipal scholastic authorities at once decreed that these memorable words should be written in letters of gold, and placed over the threshold of their gymnasium.

LONDON, MAY 1, 1862.

WHAT means this everlasting din about iron-clad ships and Armstrong guns? Scarcely had we received the intelligence of the *Merrimac* running down a portion of the Federal squadron in the Hampton Roads, than we leaped to the conclusion that the old wooden-walls of England were fit for nothing but so much fire-wood; that to strengthen our land fortifications was but a waste of money; that no amount of fire and shot from these batteries would of the least avail when directed against an iron-plated ship; that the building of wooden vessels was to be immediately suspended, and all the labour available in our dockyards to be employed in providing an iron-cased fleet; and that nothing but such a fleet could challenge all comers, or render safe our island-home. So said the Parliament, and so said the people. So spoke the Ministers, and so spoke the Opposition. So said the Press, and so said the Pencil. And so constantly has this change been rung in our ear for the last three or four weeks, that we have been literally stunned and stupefied.

And what has it all amounted to? The theory that an iron-cased ship is invulnerable, even when exposed to the most raking and continuous fire, has been exploded by a single shot from Armstrong's gun! It has been tried and proved, in the presence of the most competent judges, that a ball discharged from one of these guns can shiver to atoms a target of iron not less than eight inches thick; and hence an iron fleet subject to such an agency, would be anything but impregnable. This effect does not depend so much on the length of the range, or the weight of the ball, as on the amount of the explosive powder. Fifty pounds of powder are employed to one shot; and yet the metal is of a calibre to resist the explosive energy. Such being the fact, we must have both an iron fleet, and the Armstrong gun, if our shore is to be protected—if our home and our hearth are still to be the abode of peace. As yet, England alone is in possession of this force; and let who may invade, we are as secure and as safe as ever; while the existence of such a power may point to the closing chapter in the History of War. God grant it!

But this flowery month of May will tell of other power, and of other trophies. Various sections of the Christian Church will meet in crowded assemblies to tell of the spread of that faith among the nations whose genius is Love, whose progress is regeneration, and whose final triumph is universal peace. The present history of Christian Missions is but the prophecy of the future; and as we are borne down the ages of time, in the channel of Inspiration, scenes of life and loveliness burst upon our view, and tell us of the more than golden era, when the din of war shall have for ever died away, and this distracted world enjoy the Sabbath of her predicted rest.

Emigration is the remedy for an overcrowded unemployed population. What an exhilarating prospect does British Columbia now present to the young women of our great towns and cities! Our dear English, Scotch, Welsh, and Irish girls, who at home "pine away and die," if they can find the means, may go abroad, and have "plenty of offers," and find themselves loved, esteemed, honoured, and useful.

CALENDAR FOR MAY.

The Earth.

FIRST WEEK.—Common bugle, honeysuckle, toothwort, and mealy tree, in flower—Goatsucker or fern owl and sedge warbler sing—May bug and field cricket appear—Glow-worm shines.

SECOND WEEK.—Oak in flower—Flycatcher, admiral and orange-tip butterflies appear.

THIRD WEEK.—Beech, common maple, barberry tree, orange lily, laburnum, saintfoin, peony, horse chestnut, lilac, columbine, medlar, and tormentil in flower—Walnut in leaf—Wood argus butterfly, burnet moth, and forest fly appear.

FOURTH WEEK.—Lily of the valley, woodroof, mountain ash, bird's-nest orchis, milkwort, dwarf cistus, guelder rose, common elder, wild service tree, sanicle, female fool's orchis, ragged robin, burnet, foxglove, cornflag, serapias, raspberry, herb Robert, figwort, and Gromwell in flower—White beech tree and mulberry tree in leaf—Bees swarm—Female wasp appears—Apis longicornis bores holes in walks.

LEPIDOPTERA TO BE EXPECTED.

P. Machaon.
P. Daplidice.
L. Sinapis.
C. Pamphilus.
A. Euphrosyne.
M. Artemis.
N. Lucina.
T. Rubi.
C. Phlæas, to the end of the
L. Argiolus. [season.
L. Adonis.
L. Alexis.
L. Agestis.
S. Alveolus.
T. Tages.
H. Sylvanus.
S. Tiliæ.
C. Porcellus.
M. Stellatarum.
M. Fuciformis.
M. Bombyliformis.
S. Apiformis.
S. Sphegiformis.
S. Culiciformis.
S. Fagi.
N. Dromedarius.
N. Ziczac.
P. Palpina.
N. Chaonia.
N. Dodonæa.
N. Carmelita.
T. Rubi.
S. Carpini.
T. Batis.
C. Duplaris.
D. Capsincola.
D. Cucubali.
H. Thalassina.
S. Illustraria.
T. Consonaria.
B. Hirtaria.
C. Rotundaria.
F. Atomaria.
F. Piniaria.
L. Adustata.
E. Pulchellata.
E. Nanata.
E. Vulgata.
E. Abbreviata.
C. Suffumata.

P. Dictea may often be found near poplars or willows.
N. Plantaginis, when taken, should be chloroformed at once.

LARVÆ TO BE LOOKED FOR.

On Ash.
C. Xerampelina.
P. Curtisella, in the shoots.
C. Badiipennella.

Beech.
P. V-aureum.
X. Aurago.
S. Satellitia.
G. Papilionaria.

Birch.
A. Tincta.
N. Neglecta.
P. Betulætana.

Grasses.
A. Galathea.
H. Sylvanus.
A. Exclamationis.
H. Popularis.

Oak.
C. Promissa.
N. Hispidaria.
P. Bajularia.

Plantain.
M. Cinxia.
M. Athalia.

Trefoil.
Z. Minos.
Z. Lonicera.
Z. Trifolii.

Hawthorn.
P. Cratægi.
A. Prunaria.
H. Thymiaria.
A. Æscularia.

Nettle.
P. Iota.
P. Interrogationis.
B. Verticalis.

Sorrel.
P. Phlæas.
P. Statices.

Sallow.
S. Bembeciformis, in the stems.
S. Myopæformis, do.
T. Piceana.

Sloe.
P. Cratægi.
T. Betulæ.
T. Pruni.
A. Æscularia.

Various Plants.
H. Sylvinus.
C. Dominula.
E. Russula.

Towards the end of the month the Larvæ of C. Nupta and O. Upsilon, may be found crawling on the trunks of willows; the former conceals itself during the day under loose bark, the latter among grass at the roots.

SHIPS.

Fig. 1.

The battle which has just been fought in the Hampton Roads, America, between the *Merrimac* and the *Monitor*, iron-plated ships, has startled the world. Sailors, engineers, patriots, statesmen, sovereigns, and nations are alike in a state of surprise and eager inquiry. The *Merrimac* and *Monitor* might have gone through the British fleet and have smashed or sunk every vessel, except our two iron ones. Whilst we write, Sir Richard Armstrong's big gun has been tried at Shoeburyness, and it is now proved, we have in this, a power which would sink the *Merrimac* and *Monitor* in five minutes, and "leave not a wrack behind." What will it come to? Here are two grand discoveries in a month! Where will it stop? When? Not till they "learn war no more."

As the public attention is thus fixed on naval construction, we lay hold of the opportunity to give our readers a brief account of the divers sorts of vessels which have been used from earliest times:—

The Ark (Fig. 1) is the very first account that we can rely on which we have of any vessel. We do not mean to say our picture is exactly like it; no one can tell that, but it is probably nearly so. In the present day, if a steamer were to blow up, you would see a pretended exact representation of the event in one of the illustrated papers—just as though the artist were on the spot at the time; or especially for the purpose; and he draws the thing in such a way that the public think it is just as the accident happened. That is all pretence. We believe the sketch of the ark is nearly like the description in the Bible, and that is all we can say of it. You can read the account taken from the Bible for yourselves. Here it is:—"Make thee an ark of gopher wood; rooms shalt thou make in the ark, and shalt pitch it within and without with pitch. And this *is the fashion* which thou shalt make it *of:* The length of the ark *shall be* three hundred cubits, the breadth of it fifty cubits, and the height of it thirty cubits. A window shalt thou make to the ark, and in a cubit shalt thou finish it above; and the door of the ark shalt thou set in the side thereof; *with* lower, second, and third *stories* shalt thou make it."

It is worth noticing that the latest discoveries in naval architecture, for carrying heavy cargoes, are but a return to the form of the ark. The *Great Eastern* or *Leviathan* in great part is nearly flat-bottomed like the ark, and so is the *Monitor*, the latest achievement of the Americans.

The ark was intended to carry an immense freight, but its chief object was to preserve the human family, and to show the over-ruling providence of God.

A Babylonian Boat.—Skins were used for ships in former times. Fig. 2 shows how an inhabitant of Babylon or

Fig. 2.

Nineveh would convey himself across a river. The Tigris and the Euphrates were the principal rivers in his neighbourhood, and probably that was the way of crossing those rivers. The drawing we have had taken from the Nineveh Marbles in the British Museum. The shape reminds us very much of a young hippopotamus, which you will instantly see if you reverse the picture.

An Esquimaux Boat.—Fig. 3 is another skin boat. It is the skin of a seal blown up or filled with air. It is likely

Fig. 3.

this sort of boat is made after a very ancient traditional model, which has lingered in some nations to the present time. The seal-skin boat is still in use among the Esquimaux.

The British Coracle.—The Ancient Britons used a combination of skin and withes. (Fig. 4.) Their coracles had a fram work of willow branches neatly fastened together

Fig. 4.

and covered with the skin of an animal; and sometimes, when canvas was substituted for skins, pitched to keep out the water. In these Coracles the Britons crossed the rivers. Being light, the Coracle was thrown over the head, and was equal to an umbrella in wet weather—the wearer could then strike right across the country, and whether the rivers were high or low they would present no obstacle to his progress. These boats are in use now in some parts of Wales. We have seen them on the Wye. The ones in use now are very much like half a walnut-shell.

Giraldus, the Welshman, thus describes the Coracles of his

day:—"The boats which they employ in fishing or crossing the rivers are made of twigs—not oblong or pointed, but almost round, or rather triangular (?), covered both within and without with raw hides; when a salmon thrown into one of these boats strikes it hard with his tail, he often oversets it, and endangers both the vessel and its navigator. The fishermen, according to the custom of their country, in going to and from the rivers, carry these boats on their shoulders; on which occasion that famous dealer in fables, Bledhere, who lived a little before our time, thus mysteriously said, 'There is among us a people, who when they go out in search of prey, carry their horses on their backs to the place of plunder; in order to catch their prey they leap upon their horses, and when it is taken, carry their horses home again upon their shoulders.'"

Cæsar must have noticed these boats when in Britain, and carried away the model with him, at least, in his mind, for when his soldiers were pressed by the army of Afranius, and he wished to get them across a river, it is said, "Cæsar ordered the soldiers to build some light boats in imitation of those he had formerly seen in Britain, whose heel and ribs were of wood, and the rest of wicker, covered with leather."*

An Egyptian Vessel—We find on the Egyptian remains in the British Museum representations of the boats in use on the Nile, which was the highway of Ancient Egypt. A singular use of these Nile boats was to take the dead to the tombs. In many places the Nile was led inland to form *lakes*. At the end of these lakes were burial-places. Diodorous, an old historian, tells us, "When a body is going to be interred, the relations give notice of the day of interment to the judges and to other relations and friends of the dead, saying, that the deceased is going to cross the lake. Upon this the judges assemble, more than forty in number, and take their seats in a semicircular kind of place, on the further side of the lake, having been first prepared by those whose special duty it is to attend to it. The captain of the boat is called in the Egyptian language, Charon. But before the wooden chest, containing the body, is placed in the boat, the law allows any person who chooses, to bring his accusation against the deceased. If then the deceased is convicted of having lived a bad life, the judges give sentence, and exclude the body from the usual rites of interment; but should the accuser fail to make good his charges he is punished with a heavy fine."

Fig. 5 will show you what an Egyptian ship was. There is a small house in the middle of the vessel—the sail is

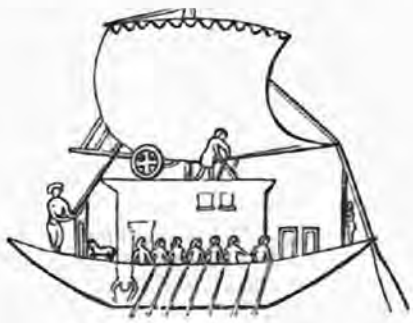


Fig. 5.

over this—they appear to have a good breeze, for it has filled the sail. There are fourteen rowers—the helm by which the boat is guided has an oar-like shape, and they are carrying some animal, probably a bull, and are going on some religious excursion.

The make of the Egyptian merchant ships is thus described by Herodotus:—† "Their ships, in which they convey merchandise, are made of the acacia, which in shape is very like the Cyrenean lotus, and its exudation is gum. From this acacia they cut planks about two cubits in length, and join them together like bricks, building their ships in the following manner: they fasten the planks, of two cubits length, round stout and long ties; when they have thus built the hulls, they lay benches across them. They make no use of ribs, but caulk the seams inside with byblus. They make only one rudder, and that is driven through the keel. They use a mast of acacia, and sails of byblus. These vessels are unable to sail up the stream, unless a fair wind prevails, but are towed from the shore. They are thus carried down the stream: there is a hurdle made of tamarisk, wattled with a band of reeds, and a stone bored through the middle, of about two talents in weight; of these two, the hurdle is fastened to a cable, and let down at the prow of the vessel to be carried on by the stream; and the stone by another cable at the stern; and by this means the hurdle, by the stream bearing hard upon it, moves quickly and draws along 'the baris' (for this is the name given to these vessels), but the stone being dragged at the stern, and sunk to the bottom, keeps the vessel in its course. They have very many of these vessels, and some of them carry many thousand talents. When the Nile inundates the country, the cities alone are seen above its surface, very like the islands in the Ægean Sea; for all the rest of Egypt becomes a sea, and the cities alone are above the surface. When this happens, they navigate no longer by the channel of the river, but across the plain. To a person sailing from Naucratis to Memphis, the passage is by the pyramids."

Ships of the Hebrews, Tyrians, &c.—Fig. 6, slightly modified, will give you a general notion of the ships in use among the Tyrians, Hebrews, Greeks, and Romans in the

Fig. 6.

Mediterranean and Red Seas. It was that sort of ship, having one or two masts, two or four rudders, sails and oars, in which Solomon used to fetch the gold of Ophir, and in which they brought to him ivory, apes, and peacocks from India. It was that sort of sail which the Tyrians embroidered in a costly manner. "Fine linen with *broidered work from Egypt* was that which thou spreadest forth to be thy sail." (Ezek. xxvii. 7). The luxury of Tyre is seen in a very striking light in the sails of her vessels being *embroidered*. It was that sort of ship of which you may read in the Acts of the Apostles, which ran with corn from Alexandria to Rome, and in which Paul was shipwrecked at Malta.

The Hebrews did not place much dependence on ships. They had them, it is true: for it is said the tribe of Dan remained in ships (Judges v. 17) during the conflict with Sisera, and Solomon's port for trade was at Ezion-Geber, in the Gulf of Akaba. Yet the great security of a place, in the estimation of the Hebrews, was, that it was situated "where shall go no galley with oars, neither shall gallant ship pass by" (Isaiah xxxiii. 21).

Greek and Roman War Ships.—Figs. 6, 7, and 8 are representations of the Greek and Roman "Men-of-War."

* De Bello Civili, lib. I. c. liv.

† Euterpe, 96, 97

No. 7 was made to pull very fast. No. 8 shows the beak or ram very prominent.

Fig. 7.

You are not, however, to suppose that the Greeks and Romans used vessels so far advanced in construction, at first. In the earliest times their boats must have been very similar

Fig. 8.

to the British coracle already described. Virgil says of one of these* —

> "Under the weight the *boat of leather* groaned,
> And leaky grown, the impetuous water found
> An easy passage through ——"

In course of time the simpler forms were improved upon, and at length they launched, amid great rejoicings, ships crowned with garlands, which were very formidable and noble specimens of naval architecture.

These were used for foreign traffic, carrying goods, and for war.

The vessels were waxed on the outside—

> "The azure sea receives the waxy ships," †

and also pitched. This last process, it is said, was invented by the inhabitants of Corsica.

Our boys know that Homer's ships are constantly mentioned as "black." Sometimes, however, they were painted red and blue, and had beautiful figures of Venus and Cupid upon them.

The "beak" was a very prominent feature in the war ships. Euripides‡ speaks of ships with brazen beaks. The person who first used these beaks is said to have been one Piræus, an Italian. They were first long and high; but Aristo, a Corinthian, used them with much greater power by making them short and low, so as to pierce the enemy's ships under water.§

It was precisely this which was done by the iron-plated *Merrimac* to the United States' wooden vessel. With all her steam on, the beak-fitted vessel dashed against the defenceless *Cumberland*, instantly cutting an awful gash in her side, when she went down, gallantly firing a broadside, with her colours flying.

Whilst the "beak" is but an old invention recently revived, so also the shield-tower on deck, which is to characterize Captain Coles's new cupola ships, may be found in the ancient war galleys. See No. 7.

* Gemuit sub pondere cymba sutilis, et multam accepit rimosa paludem.—*Æneid*, vi. 414. The above is a free translation: but *cymba sutilis* is correctly rendered *boat of leather*, literally "a sown cup-like vessel."

† Cerula ceratas accipit unda rates.—Ovid, *Œnon.* v. 42.

‡ Iphigenia. § Potter, vol. ii. 136.

INTERESTING FACTS AND DISCOVERIES.

Antiquities in Yorkshire.—At Scampston, in the East Riding, there has been found a perfect circular Roman Fibula; at Rollington, a Roman bead, quite perfect, and nearly an inch in diameter. At Amotherby, in the North Riding, a battle-axe, sharp and perfect—a rare type—having on either side flanged sockets, as if for the reception of a cleft handle.

Roman Silver Coin.—A beautiful and well-preserved Denarius has been found in a field at Doncaster, belonging to the Corporation. It was struck by the Roman Senate and People in honour of the Emperor Trajan A.D. 103. Obverse.—Laureate's bust of Trajan. Legend.—IMP. TRAJANO AUG. GER. DAC. P.M. T.R.P. [To the Emperor Trajanus, Augustus, Germanicus, Dacicus, Chief Pontiff, invested with tribunitial power.] Reverse.—A winged figure of Victory, advancing with a wreath in her outstretched right-hand, and a palm branch in her left, evidently for the purpose of crowning the emperor for some great military achievement. Legend.—COS. V. P.P. S.P.Q.R. OPTIMO PRINCI. [Consul for the fifth time, father of his country, the Roman Senate and People to the excellent Prince.] The date of the coin can be ascertained with perfect exactness, for the consular annals prove that Trajan was elected consul for the fifth time A.D. 103; and in that same year, according to Jaquemet's Chronology, he completed his conquest of Dacia, and made it a Roman province (hence the title "Dacicus.") The other title, "Germanicus," was conferred upon him by his predecessor and adopted father, Nerva, for his eminent services in Germany.

Discovery of a Roman Lead Coffin.—In the beginning of March, a man who occupies a cottage in Bethnal Green, while digging in his garden, uncovered a leaden coffin, about four feet from the surface, which has been carefully examined by some antiquarians, and pronounced to be truly Roman. It is to be hoped that means will be taken to preserve this interesting antiquity, and to procure a place for it in our British Museum,

St. Anne's Chapel discovered near the Temple.—In some excavation for drainage, south of the circular part of the Temple Church, this Chapel came into view. The remains are said to be in a perfect state of preservation.

Artesian Well in Brighton.—For some time the most persevering efforts were made in the form of diggings on the Warren Farm, situated on the South Downs, with a view of obtaining water. But the party who had contracted for the work at length abandoned it, when it was taken up by the Guardians, who continued the diggings to the depth of nearly 1300 feet, at which a strong body of fine soft water was reached to reward their labour.

Siberian Tumuli.—Thirty-six tumuli, situated about six miles from Bamaool, disclosed skeletons of Tschudi or Mongolian race; the heads are placed to the east, and the feet to the west. Near the skeletons were found the remains of ruminating animals; weapons of bone and iron; ornaments of bone and melted silicate, polished quartz, copper, fragments of pottery and tools of iron.

Birds of Paradise.—The Zoological Gardens, Regent's Park, have been enriched by the addition of two young males of the Lesser Birds of Paradise, *Paradisea papuana*, which were brought from New Guinea, and presented by Mr. R. A. Wallace, the well-known zoological traveller.

The Python and her Eggs.—After months of heightened expectation and hope, we are told that the Python has failed to hatch even one out of more than one hundred eggs, and consequently the eggs have been finally removed.

THE YOUNG NATURALIST.

CHAPTER IV.

INSTINCT AND REASON.

As Mr Rogers was much interested in the study of Natural History, he kept in one corner of his garden a small hive of bees, more, however, for the purpose of studying their habits than for obtaining the honey which they made. He had conversed with his children so frequently concerning the history of the bee, and related to them so many facts respecting its industry, its ingenuity, its mode of building its cells, its attachment to the queen bee, and its manner of swarming, that they were almost as much interested in observing its habits as their father. They were accustomed to go out in all kinds of weather, and at different hours of the day, for the purpose of making their observations.

One day, as Robert was standing near the hive watching the industrious little insects as they returned with their loads of honey or bee-bread, he noticed that a wasp, after flying several times around the hive, as if reconnoitering the fort of an enemy, alighted upon the branch of a small bush which grew by the side of the bench on which the hive stood. This branch projected in front of the hive, so as to be almost opposite the door. The position of the wasp enabled it, without attracting much notice, to see everything which entered or left the hives. Robert wondered what it was after. He knew that bees had nothing to do with wasps, and therefore suspected that its visit was for no good purpose. He resolved to watch its movements. Presently a bee, which had been out in the fields, and which had probably visited hundreds of flowers, returned with the honey it had gathered. As it alighted upon the little shelf or platform in front of the door of the hive, and before it had time to enter, the wasp suddenly darted upon it, and drew it towards the edge of the shelf, from which they both fell to the ground. Here a struggle took place between them: as the wasp was the stronger of the two, it mastered the bee, and after tearing off its wings and head, flew away with the body. "Murder and robbery," said Robert to himself, as he saw the wasp flying away with a part of the mangled bee.

"Well, my son," said Mr. Rogers, who at this moment approached the hive, after having walked through the garden unobserved by Robert, "I am glad to find you watching so intently these diligent little creatures."

"Oh, pa, is that you? I wish you had been here a minute ago to have seen a cruel wasp murder a bee, and then carry away its body."

"I wish I had, for I have heard of such things, but I never saw an instance. What do you think he did it for, Robert?"

"I suppose to eat, or perhaps to feed his young ones."

"But why did he take the body instead of the head of the bee?" Robert, after pausing a while, said he did not know.

"I will tell you, then. In the body of the bee is a little sack which receives the honey which the bee extracts from the flowers. When the bee comes home, it empties the contents of this sack into the cells prepared for its reception. Of this honey wasps are very fond, and when they kill a bee, they carry off the body instead of the head, because it contains this honey-bag."

"The wasp, then, is a very knowing insect," said Robert.

"Why so?" asked his father, who desired to see how far his son would reason correctly on this subject.

"Because they know that bees possess honey, and that they conceal it in their bodies, and not in their heads."

"That is not all," said his father. "The one that you saw displayed his sagacity in this manner:—instead of seizing the bee out in the fields, as it was flying from flower to flower, and when it was uncertain whether it contained any honey, it waited until the honey-gatherer had collected its load, and had returned home, when it pounced upon it and secured its rich treasure. Its conduct was like that of certain pirates, of whom I have read, who allowed vessels on their outward voyage to pass unmolested, but when they returned with a valuable cargo of foreign merchandize, attacked them and made them prizes."

"But have wasps minds," asked Robert, "that they are able to think so far as that? You have sometimes told us that insects and animals were governed entirely by instinct."

"And I also told you, that sometimes instinct approached so near to reason that it seemed as if some creatures thought a little."

"But, pa, what is the difference between instinct and reason?"

"That is a question, my son, which I fear I cannot answer in a manner sufficiently simple for you to understand. I am willing, however, to try; and perhaps I shall be more successful, if I illustrate the difference, than if I merely define it. A creature which is governed only by instinct, does not think. It performs all its works without reflecting what will be the consequence. It does not first contrive a certain plan, and then proceed to carry that plan into execution, but it prosecutes its labours without any previous reflection. For instance, when a bird is going to build a nest, it does not reason in this way: 'I must first get some coarse sticks, or clay, to make the bottom of my nest; I must then get some straw and grass, and work them together, and after that, I must get some tow or feathers, with which to line the nest in order to make it warm;' but without any such previous contrivance, it gathers its materials, and rears its little dwelling. But man, who possesses reason, proceeds very differently. He considers, reflects, arranges with a great deal of forethought his plans, and then carries them into execution.

"There is another difference: instinct makes no improvement. The robin, the swallow, the goldfinch, and various other birds, build precisely the same kind of nests now, as they did hundreds of years ago. They make no improvement in them. The habits and modes of life, of all kinds of animals, fishes and insects, are the same as they always were. Besides, instinct soon reaches its highest state of perfection. It then stops. Beyond that point it cannot pass. But reason exhibits the opposite of all this. It is constantly progressing. It learns more and more every day, and we have no evidence that there is any point of attainment beyond which reason cannot pass. Those who are governed by it, are continually making discoveries and improvements.

"Mankind first dwelt in caves and holes; after that, they erected rude huts of the most simple kind; upon these they made improvements, until now, their dwellings are of the most beautiful and durable character. Similar improvements have been made in materials for clothing. There was a time when silks, cottons, and woollens were not worn, because men had not learned how to make them.

"But although there is this wide difference between instinct and reason, yet sometimes they approach very near to each other."

Robert, who had been listening attentively to the explanations of his father, here interrupted him by asking him what he meant by saying that instinct and reason approached near to each other.

"I mean that the conduct of irrational creatures is sometimes so remarkably sagacious, that it seems as if they thought or reflected. I recollect an instance, which is suggested to my mind by your account of what you have just seen, and as I have no doubt that it will interest you, I will relate it. As a gentlemen was walking one day in his garden, he saw a wasp on the ground, with a fly nearly as large as itself. His curiosity was awakened to know what the wasp was about; he therefore knelt down to it as closely as he could without driving it away. He distinctly saw it cut off the head and part of the body of the fly; it then took with its claws the remaining portion, to which the wings were attached, and flew away.

(To be continued.)

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

6. The Hobby. (*Falco Subbuteo.*)

7. The Merlin. (*Falco Æsalon.*)

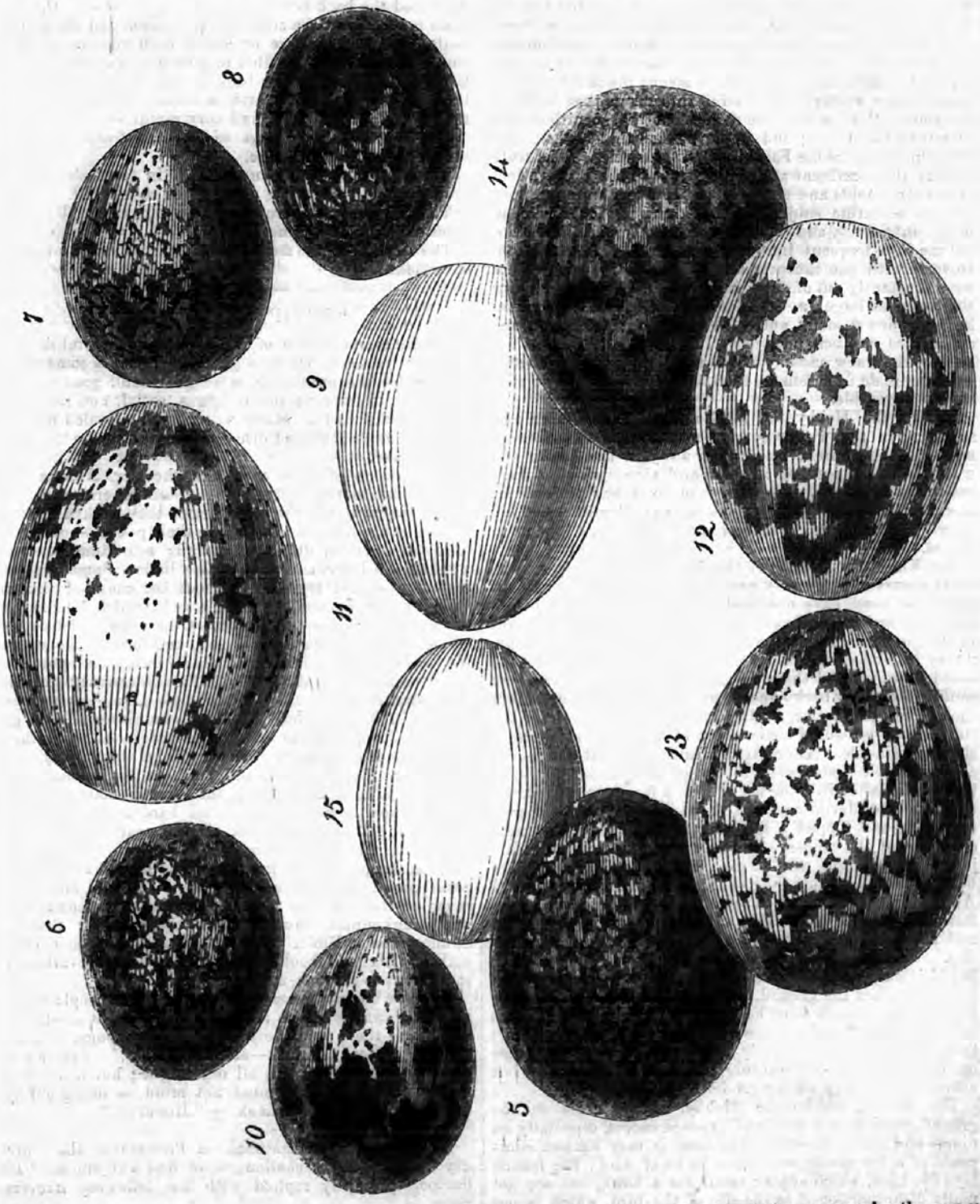
CHAPTER VI. — The Hobby (*Falco subbuteo*).

The Hobby is a "Falcon in little:" he used to be flown at larks; but was never highly prized as taking a part in the noble pastime of hawking. He is one of the most regular, but alas! now becoming one of the rarest, of our migrants: he arrives towards the end of April, and returns towards the end of September, attending watchfully on that swarm of insect-feeding birds which pass northwards and southwards at those periods, and doubtlessly thinning their ranks by his active depredations. To those who have not studied the subject, and very few indeed have even thought about it, there appears a great diversity in the course taken by migrating birds; but this is in imagination only: it is true that the arrival of the swallow and the Hobby is simultaneous with the departure of the woodcock and the redwing, or nearly so, and that many other familiar birds are arriving and departing at the same time; some arriving to nest and pass the summer here, others going to the far north to nest and summer in the Arctic Regions; which are, during their short summer, no longer inhospitable, but teeming with food and instinct with life. The movement is always in one direction: from south to north in spring; from north to south in autumn. The reason, too, is as obvious as the fact; when winter binds the surface of the earth with frost or covers it with snow, all the insect tribes are hidden and dormant; there is no insect food for the insect-eaters; the swallow can find no flies, the white-throat no caterpillars; the woodcocks can find no worms; the frozen mud refuses entrance to his beak. Then God speaks to the feathered tribes by an instinct implanted in their very nature, an instinct they cannot disobey and God says, "Go to the south, pass on and on until you find unfrozen soil and abundant food." And the feathered tribes feel the divine command in every fibre of their delicate frames; they feel it thrill through every nerve and though every muscle; they feel it to be irresistible: they feel and obey. And when they have wintered in the south, and each has thus preserved its life and its race; when the sun again appears above the polar seas; when every bud has burst into green leaf, and every insect has crawled out of its dark hiding place into the light; when nature throbs with renovated life; then God speaks again and says, "Go to the north, pass on and on until you find the homes where you were born, and there bring up your children: increase and multiply." The birds feel this new command; it vibrates through each frame; it is the voice of God, of nature, and of love. This too is irresistible: they feel it and obey. Each tribe goes exactly so far south as to procure abundant food; the woodcock finds our springs unfrozen, although those of the north are converted into crystal rock; the fieldfare and the redwing find our hedges loaded with berries, although Scandinavia refuses them the banquet.

The food of the Hobby is the cockchafer; which generally swarms soon after his arrival here, the dor-beetle and the smaller summer birds, as well as larks and sparrows: he is a most useful bird to the farmer and the gardener; and, according to that English rule, the only rule which has no exception, he is persecuted with unrelenting cruelty: to be useful or even harmless, seems to be held a crime, and destruction follows accordingly; and thus the Hobby, and kestrel and owl are devoted to indiscriminate destruction.

The Hobby builds in the tallest trees, selecting the most quiet and unfrequented districts; the nest is always among the smaller branches, and from its size becomes a conspicuous object after the leaf has fallen in autumn, but in summer it is rarely seen, so careful is the bird to select an

umbrageous retreat. His beak is blue-black; the naked space round his eye greenish yellow; the head, nape, back, and wing-covers brown-black, the edges of the feathers lighter; the throat and upper part of the neck white; but there is a black moustache from the corner of the mouth, just below the eye as in the Peregrine; the breast, belly, and thighs are dirty white, with streaks of dark brown. This hawk is, as I began by saying, a "Falcon in little," or, in other words, a miniature Peregrine: the differences between them are slight; first his small size, and secondly the absence of the cross bars which adorn the belly and thighs of the Peregrine.



The following are the Names of the Birds whose Eggs are given in the picture. For descriptions, see under the names of the Birds.

5. Peregrine. 6. Hobby. 7. Merlin. 8. Kestrel. 9. Goshawk. 10. Sparrow-Hawk. 11. Kite. 12. Buzzard. 13. Rough-Legged Buzzard. 14. Honey Buzzard. 15. Hen Harrier.

CHAPTER VII.—The Merlin (*Falco Æsalon*).

The Merlin is the smallest of all our hawks, but one of the most courageous. As far back as the time of Ray the name of Stone Falcon was given to the male, and is preserved in Latham's Synopsis, Shaw's Zoology, and in the Appendix to the Supplement to Montagu's Ornithological Dictionary, but Selby very properly unites the sexes under the name of Merlin. And here be it observed that the term of Stone Falcon, like many others of a popular character and import, has no restricted meaning, like the names used in science. Mr. Knox says, that in Sussex it means the male sparrow-hawk during winter; Mr. Yarrell informs us that in Wales the young Merlins bear the name, but that ornithologists give it to the adult; and we have seen that Latham and Shaw make the Stone Falcon a distinct species. The truth is, that these eminent authorities trust to the observations of country people and gamekeepers, the very worst authorities on scientific subjects. I was long resident at Godalming, in Surrey, and my love of birds, especially hawks, led me into frequent intercourse and not unfrequent controversy with gamekeepers and others, whose occupations were constantly out of doors, and among the feathered tribe that roam at large; and I solemnly declare that the gamekeepers, bird shooters, and bird stuffers are the very worst authorities on such a subject: I never met with a gamekeeper who knew one hawk from another, and as for distinguishing male from female, the statement that they do so is simply incredible.

Unlike the Hobby, the Merlin stays here winter and summer; in the winter coming nearer the habitations of man, in the summer keeping far away on the heaths and moors, where it perches on rocks and stones which it itself resembles in colour. In years gone by it was trained for hawking, but this employment of the Merlin has long ceased, and the memory thereof is only preserved in printed record.

Mr. Knox's knowledge of the Merlin, derived from personal observation, is very good; and, as every sportsman-naturalist must have observed, the little Merlin, although no longer trained for hawking, is often a volunteer assistant in the gunner's sport. "As for the snipe," says Mr. Knox, "they lie like stones, while the Merlin continued overhead—old Pluto pointed them one after another, and even Fan condescended to 'back,' and I had to kick them up under the nose of the former, as they sprang reluctantly from the rushes, and presented a succession of the most satisfactory shots imaginable. After bagging several, at last one rose at a considerable distance, quite out of shot, and away went the Merlin after it. On my return, a few days afterwards, there was the Merlin again on the same bog. I could perceive him, as I topped a hill which commanded an extensive view of the country, scudding along towards us with a joyous sort of flight, as if to say, 'You are welcome; I have been waiting for you a long time; come, and begin at once.' And truly he was more confiding than ever—following me from one marsh to another, and evidently distinguishing and appreciating the respective performances of man and dog. When a snipe fell dead he never meddled with it; but if it fluttered and fell at a distance, he would drop on it as it touched the ground, and begin plucking and devouring it." Sportsmen must have often observed on the moors the same fact, though so new and interesting to Mr. Knox: the grouse-shooter constantly sees the hawks in attendance on his walks, not only causing the grouse to lie close, but ever ready to carry off a wounded bird.

The Merlin, unlike the Hobby, always nests on the ground, on the most open and exposed moors, especially on rough and stony ground. The nest is very simple, composed of a few sticks and a few locks of wool; the female lays five eggs, which appear small for a hawk, but are not really disproportioned to the size of the bird, which is not much larger than a thrush: they have a pale brown ground speckled with darker brown.

The beak is horn colour, paler at the base and blacker at the tip; the naked space round the eye yellow, and the eye itself umber brown; the crown bluish grey in the male, umber brown in the female; the throat and sides of the neck are white, and there is no moustache descending from the corner of the mouth as in the Peregrine and the Hobby; the breast, belly, and thighs are reddish, marked with longitudinal streaks, but entirely without transverse bars; the legs and toes are yellow, and the claws black. I have not described the back because so various in colour: the adult male is blue grey, the adult female brown, and the young of both sexes partake more or less of both colours, so that it would be next to impossible to give such a general description of the colour of the back as would be useful to the learner. The following brief summary of the character of the four falcons will be found very useful:—

The Gyrfalcon is almost white, each feather having a brown spot: no moustache.

The Peregrine has the upper part in front streaked, the lower part barred: it has a fine black moustache.

The Hobby has the front coarsely streaked, and no bars: it has a black moustache.

The Merlin has the front finely streaked, and no bars nor moustache.

"STOP THE LEAK!"

Welcome merry month of May, with its cheerful days and fragrant flowers! Of late years May has become distinguished for the anniversaries of great and good societies, all aiming to improve the religious, social, and moral condition of the world. Many will be the crowded meetings held in Exeter Hall and other places during the month for this purpose.

Now, at one of these meetings, the Rev. Newman Hall once spoke to this effect:—"Suppose several men were trying to pump water into a cistern—they worked hard and applied every nerve and energy in their power—but, strange to say, the cistern did not get full; sometimes the water would rise a little, and then sink a little. Some suggested that they should try and find out the cause of this, and looked at the bottom and saw a hole, which let the water out as fast as it was pumped in. Others said, 'let us stop the leak,' and the cistern will soon be filled.' 'No, no,' was the reply; 'it is a *fanatical idea!* Pump on—pump on; never mind the leak, we *hope* the cistern will get filled some time!'"

Now in Exeter Hall there will be thousands of good Christian people trying to fill the cistern of philanthropy full with various pumps. There will be the Sunday-school pump, the Ragged-school pump, the City Mission pump, the Church Missionary pump, the Tract Society pump, and I don't know how many more, all hard at work, and they are continually hard at work all the year round; but all confess the result is not what we expected. The cistern of religion, happiness, and goodness, does not fill in the world! Some good people thought they would try and find out the cause of this; and, lo! a terrible leak was found, which was drunkenness, prevailing on every hand; thwarting Sunday-school, Bible, City Missionary, and other efforts, making Ragged-schools necessary, and people altogether indifferent to religion, and cruel and wicked.

Now, we teetotallers say to all these good people who are pumping away, "Go on; thank God for what good pumps you have—there are none too many, not enough." But we do say, "Stop the leak—stop the leak!" Yes, we will pump and help you with all our might; but if we do not see the cistern fill, you must not mind *us* doing our very uttermost to "Stop the Leak."—"Hopeful."

An eminent mathematician—a Professor of the University College—being challenged to find a rhyme for "Timbuctoo," promptly replied with the following irreverent verse:—

"If I were a cassowary
On the sands of Timbuctoo,
I would eat a missionary,
Skin, and bones, and hymn-book too!"

GARDENING FOR BOYS AND GIRLS.

CHAPTER II.

PREPARING AND LAYING OUT, OR MAKING THE MOST OF A SMALL PLOT OF GROUND.

UY some flowers to-day, ma'am?" said a young woman, stopping opposite the window of our house, waiting for an answer, as we looked at the beautiful flowers which she carried in a basket on her head. Her mother had died, not long before, leaving her to look after her younger brothers and sisters—one of whom she led by her hand at her side. The little child was carrying a flower-pot, to help her big sister. Of course we bought some, and very pretty they were. The young woman had put three of the other children to school, and was quite a mother to them, taking care of them, as well as she could. We hope she will sell a great many flowers, because then she will be able to keep herself and the other part of the family.

But before you buy the flowers, or plants, or seed, you must prepare the ground; therefore, having selected, or, more properly speaking, been presented with, a small plot of ground, in your father's large garden, your first duty will be to trench it two spades deep, and when this is done level the surface with a rake, and form your beds. The edging, which may be White Arubis, London Pride, Daisies, Thrift, Box, or anything else, should then be planted. Box is the best thing of any, as it requires little attention beyond an occasional clipping; once in three or four years being often enough to take it up, part, and replant it, while such edgings as Thrift, &c., will need replanting annually.

CHAPTER III.

WHAT TO PLANT, WHAT TO SOW, AND HOW TO DO IT.

As soon as your beds are formed, you may proceed to put in the following plants and seeds.

We will commence with PERENNIALS, a class of plants which last for an indefinite number of years, and may be increased annually by cuttings, or by parting the roots. Many of these, however, will have to be taken up in Autumn, such as the Dahlia for instance, and stored away till spring, when they may be replanted again. Others, like the Phlox, will stand the winter, and may therefore be left in the ground. We will name a few of the most suitable for your purpose, commencing with

The *Antirrhinum*, or *Snapdragon*,—This will continue flowering throughout the summer, and may be propagated by cuttings of the small shoots; it forms a bushy plant, when well grown, with spikes of various coloured blooms.

The *Chrysanthemum*.—There are two varieties of this plant, the Pompon, and the large flowering. The former are the freest bloomers, but the latter the most striking. There is not a plant more easy of cultivation, nor more ornamental, inasmuch as it keeps in one blaze of flower when almost every other plant has done its work. In propagating this, all you will have to do is to divide the root, reserving a few fibres to each piece, and plant anywhere in good soil, or take the top shoots of the parent plant and strike them under a hand-glass in a shady place.

The *Columbine*.—Seeds of this much admired plant may be sown from now to the last week in May, and they will bloom well the year following. They may also be increased by root division. Their colours are very varied, consisting of dark and light pink, dark and light blue, pink and white, blue and white, &c.

The *Chinese Hollyhock*.—This is a very grand-looking plant, and as it grows somewhat lofty it is well adapted for the back of a border. They are of various hues, such as reds, yellows, whites, &c. The roots being very liable to injury from frost and damp, it is best to raise plants from seed every year, which, if sown in May, will flower the second season. However, where you desire to perpetuate any particular variety you may strike cuttings under a hand-glass in the usual way.

The *Double Bee Larkspur* is another very desirable plant, which, as it does not bear seed, will of necessity have to be propagated by division, or, in other words, parting the roots. Its flowers are of an intense blue colour, on long branching spikes, which form a noble contrast to the surrounding beauties of the garden.

The *Pentstemon* is a perfectly hardy herbaceous plant, although it is not unfrequently destroyed by frost; still, as "there is no rule without an exception," it may now and then, by care, be saved; and as such there is no reason why it should not be included in our list of favourites. The colours of this flower are white, purple, and red, and they are at the height of perfection from July to November.

The *Polyanthus* is another beautiful little flower, that generally makes its appearance about the time when everything else is out of season. The most successful way of increasing the stock of this plant is by dividing the root—an operation which should be performed in autumn. Seeds of this much-admired plant should be sown in July, and the seedling plants put out the following spring.

The *Double Daisy* consists of two or three varieties—the quilled double white and the quilled double red being the best. The roots of this flower should be taken up, divided, and replanted annually, the time for doing which matters little so long as you water them well after planting. They may also be raised from seed, which should be sown in April and May.

The *Phlox Omniflora*, of which the white is the best, because it is in perfection when white flowers are required most, may be either raised from seed or propagated by division.

The *Many-leaved Lupine*, as it is called, excels in beauty all the Lupine family—not only in closeness of bloom and length of spike, but, what is of still more importance, brilliancy of colour. One of its desirable qualities is its extreme hardiness, and as it flowers all the summer, it is entitled to a place in every garden where variety and continual show is the order of the day.

The *Dielytra spectabilis* is a very beautiful flower; in fact it resembles a hothouse plant more than anything else; but has the advantage of being not only extremely hardy, but of blooming long before other things care about showing their capabilities in the ornamental line. It is reared from cuttings very easily, or by division in autumn. As far as flowering is concerned, it is at perfection during April and May.

The *Pansy*, or *Heartsease*, is endless in point of variety, and may be increased by cuttings at almost any period of the year, by sideshoots or by seed. If the latter mode is adopted, it should be carried into effect from April to June, provided protection is afforded during suspicious weather.

The *Thrift*, as its name partly indicates, thrives in all situations, and as such is admirably adapted as an edging to beds, borders, and the like. The colour of its flowers is rose. It may be either propagated by seed—which, by the bye, is almost as pretty as the flower itself—or by division of the roots.

The *Pink*, which is an especial favourite with all, requires very little attention when once established; and is easily increased by pipings of the young shoots, or by layering in June.

(To be continued.)

LITTLE ARTHUR.

In telling you about this dear little boy, we must first of all let you know that we think children—even little children—may be as truly religious as grown up people.

You think it a very proper thing that your father and mother should love God and do what He tells them to do. But is it not just as right that *you* should love Him too and also do his will?

You would think it a very wicked thing if your father or mother were to tell a lie. But would it not be also wicked in you to do it?

You ask your father and mother to give you those things which you wish to have. Now if you are told that there are some things which you need which God only can give you, can you not ask God to bestow them upon you? Well, if while you do this, you really wish in your heart to have them, that is *prayer;* and prayer is a chief part of true religion.

If your father or mother were to *promise* you something, you would *believe* their word. God always keeps his word; and why should you not believe God?

Now then about little Arthur. He was born on the 5th August, 1851; but did not live more than about three years and a half.

Before this sweet child knew how great God is, his mind was filled with the knowledge that God loved him and watched over him for good. This truth called up in his infant soul that "perfect love" which "casteth out fear." He never feared the dark as many children do. The thought of a loving, ever-present God, who always took care of him, so filled his mind, that it quite drove away fear.

"Fearest thou the dark, poor child?
I would not have thee left to thy terrors.
Yet know thy father's God is with thee still, to guard thee."

When he was two years and four months old, his little thoughts found vent in speech. His mother then began to lead his tender mind to repose its full confidence and love in that blessed Redeemer, who, when on earth, took the little children up in his arms, "put his hands upon them and blessed them," and who also said, "Suffer them to come *unto me.*"

From the time little Arthur learned to speak, he was always ready to express for himself the prayers which his mother had offered for him before.

His mother says that he warmly appreciated everything that was beautiful, but no subject charmed him like the love of Jesus. He delighted to hear the story of the child Jesus, and listened with the deepest interest and attention while I held him up before his infant mind as an example which *he* should strive to imitate; and while I told him of his generous love to the little ones—of his dying on the cross, and of the love which caused Him thus to die—even that we might have our sins forgiven, and that through his Resurrection we might go to heaven; he would afterwards sit and talk to himself about it.

Little Arthur had a baby sister in heaven, and he would say with much pleasure, "Our 'ittle baby up in heaven"—he very much wished to go there himself—that he might see Jesus and be quite like him.

When about three years old, poor little Arthur was very ill—he was sweetly patient during his illness. After he was once told that as he was ill he must not get out of his bed, he never once wished to do so; there he stayed, quite happy, repeating his little hymns and prayers.

Arthur always loved the Sabbath, and used to call it "God's day;" and "his behaviour at church was beautiful."

Do not think that Arthur did not like to play on other days. He greatly enjoyed the usual pleasures of children; indeed no child ever enjoyed fun—real fun—more than he. When he had played one game he would look round for another, and seemed never to have enough of play.

There was peculiar grace and even elegance in his manners. The sweet music of his voice was like softest melody. A little cousin used to go to see him sometimes, and the love with which he met her was most beautiful. He would welcome her, putting both arms around her, untying her bonnet, taking off her neckerchief, pouring out the fulness of his heart's love upon her. And he was very gentle in his conduct; his mother had no need to object to his having anything to amuse himself with, however valuable, for he handled everything so gently he was sure not to injure it.

It is with great pleasure we tell of little Arthur's respect and good behaviour to aged persons. There are few things we like to see more than the reverent conduct of the young to the aged.

Arthur was not *faultless*, although he was a very good child. When he was two years old he showed *much bad temper.*

Owing to his state of health he was very irritable, and that was shown on very trifling occasions. Arthur would at one time get into a great passion, and there was quite a contest between him and his mother. He was determined to have his way, and his mother, like a sensible, good woman, was determined he should not. This was the truest kindness his mother could show to him. His mother did not allow any feeling of love to him, and she loved him dearly, to prevent her doing her duty. Although she might have found many excuses if she had liked, in the delicate state of his health, and other things. But she was resolved that *what mother said Arthur must do. He learned this and remembered it too.* But it was not until the mother had inflicted upon her child a chastisement which went to her heart, and which she thinks of now with tears.

The battle which must always be fought between the mother and the child was over—the victory won—and in that victory the mother found her peace, and the child its happiness. Arthur *after that* was almost always sweetly obedient to his beloved mother.

We cannot tell you any more about dear little Arthur, except that he was in great pain before he died. Just before he died, his mother felt she should like to hear him call her name once more, and said to him, "My darling, can you say mamma?" He then said "Mamma dear," and soon after, without one struggle, he died.

His mother bent over him, and pressing the precious form to her breast for the last time, said, "You dear one! you do see Jesus now:—you are gone to him now."

THE MOTHER'S SOUL.

The Bohemians have a little flower which they call Materidinska, or Mother's Soul, on which Erben has composed the following beautiful lines:—

A mother had died and was laid in the grave,
Her orphans still stayed here,
And every morning together they went,
And sought for their mother dear.

The mother was woe for her children dear;
  Back came the soul that was fled,
And embodied itself in a tiny flower,
  Which soon the grave o'erspread.

The children their mother knew again,
  By the scent so sweet around,
And their Mother's Soul they called the flower,
  Wherein they comfort found.

O Mother's Soul of my country dear—
  Tales simple enough, I trow—
I gather'd thee on an ancient grave,
  To whom shall I give thee now?

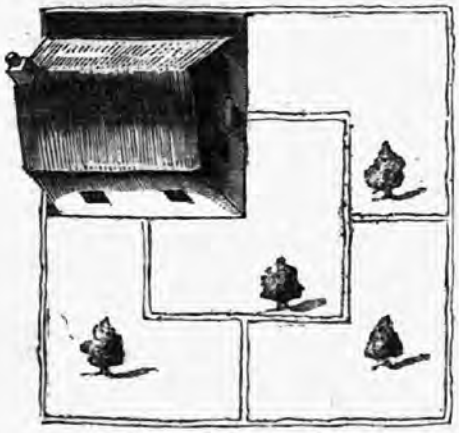
In a tiny nosegay thy flowers I'll twine,
  With a band I'll fairly bind,
I'll point thee the way to the lands so wide,
  Where kindred thou wilt find.

Some daughter of her mother perhaps will be there,
  To whom thy scent will be sweet;
Perhaps, too, some son of his mother thou'lt find,
  Whose heart thy flowers will greet.

Amusements.

ANSWERS TO PUZZLES IN OUR LAST.

1.—The Plot of Ground.



A Correspondent sends:—

My ground is divided,
My tenants at work,
And he'll profit most
Who does not shirk.
So let them toil on,
Till cabbages rise,
And carrots and turnips,
To gladden their eyes.
Gooseberries and currants,
And raspberries too,
Shall amply repay
The work they may do!

2.—The Geometrical Solid.

A regular geometrical solid, &c.—These three diagrams give the correct solution.

J. F. A., of Leeds, thus explains the difficulty, "Take a cylindrical piece of wood, an inch in length, and an inch in diameter, and cut it somewhat in the form of a wedge (see figures 1 and 2), then the piece of wood shall fill up exactly the square, the circle, and the triangle (see figure 3), the circle by the base, the square by applying the face of the wood, and the triangle by the side."

3.

Because the last thing he did was to die for his country, and it is the last thing they intend to do.

4

80 geese	@	1s. . . .	£4.
1 sheep	@	£1	£1.
19 bullocks	@	£95	£95.

5

L'Etat divisé.
Le Trône bouléversé.
Le Roi décédé.
La Noblesse abaissée.
La Gloire effacée.
La Religion mise-de-côté.
Feu environné.

Mr. Le Brocq, of Alderney, amplifies the above as follows:—

Le feu de la guerre nous entoure de toutes parts. L'Angleterre, l'Espagne, l'Autriche, et la Prusse (pays environnans) nous font en même temps la guerre. La religion est mise-de-côté; le Romanisme est aboli, et l'Athéisme le remplace. Le Trône est renversé; la royauté est abolie, et la République établie. Le Roi est décédé; Louis XVI. est décapité. La noblesse est abaissée, et la République préférée. La gloire est effacée.

PUZZLES, TO BE ANSWERED IN OUR NEXT.

1.—One Cut to Make Nine Pieces.

J. Taylor, of Great Burford, wishes our readers to fold a single piece of paper so as with *one cut* of the scissors to produce *nine pieces*, as in the above engraving. This will help the girls to "cut out."

2.—What does this Represent?

3.—The Young Gardener who fell in Love.

A gardener (a very handsome young man) fell in love with a beautiful young woman, and, after many refusals from the young lady's father, was accepted on one condition, viz. that the young man would plant twelve gooseberry bushes so that they would count four six different ways. After a great many failures, he at last succeeded. But how was it done?

4.—*Isaac Wells sends the following Enigma.*

My first to all thou dost appear;
  My second mayst thou ever be;
My whole, the source of many a tear.
  How can I utter it to thee!

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

THE EGG NUMBER OF YOUNG ENGLAND.—This instructive and amusing work has been out the greater part of the last month, and is affording much delight to both boys and girls. We expect there will be a "run" upon the "boxes of paints" in the neighbourhood where the egg number may reach. Just think—to colour 182 different sorts of eggs! We have no doubt the girls will paint best.

T. J. CARDEN, Penzance. No; out of print.

EXCHANGE OF EGGS.—I have just received a large number of duplicate "British Birds' Eggs," which I shall be very glad to exchange for others I may not have, amounting to about 80 different kinds.—A. EDWARDS, Taunton.

BUTTERFLIES AND BOXES.—Sir,—Can you tell me how to procure British Butterflies without soiling the colour of the wings, and the best place to procure a box with a glass top to it, rather cheap, say about 2s. 6d. or 3s?—DELLA.

For the first, handle them carefully,—take hold of them by the body. For the second, in any form, apply to any naturalist, or a carpenter in your own town or village.

CASTS FROM SEALS.—Could any of your readers inform me of the best method of taking casts from sealing-wax impressions, which may themselves be used as seals?—A WELL-WISHER.

THE MISSEL-THRUSH.—Sir,—Will you inform my companion and me if it is natural for a missel-thrush to build on the top of a wall; as we found a nest in that situation last year.—T. LIVINGSTONE and T. LEICESTER.

The missel-thrush builds in exposed places, and is not at all particular where. We once found a nest in a similar position.—ED.

RARE BIRDS NEAR RINGWOOD.—Mr. G. B. Corbin sends the following explanation of what we noticed in our last. "When the crossbills were shot, it was only a few from a very large flock, which were killed at a single shot; we might have shot more, but we had our desiderata. I can assure you, in all my studies I have a great detestation of cruelty, and I should be the last to diminish our list of British Birds; but if rare birds were not shot, there would be no valuable collections, as the British Museum, &c."

EXCHANGE OF LEPIDOPTERA.—For the benefit of young entomologists, I have a superfluous amount of the following insects, which I should be happy to send to any person sending a *box* with *return postage*.—G. B. CORBIN, Ringwood.

Here followed a list too long to insert. Those who wish to exchange should write to Mr. Corbin.

CLEANING BIRD SKINS.—Sir,—Any of your readers will greatly oblige by informing me the best mode of cleaning bird skins, supposing them to have been shot, and covered with blood.—T. LUNN.

STEAM PADDLE BOATS.—We never heard of the person before, and therefore cannot tell.

THE FRITILLARIES.—Rusticus, of the Lodge, Louth, will find the information he seeks in the Butterfly Number.

CHRYSALIDES.—Rusticus wishes our young friends to know he has been very successful in finding chrysalides by digging with a trowel at the foot of oak-trees.

STAINING IVORY.—Can any of your readers inform me how I may stain ivory, blue or green?—A CONSTANT READER.

BENEFIT SOCIETIES AT PUBLIC-HOUSES.—In reply to an inquiry in YOUNG ENGLAND as to the legality of a member of a friendly society (which hold its meetings at public-houses) being compelled to spend a certain sum in beer, I beg to inform you that, as the law of friendly societies at present stands, it is legal, provided there be a clause in its rules to that effect. The only way will be for the member to withdraw and join some other society which does not hold its meetings in such places. I sincerely hope that it will be altered shortly.—J. BEVAN WILSON.

TO PRESERVE PLANTS IN THEIR NATURAL COLOUR.—If you wish to preserve plants, they should be gathered in dry weather, and, after placing the ends in water, let them remain till the next day. When they are submitted to the process of drying, place each plant between several sheets of blotting-paper, and iron it with a large, smooth iron heater, pretty strongly warmed, till all the moisture is dissipated. Colours may thus be fixed, when, otherwise, the plants become pale, or nearly white. In compound flowers, with those also of stubborn and solid forms, some little art is required in cutting away the under part, by which the profile and forms of the flowers will be more distinctly exhibited. This is especially necessary, when the method employed by Mayor Velley is adopted, viz. to fix the flowers and fructification down, with gum upon the paper, previous to ironing, by which means they become almost incorporated with the surface. When this very delicate process is admitted, blotting paper should be laid under every part, excepting the blossoms, in order to prevent the white paper from being stained. Caution is necessary after completing the processes, which is, to be careful and not submit them to a damp place, but keep them in a dry one.—WILLIAM ASTON.

TO PRESERVE FUNGI FOR THE CABINET.—J. B., of Butley, will perhaps gain the information required, respecting the preservation of fungi for the cabinet, by the receipt of the celebrated botanist, William Whethering, Esq., telling us how specimens may be beautifully preserved. Take two ounces of sulphate of copper, or blue vitriol, and reduce it to powder, and pour upon it a pint of boiling water, and, when cold, add half-a-pint of spirits of wine; cork it well, and call it "the pickle." To eight pints of water, add one pint and a half of spirits of wine, and call it "the liquor." Be provided with a number of wide-mouthed bottles of various sizes, all well fitted with corks. The fungi should be left on the table long enough to allow the moisture to evaporate; they should then be placed in the pickle for three hours, or longer if necessary; then place them in the bottles intended for their reception, and fill with liquor. You must then cork and seal them, and arrange them in order with their names written in front of the bottles.—WILLIAM ASTON.

THE BRITISH MOTHS.—We have received more letters on the extra numbers of Young England containing the British Moths than on any other. We are not surprised the subject excites so much attention on the part of entomologists, and that unqualified approbation is expressed of the manner in which they are printed. For the information which is sought we must refer our friends to the advertisement. A bookseller who *now* says he cannot get the numbers must be what we should not like to write.

BOXES FOR EXCHANGE OF LEPIDOPTERA BY POST.—Sir,—It is almost impossible to bring our collections of Lepidoptera at all near completeness without adopting the system of exchange, but in doing this, when the number of insects to be interchanged is small, I have often found the cost of the postage to be equal to the value of the insects received. To obviate this, and bring the price to a minimum, I have successfully adopted the following plan for insects of not more than 1¾ inches diameter:—

I take two one-ounce willow boxes, call them A and B. I glue the lid of A to the bottom of B, the sides of A to the inside of the sides of B, and the bottom of A to the outside of the lid of B. I have thus converted two boxes (neither of which could before be sent safely by post) into one strong one, and all that remains is to glue in a piece of cork to the bottom, and cut the sides down to the required height. When sent, it must be covered in the usual way with black wool, it will then be found to weigh just under the half-ounce, and consequently will go for one penny.—W. B. P.

FLEAS.—G. C. wishes to know the remedy to cure a house swarming with fleas. Most scrupulous regard to cleanliness is observed, notwithstanding which, the annoyance continues.

ARSENIURETTED ALCOHOL.—In answer to several correspondents:—We have received no communication from PHARMAKON on this subject.

PAINTING THE FEET OF STUFFED BIRDS.—Sir, I believe that the bills and feet of birds ought not to be painted, as it destroys the natural look. It should not be done in a scientific collection if the case is decorated with moss and ferns.—THOMAS LEICESTER.

SKELETON LEAVES.—Mrs. Jane Woodfall, has kindly sent the following directions for anatomizing the leaves, seed-vessels, &c., of plants. The seed-vessels, leaves, &c., of different plants should be placed in rain-water, and remain in it without any change until decomposition is carried to the requisite extent, that is, until the cuticle and cellular tissue may be removed from the fibre by the help of a stream of water, a soft brush or a pair of pliers. This will depend upon the water, the weather, and the age of the leaf. Some leaves require several months, and others a very few weeks only. To bleach the leaves, when they are perfectly cleared from cuticle, &c., they must be put into a solution of chloride of lime—about one teacupful of the solution of the shops to a gallon of water. When the leaves, &c., are sufficiently whitened, they must again be soaked in clear water; they should then be carefully dried, either between blotting paper, before the fire, or in the sun. The solution ought to be no stronger than will suffice to bleach the leaves; if it is too strong they will have a hard, thick appearance, and seem to be shrivelled up. It is well to take them out of the bleaching liquid and put them into clean water for a short time before they become quite white. They may be in the solution six or seven hours, some not so long, and then the

same length of time in plain water, putting them back into the chloride of lime solution if necessary. The powdered chloride of lime answers as well as the solution, for the coarser sorts of leaves; about a quarter of a pound of the powder to a gallon of water. It may be made to suit all sorts, if—after the powder has sunk to the bottom—the liquid is carefully decanted; and it is much cheaper than the solution sold at the chemist's. Names of some of the leaves, etc., that will anatomize: *Leaves.* Butcher's Broom, Stercular, Indian Rubber, Pepul Tree, Maple, Rose, Pyrus, Lemon, Vine, Orange, Myrtle, Poplar, Tulip, Robinia, Westeria, Eryngium maritimum, Carduus Benedictus, Magnolia (10 sorts), Pear, Lathyrus, Alstræmeria, Thistles, Ivy, Holly, Barberry, St. John's Wort, Banisteria Fulgida, Scarlet Passion Flower, Hornbeam. *Seed-vessels.* Poppies, Woolly Germander, Honesty, Alkekengi, Nicondria Physaloides, Stramonium, Hyoscyamus, Lavatera, Malope, Campanula, Carthamus Tinctoria, Canterbury Bell, Sea Tree Mallow. The calyx of the Hydrangea will also anatomize.

Another correspondent sends:—Soak the leaf in *dilute nitric acid* (which can be procured at any chemist's for a penny) and leave it there for a short time; when, upon being taken out, you can very easily dissect it, as all the power of cohesion will be lost by the several vessels, which will be quite transparent and very easily separated by a careful dissection.—W. H. W., Dublin.

EXCHANGE OF SILKWORM'S EGGS.—Sir,—I have a quantity of silkworm's eggs to dispose of, some of which I shall be happy to forward to any of your readers on receipt of a stamped directed envelope. Any other description of ova sent in exchange, will be thankfully received by—E. J. MASSIE, 1, Alpha Place, Dewsbury Road, Leeds.

A COUNTRY LAD may get all the information he desires by asking his bookseller.

POETRY.—Several poetic pieces of some merit stand over for want of room.

YOUNG ENGLAND NATURAL HISTORY SOCIETY.—This name is suggested by Mr. W. Macmillan, of 178, Great Colmore St. Birmingham, for a Youth's Association for the Study of Natural History. It appears there is no "naturalist" in Birmingham. Any one interested in the subject might write to Mr. Macmillan.

PEREGRINE FALCON.—A. Heath, of Taunton, wishes to know *when* it breeds.

POLYOMMATUS AGIS.—It was taken, in 1857-58, at Papworth, Everard, in Cambridgeshire. Specimens were advertised for sale in 1861 by Mr. Farren of Cambridge as having been taken in Somersetshire.—ENTOMOLOGICUS.

DOUBLEDAY'S CATALOGUE.—In my explanation of the meaning of "W. V." Doub. Cat., your printers have substituted a *g* for a *z*, making the word *vergeichniss* instead of *verzeichniss*.—ENTOMOLOGICUS

LORD ROSSE'S TELESCOPE.—When in 1839, Lord Rosse constructed a reflector with a speculum three feet in diameter, and of twenty-seven feet focal distance, it was considered one of the most accurate and powerful instruments that had ever been made. Its execution filled men of science with intense admiration. But his lordship was not content with this achievement. He spoke of the possibility of producing a speculum six feet in diameter. This was deemed by many as chimerical. But nothing daunted by the magnitude and the difficulty of the undertaking, his lordship put it to the test. His success was complete. The speculum is above six feet in diameter, five inches and a half thick at the edges, and five inches at the centre, and its weight above three tons. Its composition is in the proportion of 126 parts of copper to 57½ of tin. In preparing it, there were employed three large furnaces heated with turf fires. A crucible holding one ton of the metal was placed in each of these furnaces, and for nineteen hours was subjected to an intense heat. The crucibles were lifted from the furnaces by means of an immense crane, and without accident or delay they simultaneously poured forth their glowing contents—a burning mass of fluid matter. When the metal had settled, it was drawn by a capstan into a heated oven and built in, where it remained for sixteen weeks in the process of annealing, at the end of which time it was found without spot or defect of any kind. Six weeks were employed in grinding it to a fair surface, after which the polishing was accomplished in little more than six hours. A tube was prepared for it fifty-two feet long, and seven feet in diameter, formed of wood, and hooped with iron. This tube (it is said) is capable of containing above a hundred men standing upright. The tube and speculum, including the bed on which the speculum rests, weigh above fifteen tons. The whole apparatus and expense of erection, cost his lordship not less a sum than £12,000. Now as the power of a telescope to penetrate into space depends on the quantity of light which it can receive, the light reflected from this speculum is more than double that from Herschel's largest and most powerful reflector. This has a reflecting surface of 4071 square inches, while that of Herschel's forty feet telescope had only 1811 square inches on its polished surface.

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YOUNG ENGLAND.

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HANDEL, THE GREAT COMPOSER.

GEORGE FREDERICK HANDEL was born in the city of Halle, Upper Saxony, in the year 1684. His father, who was a surgeon, or physician, was sixty years of age at the birth of George. Even in infancy the taste of the son for music began to reveal itself; and there was not a musical instrument which met his eye, or came within his reach, with which he did not amuse himself. His father, who designed him or the profession of the law, instead of giving either encouragement or the means of instruction to foster his favourite propensities positively forbade him to touch a musical instrument. It was in vain. Even before little Handel had completed his seventh year, he had made considerable—wonderful progress in music. Though the father banished every

HANDEL.

instrument from his house, the son found means to buy a small clavichord, which he secretly conveyed to a room at the top of the house; and thither, when the family were all asleep, the young rebel would make his way, and there indulge himself in his favourite pursuit, till at length he could play with remarkable accuracy, and with corresponding effect, on the harpsichord.

It so happened that his father was about to pay a visit to one of his elder sons, who was valet to the Duke of Saxe-Weissensels, when the young musician, only seven years of age, begged of his father to be allowed to go with him. The father refused; but the little urchin was not to be defeated. The old gentleman started on his journey; but scarcely had the

chaise left the door, when young Handel set out on foot; for a little time he ran close behind the chaise, but at length attracted his father's eye, who, after severely chiding him for his disobedience, gave him a seat by his side; and so they rode on together to George's unspeakable delight. At the Ducal court he found abundant means of gratifying his musical taste. At church he would quietly make his way to the organ gallery, and, at the close of the service, get the permission of the organist to play. It is said, that the duke happened one day to remain behind in the church later than usual, and young Handel being at the moment in contact with the organ, his performance so struck the duke, that he asked his valet who it was that was playing. On learning that it was young Handel, he persuaded the father to allow his son to follow the bent of his inclination; when the father agreed to place his son under the tuition of Yackau, the organist of the cathedral at Halle—a man equally capable and disposed to do justice to so promising a pupil. The path of this interesting youth was now opening before him, and for him there was a bright and prosperous future.

At the age of nine, we are told, he composed the church service of his native land, for voices and instruments; and in this, and similar service, he filled up three successive years. At the age of fourteen, it was acknowledged that he already excelled his master, when he was sent to Berlin, and became the object of royal favours. On the death of his father in 1703, he left Halle, to which he had returned from Berlin, and proceeded to Hamburg, where the Opera was but little, if at all, inferior to that of Berlin. Here he procured an engagement, and took his place in the orchestra. At this time the first harpsichord in Hamburg was played by a man of the name of Keser—a man who excelled in composition; but who, owing to pecuniary difficulties, was compelled to make his escape from the city. His office became vacant, and Handel became a candidate; when, to the mortification of several others, he succeeded in obtaining it. In his fifteenth year, he became composer to the Opera in Hamburg; and so successful was his first production—ALMIRA—that it had a run of thirty nights without interruption. Within twelve months he produced two other pieces, which had an equal success. Fortune and favour now smiled upon him; but nothing could induce him to forego his independence.

In his nineteenth year, he took a journey to Italy. Here he was embraced, caressed, by princes and by cardinals, and the height of his genius was acknowledged by all ranks. At Florence, he produced the opera of RODRIGO; when, after spending some twelve months in that city, which was the metropolis of one of the most wealthy and powerful of the Italian States, he visited Venice, Naples, and Rome; and, after spending some six years under the bright blue sky of Italy, he set out for his native home. On his way thither he was introduced at the Court of Hanover, when every possible inducement was held out to him to remain there; but having received the most pressing invitations from many of our nobility to visit our British shore, he came to England towards the close of 1710, where he was received with such flattering —almost extravagant demonstrations, as induced him to prolong his stay from year to year, and at last to accept England as his chosen home.

He had been some thirty years in England, when he produced his oratorio of the MESSIAH—the *chef d'œuvre* of his lofty genius. At first, this sublime composition was far from being appreciated according to its merits; but no sooner were these merits discovered, thanit began to rise in the esteem of both professional men, as well as of the less instructed. It has increased in reputation and favour up to the present time; and no one who has heard it performed under the matchless skill and superintendence of M. Costa, but must confess that it is a work whose sublimity and grandeur mock the use of words.

From this period, up to the day of his death, the vicissitudes in the life of the great Composer were many and trying. He was involved in disputes and in lawsuits; his health became affected; twice was he seized with paralysis; he lost his eyesight; and latterly he was the subject of great mental disturbance. At home, however, he was buoyant and full of spirit; nor did his misfortunes lessen—far less extinguish—the fire of his genius; and he continued to compose till within one short week of his death, which took place in London, in 1759. He was buried in Westminster Abbey, where a monument is erected to his memory.

In speaking of his compositions, it has been justly said, that "in boldness and strength of style, and in the combination of vigour, spirit, invention, grandeur, and solemnity, he has never been surpassed." A nobler inspiration was his. Not only had he a complete mastery over the notes of music, but he caught the very spirit of the Sacred Writers, whose words he employed, and to the full utterance of which his music was but a vehicle. Filled with the grand conceptions and ideas of the men who wrote and spoke under the influence of the Divine Spirit, his compositions partake more of a divine than a human character.

In the year 1784, which was one hundred years after the birth of the great Composer, there took place in London, what was termed the HANDEL COMMEMORATION, under the patronage of His Majesty, George III. The design of this celebration, which took place in Westminster Abbey, was, not only that a performance might thus be secured on a scale of such grandeur and magnificence as no other city in Europe, or in the world, could equal—but that honour might be done to the name and the memory of Handel. No sooner was it known that such a celebration was to be held than most of the practical musicians in the kingdom eagerly manifested their zeal in the furtherance of the enterprise, and many of the most eminent professors, waiving all claim to precedence in the band, offered to perform in any capacity in which their talent might be most available. Every possible preparation was made for this musical festival. The performance was honoured with the presence of the king and queen, and all the first and most distinguished families in the land; and the metropolis was literally crowded with visitors from all parts of the kingdom. The success of the undertaking was undeniable; and the impression which was produced on those who were fortunate enough to be present, nothing could efface from the mind or the memory.

A grander celebration is now before us. On the 23rd, 25th, and 27th, of the present month, there is to be a performance of Handel's chief compositions on a scale never before attempted; and of its perfect success, we have not even the shadow of a doubt. Its execution is in the hands of those who make a failure all but impossible. Handel is greatly indebted to the Sacred Harmonic Society for the favour with which his grandest compositions are now received, and still more to the unequalled skill, effort, and perseverance of the distinguished leader of that Society. But for M. Costa, Handel would never have gained the eminence which he now holds in England—in Europe. And we look

forward to the approaching festival under the crystal roof of the Sydenham Palace with emotions not to be expressed in words. It will be a magnificent occasion; and such as may not occur again for a generation to come. We believe that the hopes of the most sanguine will be more than realized; and that Handel, and 1862, will be associated in the memory of thousands, till life shall send its last throb from the heart, and its last beat to the pulse.

LONDON, JUNE 2, 1862.

THE opening of the International Exhibition, of which so much was said and written, and about which so many fears took possession of men's minds, is now a *fait accompli*—and, as an accomplished fact, one of intense interest. The building, as a mere structure, may not be equal to the Palace of Crystal which was reared as if by fairy hands in 1851, and even the *coup d'œil* of the interior may not leave the same inexpressibly pleasing impression on the mind, but still it is confessed on all hands, that, as an EXHIBITION, it throws the former into far, far distance. Its treasures are not only more numerous, but more varied, more artistic, more finished, more costly, and, in every sense of the word, more worthy of examination and study.

But what is the specific object of this Exhibition? Not, surely, to bring together the products of various nations whether natural or mechanical—not to collect under one wide and lofty roof the richer and the rarer works of art—not to display the fruits of research and science; but in connection with these, to stimulate the energies of all countries to a healthy effort to follow each other in the path of a higher improvement. No one people enjoys a monopoly of good. Each nation has its own individual excellences, and so we may say of its products. What is lacking in one, may be found in another. But instead of resting satisfied with this as a resting-place, it should be the point from which each country should start in the race of a prouder rivalry. It is the purpose of God, by the many developments of human skill and industry, that one nation should learn from another. Just as "star unto star speaks light," the reflection of mind in one direction appeals to the reflection of mind in another direction; and hence the effort and the application which follow. If England, for example, can exhibit any one object as the result of scientific knowledge, or mechanical skill, or artistic excellence, and which is common to no other nation, why should not the others enter the same path, and strive not only to rival, but even to excel her? And why, in reference to some other object claimed by another nation as its peculiar property, should not England seek to share the possession? This is what is being done. A mighty impetus was given by the Exhibition of 1851, to the genius and the labour of the various countries then represented; and each has made a striking advance upon the other, as well as having improved upon itself. Nor can it be denied that the present International Exhibition points forward to still greater progress in every department of human art and industry.

Nor is this all. Mighty consequences are involved in this project. People of every kindred and of every tongue cannot meet and mingle, as they will do, during the period of this great spectacle, without losing much of their national animosities and their personal prejudices; nor again leave our shores without being impressed with the fact, that how much soever other causes may have contributed to lift us as a nation into our present proud pre-eminence, England is chiefly indebted to her simple, spiritual, practical Christianity. Its principles are eminently in favour of all which can go to improve and render great a country. They are never in opposition to the freedom, the elevation, and the happiness of a people. Nor can anything short of the universal spread and prevalence of these principles, reconcile the nations, and perfect the brotherhood of man.

The whole scene connected with the opening was truly magnificent. Nor were the sacred rites of religion left out of the ceremony. The whole was sanctified by prayer. Rank and beauty were there; wealth and influence; learning and refinement; but there were absent those whose presence would have given to the whole scene its most peculiar charm. The man to whose fertile genius the whole thing owed its existence was not there. Our widowed Queen was on her way to her Highland home, carrying with her a heart burdened and full of grief. The Prince of Wales, the heir-apparent to the throne, was prosecuting his travels in the land of miracles, once trodden by the foot of Incarnate Love. The Princess Alice, on the eve of her marriage, could not be there. Their absence threw a solemn sadness over the scene; and, as in the rainbow, the light seemed to struggle with the darkness. Still it was a grand sight. And now that the building is complete, tens of thousands, both of our own population, and of people from foreign lands, will crowd its gates and enter its courts; and the fruits of the undertaking will be reaped for ages yet to come.

CALENDAR FOR JUNE.

THEN came the jolly Sommer being dight
In a thin silken cassock, colour'd greene,
That was unlyned all, to be more light;
And on his head a girland well beseene
He wore, from which as he had chauffed been
The sweat did drop; and in his hand he bore
A bow and shaftes, as he in forest greene
Had hunted late the libbard or the bore,
And now would bathe his limbes with labour heated sore.
SPENSER.

The earliest time of the appearance: they may generally be expected a few weeks later.

FLOWERS, &c.—Wood spurge, ramsons, Mouse-ear scorpion grass, rose, mouse-ear hawkweed, buckbean, water-flag, cultivated rye, hound's tongue, hellaborine, spearwort, birdsfoot trefoil, white dittany, lady's finger, bee orchis, pink, mock orange, vine, Portugal laurel, purple-spotted martagon, meadow crane's bill, black bryony, field pea, bladder campion, white bryony, hedge nettle, bittersweet, walnut, rosebay willow herb, wheat, comfrey, yellow pimpernel, dog rose, mullein, viper's bugloss, borage, spindle tree, musk thistle, dogwood, field scallions, marsh thistle, dropwort, great wild valerian, mountain willow herb, thistle upon thistle, cow parsnip, earth-nut, vervain, corn poppy, self-heal, agrimony, greater knapweed, common mallow, dwarf mallow, St. John's wort, broom-rape, henbane, goat's-beard, deadly nightshade, lime tree, spear thistle, meadow-sweet, greenweed, wild thyme, day lily, jasmine, hollyhock, nipplewort, welted thistle, sneezewort, musk mallow, and pimpernel in flower; Buckthorn in leaf.

INSECTS, &c.—Grasshopper, rose-chaffer, green gold fly, argus butterfly, anglers' May fly, cuckoo-spit insect, puff-ball, stag beetle, great horse fly, and hoary beetle appear.

MISCELLANEOUS.—Truffles begin to be found—mushroom appears—meadow hay cut—sheep shorn—Quails call—Young partridges fly—young frogs migrate—mackerel caught.

LEPIDOPTERA TO BE EXPECTED

A. Galathea.
E. Blandina.
C. Davus.
S. Sibylla.
L. Sinapis.
V. Polychloros.
G. C. Album.
A. Paphia.
T. Pruni.
T. W. Album.
T. Quercus.
E. Cassiope.
P. Arion.
P. Alsus.
P. Artaxerxes.
S. Ocellatus.
S. Ligustri.
H. Sylvinus.
C. Ligniperda.
C. Furcula.
P. Monacha.
M. Minata.
C. Vinula.
S. Fagi.
C. Curtula.
D. Coryli.
L. Aureola.
L. Helvola.
L. Complanula.
H. Dominula.
E. Russula.
A. Vallica.
M. Plantaguis.
S. Menthrasti.
T. Batis.
A. Alni.
L. Impura.
N. Dispecta.
N. Concolor.
A. Connixa.
A. Exclamationis.
A. Herbida.
T. Adusta.
P. Bajularia.
A. Blomeri.
V. Cambrica.
M. Notata.
S. Clathrata.
F. Atomaria.
S. Dealbata.
G. Papilionaria.

LARVÆ TO BE LOOKED FOR.

On Hawthorn.

P. Chrysorrhea.
P. Auriflua.
P. Populi.
T. Cratægi.
C. Spinula.
T. Stabilis.

Buckthorn.

G. Rhamni.
P. Argiolas.
S. Dubitata.

Nettle.

V. Atalanta.
V. Io.
G. C. Album.
C. Cardui.
P. Interrogationis.

Nut.

P. Cassinea.
E. Vespertaria.
C. Advenaria.
B. Prodromaria.

Oak.

N. Chaonia.
T. Quercus.
P. Cassinea.
H. Dispar.
P. Monacha.

Poplar.

A. Iris.
C. Vinula.
N. Ziczac.
D. Dictea.
P. Palpina.

Rose.

A. Badiata.
A. Derivata.

Sallow.

A. Iris.
P. Papina.
P. Cassinea.

Sloe.

G. C. Album.
T. Betula.
C. Neustria.
E. Lanestris.
T. Cratægi.
C. Spinula.

Willow.

V. Antiopa.
N. Ziczac.

SHIPS.—No. II.

You must not suppose that when the Romans invaded Britain that the British were possessed of coracles only; on the contrary, they had made at least equal progress to the Romans in ship-building. We gather this from the following fact:—The Venetans on the coast of the present France, near the entrance to the Loire, were in full trade with Britain for tin and lead, and their ships it is supposed, on sufficient reasons, were copied from the British vessels. Now, the Venetan ships are described by Cæsar, which virtually is a description of the British ships of the time. This is the account handed down to us from the renowned Roman Conqueror.

"Their ships were built and fitted out in this manner:—Their bottoms were somewhat flatter than ours, the better to adapt them to the shallows, and to sustain, without danger, the ebbing of the tide. Their prows were very high and erect, as likewise their sterns, to bear the hugeness of the waves and the violence of tempests.

"The hull of the vessel was entirely of oak, to stand the shocks and assaults of that tempestuous ocean. The benches of the rowers were made of strong beams, about a foot in breadth, and were fastened with iron bolts an inch thick. Instead of cables, they fastened their anchors with chains of iron, and used skins and a sort of thin, pliant leather for sails, either because they wanted canvas and were ignorant of the art of making sail-cloth, or, which is more probable, because they imagined that canvas sails were not so proper to bear the violence of tempests, the rage and fury of the winds, and to propel ships of that bulk and burthen.

"Between our fleet and vessels of such a construction, the encounter was this. In agility and a ready command of oars, we had the advantage; but in other respects, regarding the situation of the coast and the assaults of storms, all things ran very much in their favour: for neither could our ships injure them with their prows, so great was their strength and firmness; nor could we easily throw in our darts, because of their height above us, which also was the reason that we found it extremely difficult to grapple with the enemy and bring them to close fight. Add to all this, that when the sea began to rage and they were forced to submit to the winds, they could both weather the storm better, and more securely trust themselves among the shallows, because they feared nothing from the rocks and cliffs upon the ebbing of the tide."*

We may, therefore, conclude the British navy was by no means in a contemptible condition when Cæsar invaded Britain. Polynæus tells us that Cæsar brought an elephant with him, the first which had been seen in Britain, at least since the geological era. The elephant was cased in iron and, with a tower on his back containing archers, excited the greatest terror in the natives. We may see a reproduction of this iron-clad cavalry, or rather elephantry, as well as iron-cased ships.

The whole of the Roman fleet with which Cæsar invaded Britain, according to Nichols, assembled at Portus Itius, in Gaul, supposed to be Witsandbay, between Capes Grisnez and Blanchnez.

He weighed anchor about sunset, with five legions and the same number of horse he had left with Labienus, and, advancing, with a gentle south wind, continued his course till midnight, when he found himself becalmed; but, the tide still driving him on, at daybreak he saw Britain on his left. When again following the return of the tide, he rowed with all his might to reach that part of the island which he had marked out the summer before as most convenient for landing, and on this occasion the diligence of the soldiers cannot be sufficiently commended, who, labouring incessantly at the oar, urged the transports and ships of burthen so swiftly that they equalled the course of the galleys. The whole fleet reached the coast of Britain about noon; nor did any enemy appear in view. But, as Cæsar afterwards understood from the prisoners, though a great army of Britons had repaired to the coast, yet terrified by the vast number of ships, which, together with those of last year's expedition and such as had been fitted out by particular persons for their own use, amounted to upwards of eight hundred, they retired hastily from the shore, and hid themselves behind the mountains.†

In this way Cæsar invaded Britain. The pictures of the Roman war vessels given in the last number are not exact representations of the vessels in which the Roman legions crossed the Straits. They were made low on account of "the shallowness of the British coast," and "wide that they might carry a greater number of horses."

We now pass to the vessels of the Saxons. Nichols' who is a good authority, tells us that the modern rudder was unknown for many centuries after this period; that "ships were steered by paddles fixed to the quarter." While the steersman, who was also the captain or master, and perhaps, too, the pilot, held the paddle in one hand, he he kept the sheet of the sail in the other, thus guiding and providing for the safety of the vessel at the same time. He adds, "It is doubtful if for any purpose these vessels ever carried more than fifty or sixty men; and when not employed they were drawn up upon the sea-shore."

Fig. 9 is a very good copy of ships used by the Saxons, who about five hundred years after the invasion of the Romans, being invited by the Britons, came over to this

* De Bello Gallico, lib. iii. sect. xiii. † Ibid. v. sect. viii.

country. The Britons wanted their help against the warlike Caledonians, who trespassed upon their territory. Then Hengist and his heroes came, and they liked the place so well they would not go away again. Then the

Fig. 9.

Great Alfred rose and divided England into counties, gave the people laws, and ruled well. He formed a militia, founded the University of Oxford, and established the English throne. His ships were like this one, but he had others also. They were full nigh twice as long as those previously in use; they were swifter, steadier and higher; indeed, it was Alfred the Great who formed the English navy. This navy, formed by the genius of Alfred, had increased to nearly five thousand ships in the time of Edgar, who, it is said, dividing them "into two fleets," sailed round the island "to prevent the incursions of pirates and to train the people to war."*

Notwithstanding the increase and skill of the English navy, the Danish ships under Sweyn made a descent on the coast of Norfolk in the year 1006. Their vessels had high decks, distinctive emblems, with prows ornamented with figures of "cows, bulls, dolphins, or men, and, at the mast-head, vanes in the shape of birds with expanded wings, showing the quarter whence the wind blew. The sides were painted with various colours, and the shields of the soldiers, of polished steel, were placed in rows round the gunwales. Sweyn's own ship was called the *Great Dragon*, and was built in the form of one, its head forming the prow, and its tail the stern." The Scandinavian standard, of white silk, having in its centre a raven with extended wings and open beak, the supposed ensurer of victory, which had been embroidered by three of Sweyn's sisters in one night, although it was not displayed on board his ship until he landed in England.†

In the history of the ships of the Danes we come to Canute. It is said by Henry of Huntingdon,‡ "that Canute did three elegant and memorable things, of which the following was the most memorable. Being at Southampton, in all royal pomp he placed himself in a seat on the seashore, and addressing the flowing tide, with an air of authority, said, 'Thou, O sea! art subject to me, as is the land on which I sit, nor is there any one who dare resist my commands; now, I enjoin thee neither to approach my land, nor presume to wet the feet or garments of thy sovereign.' But the tide, rising as usual, soon wetted his feet and legs, and the king retreating, exclaimed, 'Let every inhabitant of the world know that the power of kings is a vain and trifling thing, nor is there any one worthy of the name of king but He at whose word the heavens, the earth and sea, and all that in them are, obey His eternal laws.'"

Now come the Normans, led by the Conqueror. William had been preparing for the invasion of England for nearly a year. In the spring and summer of 1066, all the harbours and creeks of Normandy were alive with shipbuilding. It is difficult to say how many ships were then built—probably 500 large ones with masts and sails, and 1000 smaller ones. One writer says there were 3000 which carried sails. These were employed to bring over 60,000 troops. At day break on September 27th, the troops began to embark, and before sunset the whole fleet was under weigh, when the Duke took the lead in his own ship the *Mora*, which was presented to him by Matilda, who afterwards became Queen, and for which he presented her with the county of Kent.

This ship was copied on the famous Bayeux Tapestry, which Matilda and her maidens worked, and from which our drawing is taken. (See No. 10. At its mast-head is

Fig. 10.

a square white banner, having a golden cross within a blue border, which is surmounted by another cross of fine gold. The prow is ornamented with a lion's head, and at the stern is a golden boy pointing to England with his right hand, and holding a flag in his left. The sail is in three stripes, red or brown, yellow, and red; the ship itself was painted brown and blue. William is supposed to be standing up holding by the mast with his left hand. The captain's name was Stephen Fitz Erard, who after the conquest lived at Southampton.

The cavalry were brought over in vessels constructed for the purpose. The cut, No. 11, is an exact representation,

Fig. 11.

also copied from the Bayeux Tapestry, which, as far as can be represented in needlework, gives the history of the whole expedition.

William's ship sailed much faster than the rest, so that at daybreak next morning none of the others could be seen.

After waiting, a sailor was sent to the mast-head, who said he could see nothing but sea and sky. The ship was then brought to an anchor and the whole company breakfasted on the best provisions served with spiced wines. The sailor was again sent to the mast-head; he then saw four vessels. Going a third time, he reported a forest of masts and sails. The fleet having come up, the Duke's vessel weighed, and very soon the army landed without resistance at Pevensey, near Hastings, on Sept. 21st, 1066. The ships were then drawn on shore and burnt; and William led his forces against Harold in the celebrated Battle of Hastings, near a place which since then has been called Battle Abbey.

(To be continued.

* Matthew of Westminster, p. 192.
† Nichols, p. 17, 18. ‡ Ed. Petrie, p. 737.

Review.

Consecrated Heights. By the Rev. Robert Ferguson, LL.D. 2nd Edition, pp. 360. Ward and Co., London.

THE Prince of Wales has been travelling in the Holy Land. His Royal Highness had the Rev. Dr. Stanley for *cicerone*, than whom no one more suitable could be found. Any person who has read Dr. Stanley's book on Palestine will probably be of the same opinion.

The public attention is thus directed, in a novel and interesting manner, to the land of prophecy and miracle. It is therefore desirable that our youth should be led to the study, not only of the so-called holy places—the topography and geography of the Promised Land—but also to the grand and momentous moral lessons which the scenes and events of that part of the world are intended, and remarkably adapted, to inculcate and enforce. "Glorious things are spoken of thee, O City of our God!" The humblest village within the consecrated territory reflects that glory.

It is not improbable, on these accounts, there will be an earnest desire for the real and ultimate teaching which the great facts of sacred story are meant to impart. For this purpose, we have nothing comparable to the book which bears the appropriate title of *Consecrated Heights; or, Scenes of Higher Manifestation.* Its arrangement is most comprehensive, clear, and complete. Its diction is felicitously appropriate, pure, and sustained, rising sometimes to the grand and even the sublime. But above all, the sentiments are such as the "Holy Catholic Church throughout all the world" have ever cherished and professed as their most blessed inheritance and choicest treasure.

We give one or two selections, that our readers may judge for themselves.

One is on the death of Moses:—

"Having taking his last adieu, he turned to ascend the hill. Nebo was one of the mountains in the lofty range of Abarim, and of Nebo the highest point was Pisgah, from which the illustrious prophet could command a full view of the land of promise. On that high eminence he stood, and gazed with unutterable emotion on the lovely scene. Everything appeared clothed in beauty, while the waters of the Jordan flowed past sparkling in the light of the sun. But grander far were the holy visions of his soul. In immediate communion with God, he had such revelations of the unseen, as no human sounds could have expressed. He was there alone. A cloud encircled the mount, which was composed of the outer edge—the dark fringe of the everlasting brightness. In the centre, where Moses was, all was light and glory. But it is not permitted to us to go through the thick darkness into the interior brightness. How long the scene continued we know not. At what moment he threw mortality off, we are not told. The hour of communion past, and surrounded with celestial glory, he laid himself down on the summit of the rock to die. Death it was not. He was not called to part with life contrary to his will. The separation was effected not by force; nor did it partake of the violence of a rupture. On the contrary, it was a willing and joyful surrender—nothing more than the soul parting with the worn-out vestment of the flesh, and putting on the robe of light. 'Tis done! There lies the lifeless form of the noblest of men! It may be that 'the mountain cloud which night hung around him was his only shroud, and the thunder of the passing storm his only dirge;' but we are inclined to think that there was neither cloud nor storm, and that the only motion which was heard amid the profound silence was that of the angel's wing, on which the spirit rose into the realms of eternal day."

The other is on the departure of any godly man:—

"Radiant is the light, and resplendent are the glories which rise upon the sight of the dying saint! Glowing as may be the splendour of the ruby when stricken by the sun—dazzling as may be the mirror of burnished gold when placed beneath the beam of noon—all material brightness becomes dim and dark in contrast with the pure light which streams from the throne of God, and which greets the spirit on her ascent to heaven. The subject of an inward and divine purity, welcome to her are the holiest and the sunniest visions. A dark soul could not exist in a bright heaven; but a pure heart desires to see God. Mighty are her aspirations after this her final joy. She rises from light to light, till all heaven stands unclosed, and she is blessed with an abundant entrance. Deny her not her mountain-height from which she may now see the land not afar off, and that light which is burning into eternal ardour. Why should we not climb to higher ground than Pisgah's head, and see something better than fields 'dressed in living green,' or the fairest landscape which earth can open to the eye of man? why should we not bring heaven and all its realities nearer to the soul through life, that in the article of death we may have nothing to do but to take the dust-covered sandal from our feet, and putting on the best robe, go into the presence of the great I AM? Why in death itself should we not have grand and ever-widening discoveries of the world to come? A freer life awaits us there, and a nobler service, and sublimely full will be the volume of our praise. There is that height of glory which no wish can exceed; and the soul no longer pinioned to the flesh, but rising on her own free wing, soars into the ineffable light, and expatiates amid the glories of eternity!"

The book ought to be in every library and in every family. It is a pleasure to recommend, but a greater pleasure to read it.

TOBACCO.

PEOPLE and children imitate before they reason. That is why so many bad habits are commenced and indulged in—for instance, that of smoking. Boys see men smoke and they think it will make them appear like men if they do the same; then without being *manly* enough to consider and reason with themselves as to whether it is a good or a bad habit, they at once *imitate* and commence smoking, which is always unpleasant and disagreeable at *first*—but, alas! this opposition which the healthy stomach shows to such an *unwelcome intruder* as tobacco overcome; and thus we see the sad sight of young men, and even *boys* walking the streets, whiffing and puffing and polluting the air with the poisonous fumes of filthy tobacco—inflicting an injury upon themselves, and a *nuisance* to others.

"What has become of your old servant, John?" said a gentleman to an old friend one day. "You surely have not parted with him."

"Yes; indeed I have."

"Why? has he not been with you for fifteen years?"

"Yes. But it was full time we should part; and I will tell you why. In the first five years he was an admirable servant; for the next five, he was a very pleasant companion; but during the last five, he has been a most insufferable tyrant!"

So it is with tobacco; at first, it is a *servant*, and can be taken up and put down, and be submissive enough. Next, it comes to be a companion, quite on a par with you, and you do not like to be without it; but afterwards you become altogether a slave to it. Many do not *know* or *believe* this till they try to give it up; then it is often found that, alas! tobacco has become master, and a tyrant too! Young England, beware of this tyrant before he has any power over you; have nothing to do with tobacco in any form; remember that many men indulge in habits which are not *manly*—a bad habit never can be manly. It is very sad to see men and sensible-*looking* gentlemen setting you such a bad example. They may say it is a luxury, and that they like it, &c. But let me ask (in the words of Professor Miller), "Is it either wise or right to indulge in a luxury—something not essential—that is hurtful, enslaving, and infectious?"—HOPEFUL.

GARDENING FOR BOYS AND GIRLS.

CHAPTER III.—*Continued.*

The *Dahlia.*—This is a plant too well known to need much description; but as there may be a few of our readers who are unacquainted with its habit, we will merely inform them that it may be propagated by dividing the roots, taking care to have, or rather preserve, an eye or shoot, and a small portion of the bulb, to each piece, and to plant it in a hole in the ground made with your trowel, and when it is properly covered up and the earth closed gently round it, water it well to settle the mould. This flower may likewise be raised from seed sown in heat during the month of April.

The *Forget-me-Not* is one of the prettiest little flowers we have, and may be raised from seed sown in April, or by division, where you have full-grown plants.

The *Violet.*—The Russian variety, which is by far the most hardy, consists of three kinds—the double blue, double white, and single. Although the last is the most useful, as it produces flowers for a much longer period than either of the other two, the former are the grandest to look at. These may be either increased by division or raised from seed.

BIENNIALS, which, being sown one year, flower, and then die the next, will require our attention, and for this reason we will commence with

The *Brompton Stock*, which should be sown in July and August, in a quarter where they may grow for a week or two without being molested; after which they may be planted out where they are to bloom the following year; or they may be transplanted while in a juvenile state in a bed where they can grow stronger, to be afterwards removed in the autumn to their permanent situation.

The *Wallflower* is one of the most fragant and early of our flowers, and will require much about the same treatment as that recommended for the above-named plant, with this exception—that the double variety may be successfully propagated by cuttings taken off and struck during the months of April and May.

The *Double Canterbury Bell* is not only a very erect-growing plant, but is showy beyond description; its colours are various, consisting of many shades of purple, blue, and occasionally white. This plant may be raised from seed sown in July.

The *Indian Pink.*—This is deserving of great attention, being exceedingly beautiful in the variety of its tints and colours. The seed should be sown from March to May in-doors; in August in the open ground, if you have the means of sheltering the seedlings during the winter.

Our third and last subject will be ANNUALS, of which the following will be the most suitable for a small garden:—1. Nemoplila Insignis; 2. Mignionette; 3. Lupinus Nanus; 4. Ten-week Stock; 5. China Aster; 6. Convolvulus, Major and Minor; 7. Sweet Pea; 8. Coreopsis Tinctoria; 9. Dwarf Rocket Larkspur; 10. Zunica Elegans; 11. French Marigold; and 12. Candy Tuft. The *hardy* kinds, such as Nos. 1, 2, 3, 6, 7, 8, 9, and 12, may be sown in the open ground, where they are to bloom up to June; and the *half-hardy*, such as Nos. 4, 5, 10, and 11, in the open border in June.

CHAPTER IV.

Watering.—It is not a very easy matter to give general directions for watering, although this much we do know, that you can never hurt plants by watering them after sunset. But when you do profess to water, saturate the ground for some distance round, and bear in mind that vacant spaces between the plants require moisture as much as the plants themselves, inasmuch as the roots are then as free to take one direction as another; whereas, if the watering be confined to one particular spot, that is to say, to the roots alone, and the surrounding earth be left dry, the water administered to the said roots will be soon absorbed or drank up by the hot dry soil close at hand, and the plants become thirsty again in a few hours. Our advice, therefore, is water seldom, and when the sun is nearly down, but do it effectually.

Transplanting.—Generally speaking, annual and other seeds come up too thick, even if the operation be performed ever so carefully; and where you discover such to be the case, it will be necessary to thin them out, as it is called—that is to say, a plant should be pulled up here and there to afford those left in the ground more room to grow. Those taken up may then be transplanted, as it is termed, in any other part of the garden. In raising these little plants, great care should be taken to lift them gently with a little earth clinging to the fibres of the roots, and drop them as tenderly into holes made with the dibble for their reception. The earth should then be lightly pressed around their roots, and afterwards watered in.

Weeding is at all times requisite; in fact there is no work in the garden of more importance than this, and especially in spring; therefore, make it your chief study to root them up as fast as they appear. You are aware, we have no doubt, that weeds, like other plants, extract, or take from the ground, a certain amount of nourishment, which nourishment is of course obtained at the expense of your flowers; and as such lose no time in clearing them away, particularly among young crops, which, being very tender, cannot afford to be robbed of that support so needful at this early stage of their existence. In the case of close crops, what is termed hand-weeding should be adopted, but where there is sufficient room to admit of the hoe this instrument should be used, because the work can be done not only quicker, but easier.

Pruning.—It is somewhat difficult to give full directions for pruning in a limited space, but we will do our best to describe the proper method of performing this operation, and will take for example the Rose; of this plant there are several varieties, each requiring different treatment in this respect. The China variety should be not only thinned regularly, but its flowering stems should be shortened a trifle; the hybrid Perpetuals must be pruned very closely to the stalk; the moss requires two-thirds of the new wood cutting away; while the Banksian class need thinning merely. Where you desire to have what is termed a succession of bloom, it will be advisable to prune a certain number at various periods of the year, so that when one lot has produced its last flower, another batch will have opened its first bud, and so on.

BOYS, BE KIND TO YOUR SISTERS.—You may live to be old, and never find such tender loving friends as these sisters. Think how many things they do for you; how patient they are with you; how they love you in spite of all your ill-temper and rudeness; how thoughtful they are of your comfort; and be you thoughtful of theirs. Be ever ready to oblige them, to perform any little office for them that lies in your power. You do not know how much happiness you will find in so doing.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

CHAPTER VIII.—THE WINDHOVER.

THE WINDHOVER.—MALE AND FEMALE.

NOTWITHSTANDING her universal proscription by gamekeepers, the Windhover or Kestrel is the commonest of our hawks. How she maintains a footing here is a problem worthy the attention of the learned: she must inevitably have been long since exterminated, had it not been for the great accession of numbers incident on the vernal migration; and yet the Windhover is never called a migrant. Some few cross the English Channel southwards in the autumn, but four times the number cross it northwards in the spring. Our continental neighbours understand natural history out of doors far better than we do; they know the Windhover well, and put a just estimate on her services: *we* know her to be a hawk, and we pronounce all hawks to be vermin; and we destroy vermin by every expedient which our sagacity can invent or our experience recommend. The vernal migration from France makes ample amends for the Windhovers we annually trap, shoot, and crucify on our barn-doors. In September and October, there is a general movement of Windhovers southwards, and their numbers are well thinned on their passage. While hovering over stubbles in search of mice, or over grass, hunting for grasshoppers and caterpillars, the Windhover presents the most tempting mark to gentlemen as well as keepers; the former kill her for practice, the latter as a matter of duty. The southward movement at this season causes a great muster of Windhovers in our southern counties, for although numbers cross the Channel, numbers also remain here. Thus, there are more Windhovers in Kent, Sussex, Hampshire, and Dorsetshire in winter than in summer; while in Lancashire and Yorkshire there are more in summer than in winter.

Windhovers are remarkable for their pugnacious propensities, and often fight with such thorough good-will that nothing but death will part them. A gentlemen living near Godalming, told me that one evening, when he was out with his gun watching for rabbits, he saw two hawks meet in the air with tremendous violence, instantly closing with each other. He fired and killed both: they were female Windhovers; and so firmly were they grappled together, that after death he had great difficulty in separating them. Some years ago, a pair of Windhovers took possession of an old crow's-nest in the little wood opposite the house at Busbridge, near Godalming; in a few days one of the keepers shot the male, and crucified him on a tree after the manner of keepers; the next day, there was a second male in attendance; he, too, was killed and crucified; and so on with four, the female all the while keeping beyond the range of the keeper's gun. A few days afterwards, she was again mated and her fifth mate shot; but this time, instead of falling to the ground, he hung on the bow of a spruce fir. In this position the female pounced on him, and, seizing him in her talons, bore him away. The astonished keeper watched the course she had taken, and, loading again, followed her. He found her in a fallow, and shot her while actually devouring the body of her mate, which she had stripped of almost every feather. I have already related how I saw a Windhover in the island of Achill harried by a Peregrine. I have a vivid recollection of a scene of the same kind which I witnessed in the Isle of Wight. The evolutions both of the Peregrine and the Windhover were graceful in the extreme; each strove to the utmost to get the sky of the other, the Peregrine to gain the swoop, the Windhover to avoid it. The Peregrine, once in the ascendant, would cleave the air like a falling thunderbolt; but the Windhover, adroitly swerving, would escape the stroke, and rise towering above her foe. In a moment, the struggle for the vantage-ground would be renewed, and the same scene enacted again and again. How it terminated, I know not; but a cliffsman who was with me in the boat told me he had often seen the wings and feathers of the Windhover scattered about the eyrie of the Peregrine, and he ought to know, for he had robbed the said eyrie for many years, and had made a handsome profit of the young.

The food of the Windhover takes a wide range: not always having a dead mate on whom to feed, she varies her diet according to circumstances and seasons. Her standing dish is a mouse; but lizards, blindworms, caterpillars, cockchafers, grasshoppers, worms, on the sea-shore crabs, and, in the dead of winter, an occasional lark or yellow-hammer, appear to be equally acceptable to her palate. The occupation of mousing is carried on with greatest success in autumn, when the mice are busy in the stubbles; the

THE GOSHAWK.

THE SPARROW-HAWK.

Windhover may then be seen perpetually hovering over the fields, keeping her head close to the wind, and moving her wings with the regularity of a pigeon, but without making the slightest change in her position; hence her name. Her assiduity in hunting for grasshoppers, and her skill in catching cockchafers in her claw, and so handing them to her beak, have been recorded long ago. I have often seen these birds in company with the cuckoos, searching the long blades of grass for the caterpillars of the Burnet Moth; and this association of the two birds may have led to a strange belief, very prevalent in some places, that the cuckoo is a young hawk, that his song is only a cry for food, and that this, of course, ceases in autumn, when he is able to shift for himself. Perhaps, however, the most remarkable food for a hawk is the little crab to be found on all our shores. I do not know that this is a common food even of the maritime Windhovers, yet, having seen one of these birds carrying off a crab, and in order to be certain, having made her relinquish it, I conceive it would be unjust, on the part of the historian, to omit the crab from the list of the Windhover's occasional indulgences.

A difference of opinion prevails among ornithological writers on this question,—Is the Windhover the architect of her own nest? From a personal inspection of the homesteads of twenty-six pairs of Windhovers, the following statistics resulted:—seventeen pairs occupied the nests of crows in trees; four pairs occupied the nests of magpies; three pairs occupied the nests of sea-gulls on ledges of cliffs facing the sea; one pair occupied the nest of a jay in ivy; and one pair occupied the hollow stem of a pollard ash previously tenanted by a pair of screech-owls. I conclude, therefore, that it is the usual practice—or I should rather call it the rule—for the Windhover to appropriate the nest of another bird; and I regard any well-authenticated instance of her building a nest for herself to be the exception to that rule. The usual number of eggs is four: they are blotched and mottled all over with brown. The male and female Windhovers are very different in colour and the markings of their plumage: the male has the head, back, and wings fawn-colour, each feather tipped with a triangular black spot; the breast and belly pale dusky-red, the breast streaked, the belly spotted, with darker markings. The female has the back red-brown, barred with blue-black, presenting a fine contrast of colours; the tail is beautifully barred, and the bird seems to take a pride in spreading it for observation; the breast and belly have much the same colours as in the male.

CHAPTER IX. — The Goshawk (*Falco palumbarius*).

This bird is known to me only through the works on Ornithology, caged specimens, and stuffed skins, which are generally mounted in a horizontal position, like that of a duck when waddling towards the water; the living bird stands erect like other hawks. In Bewick's Birds there are three pages of letter-press under the head Goshawk: the first is occupied by a quotation from Buffon; the second by the Emperor of China; and the third by a brief sketch of hawking in this country as formerly practised. No mention is made of the Goshawk as a British bird. Again in Montagu we have no information from personal acquaintance with the bird; Colonel Montagu says, "it is *said* to be not uncommon in Scotland in the more wooded parts, where it breeds, and is a great destroyer of game. It is *said* to build in trees, and to lay four white eggs." This is tantamount to a confession of ignorance. Mr. Low, in his "Fauna Orcadensis," says that "it is rather numerous in the Orkney Islands, where it breeds in the rocks and sea-cliffs," which it certainly does not, the author evidently referring to the Peregrine. Mr. Selby comes next, and from him we learn that the Goshawk "*is known* to breed in the forest of Rothiemurchus on the wooded banks of the Dee." This is more probable, because on the Continent the Goshawk does certainly build in trees in the thickest forests, but had Mr. Selby gained his information from a perfectly reliable source, he would, I think, have mentioned that source, which he does not. I therefore incline to doubt his statement, though not to reject it so absolutely as I do Mr. Low's. As regards specimens of the bird driven on our coasts or near them by stress of weather, we have good evidence. Mr. Fisher, at page 491 of the *Zoologist* says "that a Goshawk, which had alighted on the rigging of a ship, was brought into Yarmouth in November, 1843." Mr. Horn, of Egham

in Surrey, makes the following curious statement, at page 1496 of the *Zoologist*: "I was so fortunate at the beginning of this year [1846] as to obtain a Goshawk caught in the following curious manner: the hawk was perched on a gate-post so intently watching a flock of starlings, that he did not perceive the approach of a man, who captured him by seizing him by the legs." This statement seems incredible; I should much like to see the bird Mr. Horn calls a Goshawk. We find at page 828 of the *Zoologist*, that no less than three examples of this hawk have been killed in Northumberland, all of them in mature dress. The following communication on the subject is from Mr. Bold, of Newcastle: "A very large female was shot at Bolain Bog, on the 18th of February, 1841, and was sent to Mr. Thomas Ellison, animal preserver, of this town, for preservation, in whose possession I examined it, whilst 'in the flesh:' it is now in the possession of John Forster, Esq., of Shafloe. Another female was also procured during the same year [1841] in the vicinity of the Duke of Northumberland's park at Alnwick, and was for some time in the possession of Mr. Snowdon, gun-maker, of that place. The third instance, also a female, was taken on the 2nd of October, 1844, in a trap near Beddington, by the keeper of Michael Langridge, Esq., who had observed it flying about for a few days previous, and was forwarded to Mr. R. Duncan, of Newcastle, for preservation; to whose kindness I am indebted for allowing me to examine so interesting a rarity." A fourth, but immature specimen, was killed near Bellingham, North Tyne, in Northumberland in October 1849. (See *Zoologist*, page 2649.) In the South-Eastern counties we find a specimen was killed at Westhorp, near Stowmarket, on the 20th November, 1849, and a second, in the following November, five miles from Norwich. Mr. Yarrell, in his beautiful "History of British Birds," records that a fine adult male was trapped by a gamekeeper in Suffolk, in March, 1833; that Mr. Doubleday, of Epping, received a young bird from Norfolk in the spring of the same year; and that Sir William Jardine asserts that a specimen was killed near Dalkeith, which he himself examined in a fresh state. From these statements we must conclude that the Goshawk is only an extremely rare visitor in our Eastern Counties, and is quite unknown as a native.

The Goshawk was formerly trained for hawking, but was never held in much estimation, and I cannot find that even on the Continent is now ever used in that pastime. It has the strange habit of marking down its prey, and has been known to sit for hours on a stone, or on the branch of a tree, waiting until a hare or a pheasant moved from a thicket which the Goshawk had seen it enter for concealment.

"The Goshawk builds its own nest," says Mr. Hewitson, "and, if undisturbed in its possession, will frequently occupy it for several years, making the necessary repairs. It is placed on some high tree on the outskirts of the forest, and is rarely found in the interior, except in those parts which are open and free from timber. The eggs are three or four, and are hatched about the middle of May;" they are of the green-white of a duck's egg, and totally without spots.*

The beak is horn-colour; the bare space around the eye yellow; the crown of the head, neck and back, brown; the throat, breast, belly and thighs nearly white, barred with waved brown lines.

The red-legged falcon (*Falco rufipes*), is recorded as a British bird, on the faith of four specimens blown on the coast of Norfolk in 1830: foreign skins, warranted British, are to be bought of dealers.

CHAPTER X.—The Sparrow Hawk (*Falco Nisus*).

This common and familiar bird is possessed of great courage, but apparently little strength. I have seen him in a high wind utterly unable to pursue his prey. His feathers seem more slightly attached than those of the true Falcons, although the Sparrow Hawk was formerly enumerated as a falcon; and we find in Bloomfield's "Norfolk," that landed property was conveyed by William de St. Clare to William, son to William de Keveringham, upon service of a Sparrow Hawk.

* See fig. 9, page 73.

As this is the last opportunity I shall have, I will take one parting glance at the Falconry of olden time, premising that I obtain my information from those unimpeachable authorities, Sir John Sebright's "Treatise on Hawking," and the Rev. Richard Lubbock's "Fauna of Norfolk," a county in which a pleasant remembrance of this exciting sport is still maintained. Heron-hawking was always esteemed the acme of Falconry, and the month of April, when the heron has young, the best season of the year; because then there is a constant succession of birds passing to and fro between the heronry and the waters which supply the young with food. The afternoon was the right time of the day, and the hawking party took up their station, if practicable, under a belt of firs, to screen them from observation, midway between the heronry and the fishing-ground; always attempting to intercept the birds on their return, laden with fish: two falconers on horseback, and each with hawk on fist, advanced before the rest, to more open and exposed ground, looking out for the coming heron. The gathering point for these birds was the heronry, and the distance at which a practised falconer espied a returning heron was most remarkable.

According to the course of the bird, the falconers either remained motionless or rode in advance, so as to get nearer the line in which the heron was moving. If they could get within three or four hundred yards, the falcons were unhooded, and swung themselves buoyantly in the air. Here sometimes happened what to a novice seemed a riddle: a falcon, to act with advantage, must rise above her quarry, and in order to accomplish this, must make her circles in rising *against the wind*. Therefore in "climbing to the mountee," as our ancestors termed this evolution, the hawks sometimes appeared to be flying in one direction and the heron in another: but no sooner has the falcon attained the necessary elevation than the heron goes off in a straight line, and the falcon dashes forward in pursuit, and both strain every muscle. The first falcon, if unsuccessful, descends far below the heron, and must once more climb to attain the necessary elevation. While this is being accomplished, the second falcon makes a swoop, and this, too, often fails; but the first falcon is again ready, and so alternately they repeat the attack. Space rolls away as they proceed, the heron striving his utmost to gain his home. High up in the air are the birds, often mere specks in the cloudy sky of April; and far, far behind follow the gay cavalcade, now no longer attempting concealment, but urging their steeds to the utmost speed, and every face turned upwards to the birds, the riders utterly regardless of the rabbit-burrows that honeycomb the ground; each straining his eyes to see all that was possible of the chase. Three or four miles were frequently travelled in this way, at headlong speed. At last the fatal blow was given, just where the long neck of the heron joins the body, and the victor and vanquished descend together to the earth. No words can describe the aspect of the successful falcon, as, trampling on the prostrate heron, she devours the food presented to her; for when her behaviour has been good, she is "fed up" immediately on descending, by way of reward. Occasionally she plucks a mouthful of feathers from the trembling heron, on which she still stands, but whose long neck is carefully imprisoned by the falconer's leg, lest the formidable beak should injure the triumphant hawk.

The female Sparrow Hawk has the same propensity I have alluded to under the Kestrel, that of devouring the male; and Mr. Selby tells us that, in rearing the young from the nest, he has found it indispensable to keep the sexes separate, or the females, always being larger, stronger, and more savage, will kill and eat the males.

This bird appropriates the deserted nests of the crow, and the female lays four or five eggs, of a dirty white colour, blotched with brown.* White, of Selborne, gives an amusing account of the larder of a pair of these birds. It appears they find the means of supplying their young most abundantly with fresh-caught birds. They feed principally on those small birds which are injurious to our crops, and

* See page 73, fig. 10.

which more particularly injure our gardens, as sparrows, bullfinches, greenfinches, and the various fruit-eaters, which so abound while the currants and gooseberries are ripening. They must be regarded, like the Windhovers, as a kind of natural police, sent by an all-wise Creator for the especial benefit of man, to guard his crops, and preserve for him a supply of food. I have never known them meddle with game-birds of any kind.

The naked space round the eye of the Sparrow Hawk is yellow, slightly tinged with green; the beak horn colour; the head, neck, and back brown, slightly inclining to dove colour in very old males; the throat, breast, and belly of the male are pale red, and of the female whitish, transversely and beautifully barred with brown in both sexes. These bars are a distinguishing mark of the species. The legs and toes are long and yellow; the claws black.

THE POSTAGE-STAMPS OF THE WORLD.

By Dr. JOHN EDWARD GRAY, of the British Museum.

The collecting of postage-stamps having lately become a fashion, especially among the young persons at schools, it certainly will be interesting to the readers of Young England to have as complete a list of them as I have been able to form.

I may state that the list not only contains those which I have in my own collection, but also those which I have seen in the collection of my friends, and those which appear distinct from any I have seen, which I have found recorded in the list of postage-stamps which has been published in France and Belgium. The latter are often only imperfectly described. As an example of the extent to which the rage for collecting has become, I see that it is stated in the newspapers that a kind of exchange for postage-stamps is held near the Royal Exchange in the city on certain afternoons, and that there is a similar meeting held daily in Manchester; and I am further informed that in most of the public and large schools each of the rarer stamps has a well understood acknowledged value according to its rarity, expressed either in money or in the number of other stamps which must be given for it. The collection of postage-stamps is quite as much the fashion on the Continent as in England. In Paris and Brussels "catalogues" and "manuals" of them have been printed, and shops have been opened, which "*Vente, achete, et échange de Timbres Postes, pr. Albums.*"

Such collections are often used to ornament the drawing-room, and for this purpose they are arranged in albums, and for the purpose of embellishing such albums there have been publishers "Héraldique universel, armoiries des principaux états du globe. Grand in plano, contenant 98 armoiries colories, rechausses d'or, pouvant servir à illuster les Albums des Timbres Postes."

I may state that I began to collect them shortly after the system was established and many years before it had become the fashion, simply because I believe that I was the first that proposed the system of a small, uniform rate of postage, to be prepaid by stamps, having satisfied myself that the great cost of the Post Office was not the reception, carriage, and delivery of the letters, but the complicated system of accounts that the old system required, and that the collection of money by stamps was the most certain and most economical. But I found there was little chance of getting any attention to the plan without I could devote the whole of my time and energy to the development and the agitation of it.

Fortunately, Mr. (now Sir) Rowland Hill, who had leisure at his command, undertook the question, and, with the assistance of Mr. G. Moffatt, Mr. Henry Cole, and sundry merchants and Members of Parliament, whom they induced to interest themselves in the question, they carried the measure after great exertion. It has been a great success, and has been adopted by most other countries, and the system has been extended into other branches of the Government.

I may observe, that large as is the revenue received for the Post Office, that the system proposed by me, and which Mr. R. Hill propounded in his pamphlets, and which he and the advocates of the change recommended before the Parliamentary and other committees, has never been completely carried out; consequently a large staff of clerks and other officials are still retained at the Post Office, at a large expense, to keep the complicated account that a few unpaid letters require which, if the system was fully carried out, would not be necessary.

It is stated that the prepayment of all letters by stamps cannot be enforced; but this is not necessary, as I have often explained it might be left to the postmaster, through whose hands the unpaid letter last passes, to place the requisite stamp upon it and collect the cost of those stamps from the person to whom the letter is directed, and this he is likely to do with care, as each postmaster is allowed a commission on the stamps he sells.

In making out the list I have tried to make such a description as will enable the possessor to recognize the stamp at once, without any preliminary empirical knowledge.

I have copied the inscriptions which appear on each stamp, and they are printed in *italics* in this list.

I know that many collectors pride themselves on the number of stamps they possess, and separate them on the most trivial distinctions. In this list I have tried to separate all the stamps which appear to me to be really distinct, and have not separated the same kind because it was issued at slightly different dates as has been done in the foreign "manuals."

Slight variations in the shade of the colour of the ink or the paper cannot be regarded as distinct stamps, as it appears—especially in some of the colonies—that the offices which issue stamps are not particular in that respect.

Some collectors make a difference between those stamps which have a smooth and those which have a dentated edge; but I am not inclined to pay any attention to this particular. Many countries are gradually adopting the plan first used in England of mechanically piercing the space between the stamps, to facilitate their separation for use, and the use or non-use of this contrivance does not make the stamp a different kind. They are at furthest only a different state of the stamp, showing that the stamp was issued after the invention had been brought into use.

I propose to divide the list into three sections:—1. Those of Great Britain and her colonies. 2. Of European Governments. 3. Of American Governments and the Islands of the Pacific.

I might add, the intelligent collection of postage-stamps will greatly help our young friends in their knowledge of the geography, currency, and commerce of the world.

GREAT BRITAIN.

Printed Envelopes.—Design printed in red ink; a pattern to be laid before the Committee of the House of Commons on the postage, not used. Britannia sending forth angels to the four quarters of the world, designed by W. Mulready, R.A., engraved on wood by W. Thompson. *Postage one penny*, black; *postage twopence*, blue.

Postage Stamps, oblong, erect, profile of Queen to left, crowned. *Postage one penny*, frame oblong, with letter in lower angles only. Black ink, without any inferior white line. These stamps were first obliterated with a black and afterwards with a red stamp. *Postage one penny*, like former, were printed in red ink and obliterated with black. *Postage twopence*, like former, but blue. *Postage twopence*, frame oblong, with a distinct pale line above and below, and letter only at the lower angles—blue. *Postage twopence*, like former, but with letter at each of the angles. *Postage threepence*, frame oval, three lobed, *threepence* above, *postage* below, trefoils in angles containing letters. *Postage fourpence*, frame circular, labels arched, angles simple—rose-coloured. *Postage fivepence*, like former, angles with letters—vermillion. *Postage sixpence*, frame circular, label straight, angles without letters—lilac. *Postage ninepence*, frame circular, indented, label straight, letters at angles—

pale brown. *Postage tenpence. Postage one shilling,* frame oval, letters in frame, angles simple—green.

Embossed Postage Envelope.—Profile of the Queen, to right. *Postage one penny,* oval frame, without date—rose-colour. *Postage one penny,* like former, with date of issue on lower part of frame. *Postage twopence,* oval frame—blue. *Postage twopence,* like former, with date of issue in frame above. *Postage threepence,* in trifoliate frame, with date of issue at indentations—red. *Postage sixpence,* in indented octangular frame, without date—chocolate. *Postage sixpence,* like former, with date. *Postage tenpence,* in regular octangular frame—red-brown. *Postage tenpence,* like former but with date of issue. *Postage one shilling,* in regular octagonal frame—green. *Postage one shilling,* like former, with date on disk.

The older envelopes had three silk threads of the colour of the stamp inserted on the paper, which is now left off.

The stamps issued by the Post Office are on white paper; but as the Stamp Office will stamp paper sent to them, such privately-issued envelopes are sometimes more or less blue or yellow.

Some mercantile houses or societies surround the Government embossed stamp with a frame having their name and address, such as "Smith, Elder & Co., 65, Cornhill, London," who use envelopes with the above address in white embossed letters, in a circular frame; others are inscribed *Stevens & Morton, Pawson, British Workman,* &c., but these are rather to be regarded as forms of advertisements than as postage-stamps.

BRITISH COLONIES OR DEPENDENCIES.

In some of the colonies they commenced with emblematic designs, often roughly executed, as the Black Swan for Swan River, and the Queen on her Throne for Victoria, but by degrees they have adopted a simple stamp like the English profile of the Queen, and I suspect that the greater part of the stamps and envelopes now used in the Colonies and in many parts of the world are not only designed but engraved and printed in England, many of these by Messrs. De la Rue, of Bunhill Row, and Messrs. Bacon & Co., of Fleet-street.

Ionian Islands.—Foursided, erect, Queen's profile in oval frame—IONIKON ΓΑΤΟΣ. 1, yellow; 2, blue; 3, red.

Malta.—Foursided, erect, Queen's profile in eight-sided frame, with a wreath. *Malta, one halfpenny,* pale brown. They use English stamps for other values.

Cape of Good Hope.—Triangular, with Hope recumbent. *Postage, Cape of Good Hope.* I. Coarsely engraved: 1, *one penny,* red; 2, *fourpence,* blue. II. Well engraved: 1, *one penny,* red; 2, *fourpence,* blue; 3, *sixpence,* lilac; 4, *one shilling,* green.

Natal.—I. Foursided, erect, Queen's head to left, in oval frame. *Natal,* 1, *one penny,* red; 2, *threepence* blue. II. *Embossed Envelope:* oval, Queen's head. 1, *Natal, fourpence.* III. *Embossed Stamp* for newspapers.—Crown and value on coloured paper. *Natal:* 1, *one penny,* yellow; 2, *twopence,* blue; 3, *threepence,* red; 4, *sixpence,* green; 5, *ninepence* ——— (?); 6, *one shilling,* grey-brown.

Liberia.—1, foursided, erect, large, Liberty sitting in a circular frame. *Liberia,* under figure in disk; value on label above and below—1, *six cents,* red; 2, *twelve cents,* blue; 3, *twenty-four cents,* green.

St. Helena.—Foursided, erect, Queen's profile in circle. *St. Helena, Postage*: 1, *sixpence,* blue.

Mauritius.—Foursided, erect, 1, Britannia sitting. *Mauritius* below—1, red, 2, rose, 3, green. II. like former, but *Mauritius* above in an arch: 1, *fourpence,* green; 2, *sixpence,* blue; 3, *eightpence,* violet; 4, *one shilling,* red. III. Queen's head in oval, in a circular frame, *Mauritius* above: *one penny,* pale brown; *twopence,* blue; *fourpence,* rose; *ninepence,* lilac. IV. Queen's head badly engraved, in foursided frame, with *post-paid: Postage, Mauritius* in margin—1, *one penny,* red; 2, *twopence,* blue. V. Queen's head badly engraved, in foursided frame, with *Mauritius* in upper margin: 1, *twopence,* blue. VI. Value printed across the stamp, which is impressed by hands, oblong; 1, *fourpence,* green; 2, *eightpence,* violet. VII. *Embossed envelope,* Queen's head, in oval frame, *Mauritius:* 1, *sixpence,* grey; 2, *ninepence* ——— (?)

India.—*Postage-stamps* oblong, erect: 1, profile of Queen coarsely engraved, in square frame. *India,* 1, *half anna,* blue or red; 2, *one anna,* red; 3, *two annas,* green. II. Profile of Queen badly engraved, in octangular frame, with curved label above and below. *India, four annas,* profile, blue frame, red. III. Profile of Queen well engraved, in oval ring. *East India Postage:* 1, *half anna,* blue; 2, *one anna,* pale brown; 3, *two annas,* yellow-brown or rose; 4, *four annas,* black; 5, *eight annas,* rose. IV. Profile of Queen well engraved, in oval shield and octangular frame. *East India Postage,* 1, *eight pice.* V. *Embossed envelope.*—Profile of the Queen in circular frame. *India Postage:* 1, *half anna,* blue; 2, *one anna,* brown. These envelopes are also sometimes surrounded by a frame advertising certain merchants' houses, as Smith, Elder & Co., &c. &c.

Ceylon.—*Engraved stamps,* I. Oblong, erect: Profile of Queen in an oval frame, stamps foursided. *Ceylon postage,* under head, 1, *one penny,* blue; 2, *twopence,* green; 3, *fivepence,* brown; 4, *sixpence,* brown; 5, *tenpence,* red. II. Like former one, head in oval frame. *Ceylon postage,* 1, *one halfpenny,* violet. III. Like former, but eightsided and with *postage* above the head. *Ceylon postage,* 1, *fourpence,* red; 2, *ninepence,* purple-brown; 3, *one shilling,* blue. IV. *Embossed envelope,* with profile of the Queen, circular, *Ceylon, postage* 1, *sixpence,* chocolate; 2, oval, *postage, Ceylon, one penny,* blue; 3, octagonal, *postage, Ceylon, fourpence,* blue; *fivepence,* ——— (?); *eightpence,* chestnut; *ninepence,* violet or green.

New South Wales.—*Postage-stamps.* Oblong, 1, view, in a circular frame, inscribed *Sigillum Novæ Austriæ Cambriæ. Postage* above: 1, *one penny,* red; 2, *twopence,* black or blue; 3, *threepence,* green. II. Oblong, erect, Queen's head with wreath, in square frame. *New South Wales postage:* 1, *one penny,* red; 2, *twopence,* blue; 3, *threepence,* green; 4, *sixpence,* black or brown; 5, *eightpence,* yellow. III. Oblong, erect, Queen's head, with wreath red or yellow, in oval blue frame. *New South Wales registered* in blue letters. IV. Oblong, erect, Queen's head, crowned, in foursided frame. *New South Wales postage:* 1, *one penny,* red; 2, *twopence,* blue; 3, *threepence,* green. V. Square, Queen's head, crowned, in circle, surrounded by a sixsided frame. *New South Wales postage:* 1, *fivepence,* green; 2, *sixpence,* grey or reddish; 3, *eightpence,* orange or yellow; 4, *one shilling,* rose or red brown. VI., Circular, Queen's head ——— (?) *five shillings,* violet.

South Australia.—Oblong, erect stamp. I. Queen's head, crowned, in oval frame. *South Australia:* 1, *ninepence,* lilac. II. Oblong, erect stamp: Queen's head, crowned, in circle. *South Australian postage*: 1, *one penny,* green; 2, *twopence,* red; 3, *sixpence,* lilac; 4, *one shilling,* orange.

Western Australia.—1, foursided transverse stamp, Swan in square frame. *Western, postage, Australia:* 1, *one penny,* black or red; 2, *twopence,* red or orange; 3, *sixpence,* green or purplish. II. Eightsided transverse, Swan, in square frame. *Western, postage, Australia:* 1, *twopence,* red; 2, *fourpence,* blue; 3, *sixpence,* black or bronze. III. Foursided transverse Swan, in oval frame. *Postage, W. Australia.* I. *one shilling,* pale brown.

Victoria.—Foursided, erect. I. Queen's half-length. *Victoria*: 1, *one penny,* red; 2, *twopence,* ash; 3, *threepence,* blue. II. Foursided, erect, Queen sitting on throne, *twopence,* violet; for use in Melbourne. III. Foursided, erect, Queen on throne. *Victoria postage*: 1, *one penny,* green; 2, *sixpence,* blue. IV., Foursided, with angle more or less rounded, erect, Queen's profile, crowned, in oval frame, with the figure of value at each side. *Victoria postage:* 1, *threepence,* blue; 2, *fourpence,* red, dusk, or pale; 3, *sixpence,* black, brown, pale brown or yellow. V. Foursided, erect, Queen's profile, crowned. *Postage, Victoria, stamp:* 1, *one penny,* green; 2, *twopence,* lilac; 3, *fourpence,* red; 4, *sixpence,* reddish yellow; 5, *one shilling,* blue; 6, *two shillings,* green. VI. Like former, but marked: 1, *sixpence,* too late, green, rest violet; 2, *one shilling* and *registered* blue, rest red. VII. Foursided, erect, Queen's profile, in oval frame, inscribed *Victoria:* 1, *one penny,* green; 2, *twopence,* violet; 3, *fourpence,* red. VIII.

Square, Queen's profile, in circle, inscribed *Victoria*, in eightsided frame: *one shilling*, blue.

QUEENSLAND.—Foursided, erect, Queen's head, crowned, in oval frame, inscribed *Queensland:* 1, *one penny*, red; 2, *twopence*, blue; 3, *threepence*, brown; 4, *sixpence*, green; 5, *one shilling*, lilac; 6, *registered* yellow.

TASMANIA.—Foursided, erect. I. Queen's profile to right in oval, inscribed *Van Dieman's Land:* 1, *one penny*, pale blue. II. Eightsided square, Queen's profile to right, in circle, inscribed *Van Dieman's Land:* 1, *fourpence*, orange. III. Foursided, erect, Queen's head, crowned, in oval, *Van Dieman's Land, postage:* 1, *one penny*, red; 2, *twopence*, green; 3, *fourpence*, blue. IV. Eightsided, erect, Queen's head, crowned, in an eightsided frame, inscribed *Tasmania:* 1, *sixpence*, lilac; 2, *one shilling*, red.

NEW ZEALAND.—Foursided, erect, portrait of Queen, in circle, *New Zealand, postage:* 1, *one penny*, red or yellowish; 2, *twopence*, blue; 3, *sixpence*, brown; 4, *one shilling*, green.

CANADA.—Foursided, erect. I. Queen's profile, in oval. *Canada postage:* 1, *one cent*, rose; 2, *one halfpenny*, rose. II. Foursided, transverse. Beaver, in oval. *Canada postage:* 1, *five cents*, red; 2, *threepence*, red. III. Foursided, erect, Prince's head, in oval. *Canada postage:* 1, *ten cents*, with x in angles, lilac; 2, *sixpence*, with 6 in angles, lilac. IV. Foursided, erect, Queen's head, crowned, in oval. *Canada packet postage:* 1, *sixpence sterling*, 12½ c. in angles. V. Foursided, erect, Cabot's head, in oval. *Canada postage*, 1, *seventeen cents*, 8½ *stg.* & 10 *cy.* in angles.

NOVA SCOTIA.—I. Square, Queen, full face, in lozenge, and four half stars. *Nova, postage, Scotia:* 1, *one penny*, chocolate. II. Lozenge-shaped, crown surrounded by four stars, each containing a flower, *Nova Scotia, postage:* 1, *threepence*, blue; 2, *sixpence*, green; 3, *one shilling*, violet. III. Foursided, Queen's head, full faced, in oval florid frame, *Nova Scotia:* 1, *ten cents*, red; 2, *twelve and a half cents*, black. IV. Foursided, Queen's profile, in circle, florid, *Nova Scotia:* 1, *one cent*, black; 2, *five cents*, blue; 3, *eight and one-half cents*, green. V. Foursided, Queen's profile, *Nova Scotia:* 1, *one cent*, orange-brown.

NEW BRUNSWICK.—I. Lozenge-shaped, crown surrounded by four stars, each with a flower, *New Brunswick Postage:* 1, *threepence*, red; 2, *sixpence*, yellow; 3, *one shilling*, dull puce violet. II. Foursided, erect, Queen's head, full face, in oval, *New Brunswick Postage:* 1, *five cents*, green; 2, *ten cents*, vermillion. III. Foursided, erect, Prince's head, in oval, *New Brunswick Postage:* 1, *seventeen and a half cents*, black. IV. Foursided, transverse, steam ship, in oval, *New Brunswick Postage:* 1, *twelve and half cents*, blue. V. Foursided, transverse steam locomotive, in oval, *New Brunswick Postage:* 1, *one cent*, blue.

NEWFOUNDLAND.—I. Lozenge-shaped, crown surrounded by four stars, each containing a rose, *St. John, Newfoundland, postage:* 1, 5. *fivepence*, 5. red-brown. II. Foursided, erect, rose in circle, in an oval, *St. John, Newfoundland* above, *postage* below, value in angles: 1, 2. *twopence*. 2. red. III. Foursided, erect, rose in oval, in an oval, *postage* above, *St. John, Newfoundland*, value at angles: 1, 6. *sixpence* 6. red.

PRINCE EDWARD'S ISLAND.—I., Foursided, erect, Queen's profile in different-shaped frames, *Prince Edward's Island, postage*: 1, *one penny*, yellow; 2, *twopence*, red; 3, *threepence*, blue; 4, *sixpence*, frame eightsided, green; 5, *sixpence stg. ninepence currency*, frame foursided, violet; 6, *one shilling*.

In several of the North American colonies, when they want only half the postage marked on the stamps, they cut the stamp obliquely across, and use only a half of it on each letter; hence many are found so divided.

COLUMBIA AND VANCOUVER'S ISLAND.—Foursided, erect, —— (!) 1, *halfpenny* —— (!) 2, *twopence* —— (!) 3, *twopence halfpenny*, rose.

BARBADOS.—Foursided, erect. I. Britannia sitting, *Barbados* on lower side: 1, blue or blackish-blue; 2, green; 3, red. II., Like former, but *Barbados* in upper margin: 1, *sixpence*, red; 2, *one shilling*, black.

TRINIDAD.—Foursided, erect, I., Britannia sitting, *Trinidad* on lower side: 1, red; 2, blue or green; 3, black or violet grey. II. Like former, but *Trinidad* on upper margin, and value below: 1, *fourpence*, violet; 2, *sixpence*, green; 3, *one shilling*, black or purple.

JAMAICA.—Foursided, erect. I. Queen's profile to left, in different shaped shields, *Jamaica postage:* 1, *one penny*, shield circular, blue; 2, *twopence*, shield circular, red; 3, *fourpence*, shield circular, pale red; 4, *sixpence*, shield sixsided, lilac; 5, *one shilling*, shield oval, pale brown.

BAHAMAS.—Queen full-faced in oval, with a small oval on each side below, and *Interinsular postage* inclosed in a foursided, erect frame, inscribed *Bahamas* in upper, and value in lower margin, printed in colours. 1. *One penny*, red; 2. *Fourpence*, ——?

ST. VINCENT.—Foursided, erect, Queen's profile, crowned, in oval frame, truncated above and below, *St. Vincent:* 1, *one penny*, red; 2, *sixpence*, green or bluish.

ST. LUCIA.—Foursided, Queen's profile, *St. Lucia:* 1, red; 2, blue; 3, green.

GRENADA.—Foursided, erect, Queen's portrait, crowned, in oval frame, *Grenada:* 1, *one penny*, green; 2, *sixpence*, red or orange.

NEVIS.—Foursided, *Nevis:* 1, *one penny* ——; 2, *fourpence* ——; 3, *sixpence* ——; 4, *one shilling*.

BRITISH GUIANA.—Foursided, erect, ship, in oval, *Damus petimus que vicissum*, in Garter, *British Guiana postage:* 1, *one cent*, rose-coloured; 2, *two cents*, red; 3, *four cents*, blue; 4, *viii. cents*, rose-red; 5, *xii. cents*, lilac; 6, *xxiv. cents*, green.

Amusements.

ANSWERS TO PICTURE PUZZLES IN OUR LAST.

T. S., Tavistock, has sent the solution:—

Take a piece of paper and fold it into the shapes, successively, or, one after the other, of these drawings, and then cut it in the direction of the dotted line in the last.

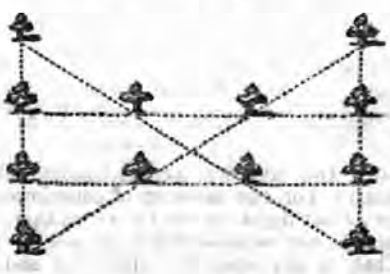
2.

Isinglass (Eyes in glass).

3.

The Young Gardener.

Twelve trees I take,
Six rows I make,
As here you may them planted see;
Then look again,
'Tis very plain,
Four in a row decidedly.



CORNHILL.

4.

My first perchance thou knowest is fair;
My second thy quick wit will tell;
But who, enchained by thee, can bear
The anguish of my whole—farewell?

Or another—

Thou dost appear most fair to me:
And well I wish thou mayest be.
With many tears I bid farewell,
To one whose love I scarce can tell.

ELLEN B.

PUZZLES, TO BE ANSWERED IN OUR NEXT.

1.

Can any of our readers explain this mysterious thing to us?

2.

A fine sentiment; what is it?

3.

A Correspondent sends:—

Himself, he stood beside himself, and look'd into the sea,
And in himself he saw himself, and wonder'd mightily;
But when himself, he saw himself, and in himself go round,
Into himself he threw himself, and in himself was drown'd.
Now if he had not been himself, but any beast beside
Himself, he would have cut himself, nor in himself have died.

4.

M. A. P., of Dawlish, says:

A headless man had a letter to write,
He that read it had lost his sight,
The dumb repeated it word for word,
And deaf was the man that listened and heard.

And supposes you are shrewd enough to give the solution.

5.

A puzzle for Cockneys; repeat, giving the true sound of Poor Letter *H*.

"While hewing yews, Hugh lost his ewe,
And put it in the 'Hue and Cry.'
To name its face's dusky hues
Was all the effort he could use.
You brought the ewe back by-and-by,
And only begged the hewer's ewer,
Your hands to wash in water pure,
Lest nice-nosed ladies not a few,
Should cry on coming near you, 'Ugh!'"

MONEY AND THE MOMENT AFTER DEATH.—But to die worth so much! For one moment of consciousness, as his spirit wings its last flight no one knows whither, it is to feel that it has—*the next moment that it has not*—a million of money. That is the sum of a life's toil and misery.—*Times.*

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

EXCHANGE OF INSECTS.—I have for exchange good specimens of the following insects: L. Olivaria, N. Gonaria, A. Connexa, A. Aglaia, for the following—S. Tiliæ, *C. Porcellus, *S. Fagi, H. Dominula, *A. Villica, *A. Alni. *P. Monacha: marked thus * I want most. Please write first before sending boxes, and if those who write do not receive an answer within ten days they will know their offers are not accepted.—Address, T. H. WOOD, 39, Bondgate.

FLEAS.—Sir,—May I venture a surmise as to the cause of the fleas in the house mentioned by "G. C." in your last number? If cats are allowed to sleep in a house at night, and the cushion they have occupied be examined next morning, it will be found to be positively strewn with white particles, which, seen through a magnifying glass, will be discovered to be tiny white eggs. Surely, if these be left untouched, they would in time be hatched, and, without professing to be an entomologist, might I not assert that the result would be a swarm of fleas? If, for mouse-catching, cats must sleep in a house, their beds, it appears from this, should be well shaken every morning. Might not powdered camphor, so abhorrent to insects, be scattered through the infested house with good effect?

A SUBSCRIBER, Richmond.

A MAN IN A PASSION.—Will you Be so kind as to leet me know if you intend Bringing the moths out or knot for I am tired of the pussels I think thair Has Been Enugh of Pussels Latly I take Two Numbers Every month But I will Have to give them up I Have tried them for 6 or 7 months Lately and tha Never Get any Better I took them Especilly for moths and not pussels we are pusseld sure Enugh some times with moths without pussels to pussel us harder I will take Two months Longer if Your moths not in it I will burn all that I Have Got and Do without them.—A. Z., Carlisle.

[Does not A. Z. know we are publishing the moths in the extra numbers in the very best style?]

INCUBATION, &c.—Sir,—W. R. thinks it desirable to call Mr. Newman's attention to the fact, that in Regent's Park there is (or rather was) a pythoness incubating or hatching its young from eggs. Not many are, probably, aware that a common insect (the earwig) not only hatches its eggs, but also conducts its young about, like a hen does her chicks. The following is an extract from Kirby and Spence's Entomology (seventh Edition, page 203). "It is De Geer that we have to thank for a series of interesting observations on the maternal affection of the common earwig. This curious insect, so unjustly traduced by a vulgar prejudice, as if the Creator had willed that the insect world should combine within itself examples of all that is most remarkable in every other department of Nature, still more nearly approaches the habits of a hen in her care of her family. She absolutely sits upon her eggs as if to hatch them (a fact which Frisch appears first to have noticed), and guards them with the greatest care. De Geer, having found an earwig thus occupied, removed her into a box where was some earth, and scattered the eggs in all directions. She soon, however, collected them one by one with her jaws into a heap, and assiduously sat upon them as before. The young ones, which resemble the parent, except in wanting elytra and wings, and strange to say, are as soon as born larger than the eggs which contained them, immediately upon being hatched creep like a brood of chickens under the belly of the mother, who very quietly suffers them to push between her feet, and will often, as De Geer found, sit over them in this posture for hours" (De Geer, vol. iii. p. 548). This remarkable fact I have myself witnessed, having found an earwig under a stone, which I accidentally turned over, sitting upon a cluster of young ones, just as this celebrated naturalist has described. Hoping this letter will prove interesting to your readers.

ENTOMOLOGICUS.

TO STAIN IVORY.—For Green: dissolve some copper in nitric acid, and soak the ivory in it. Red, can be done in two ways: 1. Dip the article first in the tin mordant used in dyeing, and then plunge into a hot decoction of Brazil wood, half a pound to a gallon of water. 2. Steep in red ink until sufficiently stained. Purple: put into nitric acid one quarter of its weight of sal-ammonia, and soak the ivory in it.—93, Great Russell Street.

"FRIED CABBAGE."—Is very green.

LEPIDOPTERA.—Mr. Stainton's book, published by Mr. Van Voorst, Paternoster Row, will help T. Clunn.

TOBACCO.—The fashion of smoking tobacco was introduced into England by Sir Walter Raleigh in the reign of James I. This custom was followed by almost all the nobility and high officers of the realm, to the great dissatisfaction of the fastidious monarch. So universally prevalent was this fashion, that his Majesty could not find any one to write or preach against it. He therefore wrote and published a tract himself, which he entitled "*A Counter-Blast to Tobacco.*" After exposing in strong language the unhealthiness and offensiveness of this practice, he closes with this royal counter-blast:—"It is a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs; and, in the black, stinking fume thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomless!"—From a CORRESPONDENT.

ENIGMAS.—Cornhill sends an enigma founded on a word which he supposes is in a text of Holy Scripture. There is no text in the Bible which says "Revenge is mine." But we object on other grounds to inserting enigmas, conundrums, &c., founded on the texts of Scripture. The Bible was given to show men the way of salvation, and we have too much reverence for it to use it for any other purpose.

FOREIGN POSTAGE STAMPS.—Sir,—I have a superior collection of foreign postage-stamps on sale or exchange.—T. F. CHAMBERS. Address, care of Shields and Brunström, 6, Quay Street, Hull.

Sir,—I am willing to exchange many of my duplicates with any of your readers, that have others to return, or on any other terms that we may agree to.—M. P. BRANNAN, No. 50, Trinity Street, Spring Bank, Hull.

WHERE TO BOTANIZE?—Can any of your readers tell me of a good place to botanize within walking distance of London, or give the locality of woods free to the public?—A LOVER OF NATURE.

THE SHRIKE.—I should like some one of your readers to compare the egg of the Great Grey Shrike with that of the Red Backed Shrike, and state the difference in YOUNG ENGLAND, as I wish to know if some eggs which were given me by the person who took them are really those of the Great Grey Shrike or not.—A. WILLIAMS, Farnham.

THE HEDGE SPARROW.—Does the Hedge Sparrow ever lay its eggs in another bird's nest? As I found a Robin's nest the other day which contained five eggs and also a Hedge Sparrow's egg.—GEO. STEDMAN, Lindfield, April 15.

F. D. CREMER.—Stephens's Manual. Three numbers are now published containing the whole of the Nocturni. Wait and see.

RARE BIRDS.—Occurrence of rare birds near Epworth, Lincolnshire. The following is a list of some of the rarest captured and sent to me for preservation during the last few months:—1 Osprey, 1 Peregrine Falcon, 1 Ringtail Harrier, 1 Merlin, 2 Egyptian Geese, 1 Brent Goose, 2 Sheldrakes, 2 Goosanders, pair of Shovelers, 1 Green Sand-piper, pair of Sooty Terns, pair of Snow Buntings. Also one fine specimen of the Pine Martin.—HENRY GRAVIL, Epworth, Lincolnshire.

CASTS FROM SEALS.—The following receipt I have tried with success myself: melt some isinglass glue with brandy and pour it over the seal (you might first put some moulding of plaster of paris round the seal so as not to allow the liquid glue to run over) leave it now for at least five days, and then, when you have broken the mould, you will have your seal complete and as hard as glass; this way of taking impressions is the best which I have tried, and it takes the most delicate seals to perfection.—W. H. K. W.

WOOD FOR INSECT BOXES.—Would you be so kind as to inform me if birch would do for the back and bottom of an insect cabinet, and also for the sides, back, and bottom of the drawers. I should not have troubled you, only Mr. E. Newman says in the Butterfly Number a cabinet must be of the best mahogany, and I thought if the Birch were thoroughly seasoned it would do as well.—W. H. S.

[W. H. S. had better follow Mr. Newman's advice. The cost of mahogany is not much, and if the specimens are worth preserving, it is better to incur the extra expense, than have your specimens spoilt. Of course birch would *do*.—ED. Y. E.]

VANESSA CARDUI.—Sir,—Perhaps it may be interesting to some of your readers to learn that my brother took a fair specimen of the "Painted Lady," (Cynthia Cardui) in the Hackney Marshes, this morning (May 12.)—WILLIAM COLE.

CAPTURES.—We have taken Arctia Mendica (male), also three Smerinthus Populi (two females and one male).—W. and S. DIXON, Hackney.

EXCHANGE OF EGGS OF LEPIDOPTERA.—W. and S. Dixon, Hackney, will be glad to exchange eggs of above.

C. ELGER.—There is no help for it.

TO DYE IVORY.—(*In answer to inquiry in last Number.*) Blue: When left immersed in a dilute solution of sulphate of indigo (partly saturated with potash) it will assume a greater or less intense hue, according to its immersion for a longer or shorter period. Green:—Dip "blued" ivory for a little while in a solution of nitro-muriate of tin, and then in a hot decoction of fustic. It may be better, generally, to dye ivory *before* it is polished. If dark spots appear, rub them with chalk; and then dye the ivory again, in order to produce a colour quite uniform. On taking the ivory out of the boiling-hot bath, plunge it immediately into cold water, to prevent any chance of fissures being caused by heat."—UNA MADRE.

Another correspondent sends:—Blue.—Steep it in a weak solution of sulphate of indigo which has been nearly neutralized with salt of tartar. Green.—Dissolve verdigris in vinegar, and steep the pieces therein for a short time, observing to use a glass or stoneware vessel.—ALBERT EDVREDO.

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YOUNG ENGLAND.

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THE PRINCESS ALICE AND THE PRINCE LOUIS OF HESSE.

A ROYAL wedding and an English fireside are things joyous and merry. This is the bridal day of the Princess Alice, and there is not one, from her Mother on the throne down to the humblest peasant in the land, who will not breathe the prayer, GOD BLESS HER IN HER WEDDED LIFE What a bright and sunny spot is an English home! In other countries we may find a bluer sky and a purer atmosphere, a warmer climate and richer products, but England stands first and pre-eminent for domestic virtue and social happiness. It is here, if anywhere, that the home affections are most sacredly cherished, and that the sanctities of each hearth are fenced around by a most righteous solicitude. At the door of the poor man's cottage, no less than at the door of the lordly baron, a halt is put upon the step of every intruder; and to invade the inner sanctuary of either would be deemed an act of criminal impiety for which nothing could atone. The love which dwells there, or is supposed to dwell there, is something too pure to be made the common property of those without; and the home that is rich in love is rich in everything else. There every face is clothed with smiles, and every heart throbs with that love which is the first impulse of Heaven's

PRINCE LOUIS OF HESSE. PRINCESS ALICE.

life. The affection, as it flows from breast to breast, is in itself true enjoyment, and is a multiplication of our own pleasures at the very moment in which it is seeking to promote the happiness of others. The Persian poet tells us of two friends who spent a summer's day in a garden of roses: the one contented himself by gratifying his own senses with their colours and their fragrance; but the other gathered the choicest bloom and carried it home to his children. And beyond all question, sunny and happy is that hearth where all are drawn in closer circle around the father's feet, to find in him a heart which can enter into all their delights and joys.

We may go to the halls of the great and the noble; we may take our seat at the festive-board of princes and potentates; we may mingle with the learned and the illustrious; but this will never compensate for those home affections which make earth so bright, and life so happy. There is a spot even in this sad and sorrowful world which is supremely blest—a spot brighter, dearer, and more blessed than all the rest, and that is HOME. It depends not on rank or title, on wealth or name, but on those affections of the heart which bind the family circle in sympathy and love. If the love of country binds us to the very soil on which we first drew the breath of infant life, then the love of home bespeaks attachments the most tender, intimate, and endearing, and the man whose heart never bounded with purer delight as homeward he bent his steps, is a man who deserves to go through the world unhonoured, and to die unwept. It is these home affections, with their corresponding associations and enjoyments, which have given to the firesides of England a character so sacred and so attractive. It is around an English hearth, over which the live coal is sending its kindly, genial glare, that the intelligent and the good, the grave and the gay, the man of wit and the man of wisdom, the honest rustic and the inquiring philosopher, the lordly baron and the lowly cottar, meet for recreation and intercourse, for sober thought or blithesome glee, or for those purer pleasures which are the common property of the virtuous and the good. Home is the abode of love, where all hearts flow into one; it is the shrine of peace, where each one presents the offering of a purer and more confiding affection; it is the temple of concord, in which sweetest music is stealing from the strings of every soul to make up one full and joyous harmony.

"'Tis heart speaks to heart at one's ain fireside;
My ain fireside—my ain fireside;
Oh! there's nought to compare with my ain fireside."

It is here that we may laugh when we are merry, and sigh when we are sad; and no one dares to ask us why. Here we can meet truth to delight us, and friendship to cheer us, and sunlight to bless us. Our cares are given to the winds; and the sorrows of the past seem but as a dream of the night. Here every face is lit up with a hidden fire, every look is a revelation, every smile is like a sunbeam from heaven, and every utterance like a pearl which has dropped from the throne of God! For what other earthly enjoyment, then, would we exchange the hearth of a happy English home?

Such a home, we trust, is now to open wide its door and welcome our Princess Alice, who this day enters on married life. This second daughter of our beloved but bereaved Sovereign was born on April 25th, 1843, so that the dew of youth is still fresh upon her; and but for the irreparable loss which she has sustained in the death of her illustrious father, who has left behind a deathless name, her youthful heart must have bounded with a yet purer joy on this auspicious day. How much she is indebted to that now sainted sire—to his teaching and training, to his wisdom and control, to his character and example, it is not within the compass of words to express. But under his fostering care, as well as under the loving, tender, womanly solicitude of her Royal Mother, she has grown up to exhibit in her own character every higher and nobler virtue. These virtues she will carry with her into her new and interesting relation; nor will they fail to shed over her domestic life their bright and holy radiance. Though allied to a foreign Prince, her home is for the present, and it may be for many long years, to be in England. For her own sake, as well as for the sake of her widowed Mother, we rejoice in this. Even in married life she cannot but prefer this dear old England of ours to any other country on the face of the earth. And we know it on the best authority, that ever since the death of her lamented father, she has been the solace and the joy of her widowed mother. With a firm and unfaltering faith in the sublime and sanctifying truths of our holy religion, she has been the happy instrument of pouring rich and ever-repeated consolation into that sorrowing heart; and it will be no little happiness to the mother to have her daughter still so near to her, with whom she may confer and commune.

In that Palace in which the Princess has been trained from infancy up to womanhood, the home affections have always been in the ascendancy. We turn with pride and pleasure to the domestic life of the illustrious Lady who now fills the throne of England, and much as we revere and love her as a Sovereign—and long may she sway the sceptre of these realms over a free and loyal people!—it is as a wife and a mother that she has endeared herself to every English heart, and stands out as a pattern of every fireside virtue. The home of Royalty has ever been the home of domestic love. The affections of the heart are there enthroned. There Virtue has her shrine, and Pity her altar. There the lessons of wisdom are in daily circulation, and the seeds of truth are not only thickly but carefully sown. There the buds and the blossoms of an opening life have been watched over with unwearied care; and the training of the mind has ever been made secondary to the discipline of the heart. There life has been, and still is, but another name for love; and love is but the synonyme for all that is pure and peaceful, wise and good, enlightened and enlarged, cheerful and happy. There the light is no rainbow in the cloud, but a bright sunshine; and the joy is no bubble upon the stream, but the gushing up of a living fountain. Peace be to that Royal home! and all holy solace to our bereaved Queen.

From such a home, the Princess will carry away impressions and lessons which will shed over her own wedded fireside all that is pure and good, cheerful and happy. For herself and for the Prince to whom she is now allied for life, and with whom she will be called to divide the sorrows and double the joys of life, we offer up our most fervent prayer to the One great Father of all. May their union be long and ever-increasingly happy! May the sunshine of a higher world ever fall upon their path, and every blessing from the Infinite Love be poured into their cup!

It is a fact never to be lost sight of, that the hearthstone of the family is the corner stone of the Commonwealth. In other words, our domestic virtues lie at the foundation of our national stability. If England's sun ever sets, it can only be when England's homes and hearths shall have lost their sanctities and their sacredness. So long as our firesides are pure, and the home

affections are kept in play, we predict for our land a stability which nothing can disturb, and a glory which nothing can eclipse. Nor do we for one moment doubt that these virtues will ever be conspicuous in the character and the home of that beloved Princess who this day enters on the duties and responsibilities, as well as on the pleasures and delights of wedded life.

Let our young readers ever bear in mind, in forming such engagements, that married life, to be happy, must have its foundation in love; that as soon as the affections are fixed, there should be no trifling with those affections on either side; that as soon as the thought of an engagement arises in the mind, not a moment should be lost in revealing the fact to parents; and that if an engagement be entered into with their sanction and approval, each should be confidingly faithful to the other. For all such we wish a speedy union, and a happy fireside!

LONDON, JULY 1, 1862.

While the people in thousands and tens of thousands have been crowding the courts of the Great International Exhibition, the National Association for the Promotion of Social Science have been holding their Sixth Annual Conference in the metropolis, with heightened interest and effect. The several departments of Jurisprudence, Education, Prevention, Punishment, and Reformation, Public Health, Social Economy, and of Trade and International Law, were well represented; not a few valuable papers were read, and the subjects of which they treated were discussed with no little ability. Several ladies, whose names are well known in the philanthropic and benevolent circles of our land, contributed papers on Education, Public Health, and Social Economics, which were listened to with profound attention, and embodied the most practical suggestions. On the whole, the Association, with the venerable and truly noble Lord Brougham at its head may congratulate itself on the success which has hitherto attended its operations, and rejoice in the prospects now before it. It is now drawing all ranks and classes within its circle, and its influence will soon be all but universal.

We have the visit of the Pasha of Egypt to our shores, and trust that both he and the Japanese ambassadors will take away from England and from English society that which they may graft as a living shoot on the institutions of their respective countries. The intercourse of nations is one of the signs of the times, and bespeaks an era not far off of unconfined light and liberty, of intellectual emancipation and moral elevation, and of Christian life, which has had no parallel in the past history of the world.

Would that we could say there was any prospect of the war in America coming to a close! It is worse and more hopeless than ever. Whether the talked-of mediation of England and France will find any favour in these distracted States, North and South, remains to be seen. We confess that we are not sanguine; neither side is in a state to be conciliated, and if reconciliation could be brought to-morrow, the fruits of this warfare will be reaped for ages yet to come.

The Handel Festival is past, but the memory of it will live on in the thoughts and recollections of every one who had the happiness of being present. Never was there such an achievement in music since Music struck her first note in the ear of man. Grand was the effect in 1859, but this rose unspeakably above it. Nor could Handel himself—had he been present—have failed to appreciate the performance as something exceeding even his loftiest conception.

GENIUS.

"He that would be great must be content to live obscure," said the late Sidney Smith. And it is true. Just as many a gem never sees the light, and "many a flower is born to blush unseen," so there is many a noble life spent in shade and seclusion. Some of the highest types of our race have come from the cottage. Intellect is not always allied to rank, and genius is not the exclusive property of birth. Every age has its men—its true men; men notable for life and deeds; many of whom come silently and unexpectedly into view, like some brighter star emerging from the darkness of deeper night. Endowed with nobler and mightier powers, they have devoted their energies to corresponding ends; and, far away from the idle gaze of the ignorant throng, and unknown for a time even by their more favoured co-workers, they have thought, and studied, and toiled, in their chosen retirement, till the fruits of their genius have brought them into the light of day, and have won for them all but universal admiration and praise.

But genius is wonderfully modified and determined by outward circumstances. Of one of our English poets—Chatterton—who was the son of a sexton, and the character of whose genius was such as afterwards to make grey-headed erudition bend before it, and even to startle and astonish those on whom it did not impose—it is said, that in his earlier boyhood, he was deemed to be of very dull intellect till he fell in love with the highly-illuminated capitals of an old manuscript in French, from which his mother taught him his letters, and then with the black letter of the Bible, from which she afterwards taught him to read. His mind then awoke as from a slumber: his powers were quickened: his conceptions were all fresh, and gave to his genius its peculiar character and determination. It is thus that, in one sense, we are the creatures of circumstances. Influences and agencies, foreign to ourselves, act upon the mind, to lend, not only their impression, but even their bias, to our intellectual character; and, apart from these outward influences, it is impossible to say how many noble spirits would have been lost in their life, and in their deeds, to the world and the race.

These remarks apply in their full force to Handel, whose name will be on ten thousand lips for some time to come; and who must always rise up before our thought as a man whose musical powers can never be estimated too highly. As has been justly said: "Conceive the highest you can of his abilities, and they are much beyond anything that you can conceive." It was no vulgar wreath which encircled his brow while he lived; and, since his death, honours have been strewed thick upon his grave. His very name is pronounced with reverence, and his genius is all but glorified.

Gold.—On the very day on which her Majesty opened the Exhibition building of 1851, the news of the discovery of a prolific gold field in New South Wales was announced in Sydney, and, before the close of the Great Exhibition, samples of gold and nuggets of great size made their appearance there from Australia. The importance of these discoveries has now become an established fact, and is supplemented by the working of gold fields in almost all our Australasian possessions. In the ten years which have since elapsed Australia alone has supplied the world with 780 tons of gold, of the value of £112,000,000.

THE YOUNG NATURALIST.

CHAPTER IV.—*Continued.*

"It had, however, hard work to get along, for after advancing a short distance, the breeze, which was gently blowing, took the wings of the fly, and blew both the insects around. The wasp could not manage its own wings and those of the fly too."

"Did the wasp give up the attempt to carry the prize home?" asked Robert.

"No; but when it found that the wind was too strong for it to make much progress, it alighted on the ground, and deliberately sawed off, first one wing of the fly, and then the other, and having thus removed the cause of the difficulty, it easily flew away with its load."

"But, pa, wasn't there some contrivance in that?"

"It seems very much like it, Robert, and that is the reason why I related the fact. It appears that when the wasp found that he could not bear off the whole of the fly, he knew enough to divide it into parts, so as to make the burden lighter; and even after it had made choice of a particular portion, and still found that it could not advance, it seems to have known what was the cause, and how to remove it. Its method was similar to that of a mariner, who, when he finds that by altering his course, or by the change of wind, some of his sails injure the progress of his vessel, takes them in."

"It was something like me," said Robert. "The other day as I was coming from school it began to sprinkle. I put up my umbrella to prevent myself from getting wet, but the wind was so strong that I could not hold it: I was almost blown away; so I had to shut it, and get home as well as I could without using it."

"A very good comparison, Robert; the wings of the fly operated upon the wasp just as your umbrella did upon you, and the wasp seems to have known, that in order to advance more rapidly through the air, it must remove the wings of the fly, just as you knew that, in order to get home, your umbrella must be closed."

During this conversation, Robert and his father left the bee-hive, and took one of the paths which led towards the house, but before they reached the gate, they met William and his mother, who, a few moments before, had entered the garden. Robert related to them, in a few words, the conduct of the wasp which he had seen, and the story which he had just heard from his father, and then asked, "Do not these things prove that insects know something?"

"Whether insects know anything or not," replied his mother, "we had an old cow once that I used to think knew something."

"What made you think so?" asked Robert.

"Why, we were in the habit of feeding her during a part of the year on parsnips, and generally we washed them for her; but one day, in consequence of being in a hurry, the boy carried her the parships unwashed, just as they were pulled from the ground, and her ladyship was so nice, that when she saw the condition they were in, all covered with dirt, she washed them herself before eating them."

"What! a cow wash parsnips?" asked Robert, in tones of surprise.

"Yes, she certainly did."

"How did she do it?"

"She took one of the parsnips in her mouth, put it into a tub of water which stood there, and out of which she usually drank, and holding it by its short tops, she moved her head from side to side, till she washed off the dirt; afterwards she ate it. She then took several others, one by one, and went through the same process of cleansing."

"What do you think of that, pa?" asked Robert.

"I think she was quite an intelligent cow, my son."

"But do you not think she reasoned a little?"

"Perhaps she did, and perhaps she did not."

"It seems very much like it," said Mrs. Rogers. "It is plain that the cow knew three things; first, she knew that water would cleanse the parsnips; second, she knew that in order to accomplish this, the water and the parsnips must be brought in contact with each other; and, thirdly, she knew *how* to bring them in contact. There were two other things that evinced her sagacity. She might, with her horns, have tipped the tub of water over them, but, instead of this, she took them up singly and dipped them into the water, and that was by far the better way; but instead of putting them in the water and taking them immediately out, she moved her head from side to side, with the parsnip hanging from her mouth, and in that manner actually washed the dirt off. Now, was there not in all that some reasoning?"

"Why," said Mr. Rogers, "it is difficult to tell. It might have been nothing more than mere imitation. You said that the parsnips were usually washed for the cow; was the cow present when they were washed for her?"

"Oh, yes, they always took them to the tub, which stood near the pump, and washed them; the cow, in the meantime, looking on and waiting for them."

"That is an important fact to be considered. If the cow had never seen parsnips washed, her cleansing of them in the manner she did would have exhibited a much higher degree of sagacity. But as she had often seen it done, it might have been nothing more than mere imitation."

"Perhaps it was," replied Mrs. Rogers; "for I recollect she would sometimes let down the bars, and get out of the pasture."

"A cow let down bars!" said William, "how did she do it?"

"In this way; she would put her head under the bar, raise it up a little, and work it to and fro, until she drew one end out of the hole, and made it fall to the ground. She would then serve others in the same manner, until she had let down enough to enable her to pass through. I think it probable that she learned how to do it by seeing how the bars were let down when she was driven out and into the pasture."

"That is to say," replied Mr. Rogers, "it was mere imitation. She did what she had seen others do; and very likely she learned how to cleanse parsnips in the same way."

This explanation did not satisfy William. He could not see how a cow could wash parsnips or let down bars from imitation, without exercising a little thought.

The conversation was now interrupted by Emily, who came to inform her parents that company had arrived and were waiting for them.

(To be continued.)

OXFORD UNIVERSITY.—Old Fuller tells us, that "it is not the least part of Oxford's happiness, that a moiety of her founders were prelates, who had an experimental knowledge of what belonged to the necessities and conveniencies of scholars, and therefore have accommodated them accordingly, principally in providing them the patronages of many good benefices, whereby the Fellows of those Colleges are plentifully maintained after leaving the University." From the same authority we learn that "of the Colleges—University is the oldest, Pembroke the youngest, Christ Church the greatest, Lincoln, the least, Magdalen the neatest, Wadham the most uniform, New College the strongest, and Jesus College the poorest. . . New College is the most proper for southern, Exeter for western, Queen's for northern, Brasenose for north-western men, St. John's for Londoners, Jesus for Welshmen, and other colleges almost indifferently for men of all countries. Merton has been most famous for schoolmen, Corpus Christi for linguists, Christ Church for poets, All Souls' for orators, New College for civilians, Brasenose for disputants, Queen's College for metaphysicians, Exeter for a series of Regius Professors, Magdalen for ancient, St. John's for modern prelates, and all eminent in some kind or other."

SHIPS.—No. III.

After the Norman Conquest the English went on improving in their ships, which were frequently engaged in war with

Fig. 12.—The Great Harry.

the nations of the Continent. They also equipped fleets for Africa and the Holy Land. We at length come to the *Great Harry*, built by Henry VIII. (see Fig. 12), in which in great state he visited France for his celebrated interview with Francis I. He embarked at Dover on May 31st, 1520. This ship was built at Woolwich a few years before, where she was burnt by accident a few years after. She cost £114,000. A painting of her right royal voyage is preserved in Greenwich Hospital, from which our engraving is taken.

Fig. 13.—The Sovereign of the Seas.

"His Majesty's Royall and most stately ship, called the *Soveraign of the Seas* (Fig. 13), was built at Woolwitch, in Kent, in 1637."

Her length by the "Keele" was 128 feet; her "wideness from side to side, 48 foote," "her utmost length, 232 foote." She had "three flush deckes." She carried "Eleaven anchors, one of them weighing foure-thousand foure-hundred."

The writer of a description of her, hopes she will be an inducement to the nation to pay the "Ship-money;" *that* ship money, not money really spent upon ships, was the occasion of the ruin of Charles I.

Her number of tons was undesignedly the same as the years which had elapsed from the Christian era to the time of her being built, viz. 1637, which at that time was considered as a very favourable omen.

The *Sovereign of the Seas* (see Fig. 13) was the largest English vessel in the time of Charles. You see that she has port-holes for the guns, between decks; these were first made in men-of-war in the last year of the reign of Henry VIII.—that is, in 1549.

Cromwell did much for the English navy. He raised it to unparalleled power. He contended with the Dutch in a series of naval engagements, which lasted about two years. These desperate and bloody sea-fights lasted in some cases for two and three days, having on each side over one hundred men-of-war—six or seven battles were fought in a year. At the conclusion of peace, the Dutch, who certainly had the worst of it, were found to have lost some hundred and twenty ships. The brave Van Tromp led the Dutch, while Blake and Monk fought for the Commonwealth.

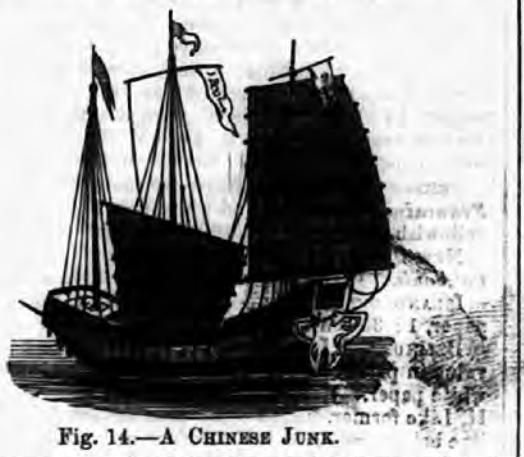


Fig. 14.—A Chinese Junk.

The Chinese preserve their old fashions in the build of their ships as in most other things. Here is one of their junks (see Fig. 14), a sort of vessel admirably adapted to their purpose. The junks, though of great burden, can sail into very shallow water, and go where our vessels cannot follow them. On this account they escape from our lightest gunboats. They are able, for the same reason, to pursue the small robber-boats, and carry the Chinese law where otherwise it could never reach. The Chinese use sails constructed of thin slips of bamboo neatly woven and fastened together.

Fig. 15.—A Canoe.

The Canoe of the South Sea Islanders is by no means of recent date. Captain Cook, in his voyages, gives a very interesting account of these canoes, and especially mentions the remarkable ease with which the *children* swim: if they fall into the water, they seem to take to it like young ducks. The Captain saw a canoe upset, and a *little* child *three or four* years old, instead of being frightened as a little British child would be, began to swim and splash about with great glee, till the canoe was righted: then the mother got in, took her child in with her, and they went on together none the worse for the bath, because both could swim. These canoes are sometimes made very sharp, and are crowded with an enormous quantity of sail, when with a stiff breeze they run before the wind at the rate of twenty miles an hour.

(To be continued.)

THE POSTAGE-STAMPS OF THE WORLD.

By Dr. JOHN EDWARD GRAY, of the British Museum.

No. II.—STAMPS OF EUROPEAN GOVERNMENTS.

FRANCE.—I. Profile of "France" crowned in a circle, *Repub. Franc.* 1, 10 *c. Postes* 10 *c.*, yellow, 1860; 2, 15 *c. Postes* 15 *c.*, green, 1850; 3, 20 *c. Postes* 20 *c.*, black, 1849; 4, 25 *c. Postes* 25 *c.*, blue, 1850; 5, 40 *c. Postes* 40 *c.*, red, 1849, or orange; 6, 1 *fr. Postes* 1 *fr.*, crimson, 1849, and pale carmine (50 c. is not issued). Pattern Stamps like former have been made. 1, without value, green and golden; 2, 10 *c.* pale chestnut; 3, 15 *c.*, brown; 4, 20 *c.*, blue; 5, 1 *fr.*, greenish. II. Louis Napoleon, profile, in circle, *Repub. Franc.* 1, 10 c. *Postes* 10 c., pale brown, 1852; 2, 25 *c. Postes* 25 *c.*, blue, 1852; III. Louis Napoleon profile, in circle, *Empire Franc.* 1, 1 *c. Postes* 1 *c.*, grey or olive green; 2, 5 *c. Postes* 5 *c.*, green; 3, 10 *c., Postes* 10 *c.*, pale brown; 4, 20 *c. Postes* 20 *c.*, blue; 5, 25 *c. Postes* 25 *c.*, blue; 6, 40 *c. Postes* 40 *c.*, red or orange; 7, 80*c. Postes* 80 *c.*, lake red or rose; 8, 1 *fr. Postes* 1 *fr.*, carmine. IV. Louis Napoleon crowned with laurels in circle, *Empire Franc.* 1, 2 *c.*; 2, 4 *c.* V. Square *Chiffre Taxe* on white paper, 10 *c.*; black, Letters not sufficiently stamped.

FRENCH COLONIES.—I. Eagle crowned. *Colonies de l'Empire Francaise*, coloured ink on white paper. 1, 10 *c. Postes* 10 *c.* yellowish; 2, 40 *c. Postes* 40 *c.* vermilion.

NEW CALEDONIA.—Louis Napoleon, profile, and *Nouvelle Caledonie.* 1, 10 *c. Postes* 10 *c.*, grey, more or less dark.

ISLAND OF REUNION.—*Reunion*, black ink on coloured paper, 1; 30 cent. green.

BELGIUM.—I. Leopold, profile, to right, oblong frame. *Postes* value in pale letters in straight line below; coloured ink on white paper. 1, 10 *dix cents*, black; 2, 20 *vingt cents*, blue. II. Like former, but in oval, value in dark letters on curved line below; coloured ink on white or greenish paper. 1, *un centime*, green and greenish paper; 2, *dix cents*, black; 3, *ving cents*, blue; 4, *quarant cents*, red.

HOLLAND.—Foursided, erect, William, profile, to right, in oval. *Post zegel.* 1, 5 *c.*, dark or pale blue (or black patterns only); 2, 10 *c.*, rose red; 3, 15 *c.*, orange; 4,

SWITZERLAND.—I. White Cross on a red shield, in 1, *Rayon I. 5 rap.*, blue ink on white paper; 2, 5 *rap.*, black ink on blue paper; 3, *Rayon II.* 10 *rap.*, black ink on yellow or orange paper; 4, 10 *rap.*, black ink on blue paper. II. Like former, but *Orts Post.* 1, 2½ *rap.*, black ink (for German cantons). III. Like former, but *Poste local.* 1, 2½ *rap.*, black ink (for French cantons). V. Like former, but Cross in red-lined shield, on white paper. *Rayon III.* 1, 15 *rap.*, for German cantons; 2, 15 *cents.*, for French cantons. VI. "Switzerland," sealed in square frame, *Franco*, value on sides. 1, 5 *rap.* 5 *cents.*, brown; 2, 10 *rap.* 10 *cents.*, blue; 3, 15 *rap.* 15 *cents.*, red; 4, 20 *rap.* 20 *cents.*, yellow; 5, 40 *rap.* 40 *cents.*, green; 6, *un franc, un franco*, grey.

SWISS LOCAL.—I. White Dove on a red shield, *Basel standt post.* 1, 2½ *rap.*, black or white or blue paper. II. Arms of Geneva. *Post local.* 1, 5 *cents.*, black or green paper. III. Like former. *Post cantonal.* 1, 5 *cents.*, black or green paper; 2, 5 *cents.*, green ink on white paper. IV. White Cross on a red shield. *Neufchatel?* Printed in black ink. *Poste local.* 1, 5 *cents.* V. White Cross on a red shield, with a Post-horn. (*Vaud?*) 1, 1 *cent.*, black; 2, 5 *cents.*, black. VI. The Number of Value, in black, on white paper. *Zurich.* 1, 4 *cents., local taxe*; 2, 6 *cents., cantonal taxe.* VII. Post-horn, with a White Cross, in the middle of a red shield (*Lausanne*). *Poste local.* Printed in black ink. 4 *cents.*, 5 *cents.* VIII. Foursided, erect, Post-horn, with a White Cross in the middle, on a red ground. 1, *Orst poste, poste local*, 2½ *rap.*, red; Canton doubtful.

GREECE.—Mercury, in profile, to right; in circle, ΕΛΛΗΝΙΚΑ ΓΡΑΜΜ. 1, 1 ΛΕΠΤ, chocolate; 2, 2 ΛΕΠΤ, pale brown; 3, 5 ΛΕΠΤ, pale green; 4, 10 ΛΕΠΤ, orange, or bluish paper; 5, 20 ΛΕΠΤ, blue; 6, 40 ΛΕΠΤ, lilac, or bluish paper; 7, 80 ΛΕΠΤ, carmine.

SPAIN.—I. Queen, in profile, to right, with wreath, in a circle; *correos* in upper border, printed in colours, on bluish or white paper: 1, 2 *cuartos*, green; 2, 4 *cuartos*, carmine; 3, 12 *cuartos*, orange or violet; 4, ½ *real plata F*, dark or pale blue, or green; 5, 1 *real*, green or blue; 6, 2 *reales*, dark or pale chocolate. II. Queen, in profile, to left, with crown in a beaded circle, *correos* in label above, printed in colours, on bluish or white paper: 1, 2 *cuartos*, green; 2, 4 *cuartos*, orange; 3, 6 *cuartos*, black or rose; 4, 12 *cuartos*, carmine or violet; 5, 19 *cuartos*, brown; 6, ½ *real plata, F*; 7, 1 *real*, blue; 8, 2 *reales*, lilac or chocolate; 9, 5 *reales*, red; 10, 6 *reales*, blue; 11, 10 *reales*, green or blue. III. Large Arms (Lion and Tower), with crown, on shield, *correos*, 1854, printed in black, on coloured paper: 1, *franco*, 6 *cs.*, red, on white paper; 2, ½ *onza*, orange; 3, 1 *onza*, rose; 4, 4 *onza*, green; 5, 1 *libra*, blue. IV. Oval, erect, Arms, with crown and collar of Golden Fleece, *correo official*, black, on coloured paper: 1, ½ *onza*, orange; 2, *una onza*, red; 3, 4 *onza*, green; 4, 1 *libra*, blue. V. Foursided Arms (Bear mounting a Tree), bronzed: 1, 1 *cuartos*; 2, 2 *cuartos*; 3, 3 *cuartos*. VI. Arms, printed in colours: 1, 4 *cuartos*, red; 2, 6 *cuartos*, red; 3, 1 *real*, black; 4, 5 *reales*, green. I. Profile of Queen, with foliated diadem, to left, in foursided frame, inscribed *Cuartos* above, *Correo Franco* on sides, and 1850 below, black ink. II. Profile of Queen, with rows of pearls, to right, in oval erect frame, inscribed *Franco Secs Cuartos* above, *Correos* 1851 below, in oblong frame, black ink. III. Profile of Queen, with simple diadem, to left, in circular frame; in foursided frame, with *Franco*, 6 *cs.*, in upper, and *Correos*, 1853, in lower margin, red ink. IV. Profile of Queen, with foliated fillet, to right, in oval frame; in oblong frame, with *Correos*, 1853, in upper, *Franco*, 6 *cs.*, in lower margin, red ink. V. Arms, Lion and Tower quartered with golden fleece, on side, and crown above, in eightsided disk, with Greek ornamental angles, in oblong frame, *Correos*, 1854, in upper, and *Franco* in lower margin, red ink.

PHILIPPINE ISLANDS (Colony of Spain).—I. Queen, in profile, in a pearled circle, printed in colours: 1, 6 *cuartos*; 2, 1 *real*, brown. II. Like former, but marked *correos interior*; 5 *cuartos*, red. III. Queen, in profile, to right, in a circle, printed in colours: 1, 5 *cuartos*, red. IV. Like former, but marked *correos interior.*

CUBA AND PORTO RICO.—Queen, in profile, in a pearled circle, printed in colours, on bluish or white paper: 1, ½ *real plata*, blue: 2, 1 *real*, green; 3, 2 *reales*, red or brown.

PORTUGAL.—I. Varying in shape, Dona Maria II., in profile, embossed white, to left, in a circle, *correio* above: 1, 5 *reis*, brown; 2, 25 *reis*, blue circle simple, angles rounded; 3, 50 *reis*, green; 4, 100 *reis*, circle, in oblong frame, angles rounded. II. Varying in shape, Don Pedro V., in profile, embossed white, to right, in circular or oval frame, *correio* above: 1, 5 *reis*, brown, shield circular, angles concave; 2, 25 *reis*, red or blue, shield oval, angles rounded; 3, 50 *reis*, green, shield oval, in eight-sided frame, with truncated angles; 4, 100 *reis*, lilac, shield circular, angles three-lobed.

ITALY.—I. Emanuel, in profile, embossed white, to the right, in a white disc, *Franco poste Bollo*, in white letters, in coloured frame, printed in coloured ink, on white paper: 1, *c. cinque*, green; 2, *c. dieci*, brown; 3, *c. vinti*, blue; 4, *c. quadranta*, red; 5, *mezzo tornesi*; 6, *c. ottante*, yellow. II. Similar to former, but the oval disk coloured: 1, *c. vinti*, blue; 2, *c. quadranta*, red; 3, *Lire tres*, bronze. III. Similar to two former, but frame white, with coloured letters, and angles of the inner frame lined: 1, *mezzo grana*, pale brown; 2, *un grano*, black; 3, *duo grana*, blue; 4, *cinque grana*, red; 5, *dieci grana*, yellow; 6, *vinti grana*, pale yellow; 7, *cinquata grana*, pearl grey; 8, *mezzo tornesi*, green. IV. Similar to the first series, but all but the white profile, and oval disk, coloured, and the letters embossed: 1, *c. quadranta*, frame red. V. Similar to the first series, but the whole stamp coloured; the profile, frame and letters, are embossed: 1, *c. cinque*, green; 2, *c. vinti*, blue. VI. Foursided, erect, central embossed ornamented figure of value, on a white oval disk, frame white, with black inscription, *Giornala Franco Bollo Stampe*: 1, *cente uno*; 2, *cente due.*

MODENA.—I. Arms (the Cross of Savoy), crown, collar and wreath, in foursided erect frame; *Provincie Franco Bollo Modonensis*, in coloured ink, on white paper; 1, *cent 5*,

green; 2, *cent* 15, black; 3, *cent* 20, lilac and violet; 4, *cent* 40, rose; 5, *cent* 80, orange (issued by the Provisional Government, 1859). II. Arms (Eagles) and crown, with wreath on each side, united below, *Poste estensi*, printed with black ink on coloured paper: 1, 3 *cent*, green; 3, 5 *cent*, blue; 2, 9 *cent*, violet; 4, 10 *cent*, rose or violet; 5, 15 *cent*, yellow; 6, 25 *cent*, pale yellow; 7, 40 *cent*, blue; 8, 1 *lira*, white. III. Like latter, Eagle, *Tassa Gazzetta*—1, 10 *cent*, white.

PARMA.—I. *State Parmensi* and value, in octagonal frame, printed in colours on white paper; 2, *centissimi* 5, green; 3, *centissimi* 10, brown; 4, *centissimi* 20, blue; 5, *centissimi* 40, vermilion; 6, *centissimi* 80, reddish yellow. II. Like former, but printed on coloured paper,—1, *centissimi* 6 green; 2, *centissime* 9, blue: issued by the Provisional Government of 1859. III. Foursided, erect, fleur-de-lis, in oval, in shield, with crown above, printed in colours, *Du di Parma, Piac. Ecc.* 1, 15*c.*, vermilion; 2, 25*c.*, red; 3, 40*c.*, blue. IV. Fleur-de-lis in circle, with crown above, *Stati Parm.*; 1 *centes* 10, black, on white paper. V. Arms, on large shield, printed in colours, on white paper; 1, 5*c.*, orange; 2, 10*c.*, red; 3, 25*c.* violet. VI. Similar to last, but printed in black, on coloured paper; 1. 5*c.*, yellow; 2, 10*c.*, grey or black; 3, 15*c.*, rose; 4, 25*c.*, brown; 5, 40*c.*, blue.

TUSCANY.—I. Lion, with a shield, in a square frame, printed in colours, on a grey or white paper, *Franco Bollo Postale Toscano*; 1, 1 *soldo*, yellow; 2, 2 *soldi*, red; 3, 1 *quatr.*, black; 4, 1 *crazie*, chocolate; 5, 2 *crazie*, blue; 6, 4 *crazie*, 7, 6 *crazie*, blue, or blue-black; 8, 9 *crazie*, chocolate; 9, 60 *crazie*, red brown. II. Arms (a cross), in mantle, surrounded by a crown, in square frame, printed in colours, on white paper, *Franco Bollo Postale Torrino*; 1, 1*c.*, violet; 2, 5*c.*, green; 3, 10*c.*, chocolate; 4, 20*c.*, blue; 5, 40*c.*, dark red; 6, 80*c.*, brown; 7, 3 *lire*, golden yellow.

SICILY.—1. Ferdinand II., in profile, to left, *Bollo della Poste de Sicilia*, printed in colours; 1, *gr* ½, orange; 2, *gr.* 1, brown; 3, *gr.* 2, blue; 4, *gr.* 5, red; 5, *gr.* 10, deep blue; 6, *gr.* 20, lilac or black; 7, *gr.* 50; chocolate, or, rich red.

NAPLES.—I. Of various shapes, arms on central shield, *Bollo della Posta Napoletana*, printed in red, on white paper; 1, *gr.* ½, shield, circular; 2, *gr.* 1, shield square; 3, *gr.* 2, shield, six-sided, square; 4, *gr.* 5, shield oblong, erect; 5, *gr.* 10, shield six-sided, erect; 6, *gr.* 20, shield lozenge-shaped; 7, *gr.* 50, shield oval. II. Foursided arms, like preceding, printed in colours; 1, ½ *Tornesi*, blue. III. Foursided, the Cross of Savoy, printed in colours; 1, ½ *Tornesi*, blue. Two latter issued by the Provisional Government of 1860.

ROME.—I. Of various shapes, with cross keys and tiara, printed in black, on coloured paper, *Franco Bollo Postale*; 1, *Baj-mezzo*, lilac, oval, transverse; 2, *Baj.* 1, green, oval, transverse; 3, *Baj.* 2, yellow green, oblong, transverse; 4, *Baj.* 3, pale brown, oval, transverse; 5, *Baj.* 4, yellow, circular; 6, *Baj.* 5, pink, oblong, erect; 7, *Baj.* 6, grey, sixsided, transverse; 8, *Baj.* 7, blue, eightsided, erect; 9, *Baj.* 8, white, with eight concave sides. II. Like former, but printed in coloured ink, on white paper; 1, *Baj.* 50, blue; 2, *Scudo* 1, red. III. *Bollo straordinario.*

ROMAGNE.—Foursided; value in the central square. *Franco Bollo Postale, Romagne*, printed in black, on coloured paper; 1, *Baj.* ½, straw; 2, 1 *Baj.* 1, grey; 3, *Baj.* yellow; 4, *Baj.* 3, green; 5, *Baj.* 4, fulvous; 6, *Baj.* 5, violet; 7, *Baj.* 8, rose; 8, *Baj.* 20, blue. These were only used in 1860.

AUSTRIA.—I. Foursided, erect; arms, on body, of double-headed spread eagle, on a shield, surmounted by a crown, *K.K. Post, stempfe*, printed in coloured ink, on white paper; 1, 1 *kreuzer*, yellow; 2, 2 *kreuzers*, black; 3, 3 *kreuzers*, red; 4, 4 *kreuzers*, brown; 5, 9 *kreuzers*, blue. II. The same as the former, for Lombardo-Venice, in *centes*; 1, 1 *centes*, yellow; 2, 10 *centes*, black; 3, 15 *centes*, red; 4, 30 *centes*, brown; 5, 45 *centes*, blue. III. Square, arms, on body, of a double-headed spread eagle, bearing a crown, in square frame, *Kais Kon Zeitung Stampel*, printed in colours, on white paper, for newspapers going abroad; 1, 1 *kreuzer*, blue or black; 2, 2 *kreuzers*, brown, red, or green; 3, 4 *kreuzers*, deep red or brown. IV. Foursided, erect, Emperor's profile to left, embossed, white on coloured shield, surrounded by white embellishments, value in *kreuzers* for German Austria; 1, 2 *kr.*, in white letters, yellow, shield wreathed; 2, 3 *kr.*, green or black shield; 3, 5 *kr.*, in white letters, shield circular, with internal wreath below; 4, 10 *kr.*, in dark colours, shield oblong, surrounded by a wreath; 5. 15 *kr.*, in dark letters, shield, with a circular frame, and 15 at each upper angle; 6, 25 *kr.*, dark brown shield. V. Like the latter, but the value in *soldi*, for Lombardo-Venice; 1, 2 *soldi*, yellow; 2, 3 *soldi*, black; 3, 5 *soldi*, red; 4, 10 *soldi*, brown; 5. 15 *soldi*, blue. VI. Foursided, erect, Emperor's profile, white embossed, to left, in oval disk, frame and letters white, rest coloured; value on each side of frame and angles; 1, 3 *kreuzers*, black; 2, 3 *kreuzers*, green. VI. Like above, but value in *soldi*; 1, 3 *soldi*, black. VII. Like above, but profile to left, without the white oval frame, with a square frame, inscribed *K.K. Zeitung, Post Stempel*; 1, lilac (for newspapers only); 2, blue. VIII. Square, St. Andrew's cross, on a white ground, for returned letters; 1, yellow; 2, black; 3, red; 4, brown; 5, blue; 6, green. IX. Like the latter, but cross, on a coloured ground, for returned letters; 1, yellow; 2, black; 3, red; 4 brown; 5, blue; 6, green. X. Four coloured triangles, having a white St. Andrew's Cross, on white paper. 1, yellow; 2, green; 3, red; 4, brown; 5, blue. XI. Foursided, erect, Emperor's profile, embossed, white to right, on a dark oval shield, surrounded by a white-lined oval frame; *kreuzer* above, and value below. 1 *kr.* 2, yellow; 2, *kr.* 3, green; 3, *kr.* 5, red; 4, *kr.* 10, brown; 5, *kr.* 15, lilac. XII. *Envelopes*, with similar stamps; 1, *kr.* 2, yellow; 2, *kr.* 3, green; 3, *kr.* 5, red; 4, *kr.* 14, brown; 5, *kr.* 15, lilac. XIII. Stamps like above, but value in *soldi*, for Venice; 1, 1 *soldi*, yellow; 2, 3 *soldi*, green; 3, 5 *soldi*, red; 4, 10 *soldi*, chocolate; 5, 15 *soldi*, blue. XIV. *Envelopes*, with similar stamp to latter; 1, 1 *soldo*, yellow; 2, 3 *soldi*, green; 3, 5 *soldi*, red; 4, 10 *soldi*, chocolate; 5, 15 *soldi*, orange; 6, 25 *soldi*, dark brown; 7, 30 *soldi*, violet; 8, 35 *soldi*, pale brown. XV. Figure, Mercury in profile, to right, in square frame, inscribed *K.K. Zeitung Poste Stampel*, printed in coloured ink, on white paper, for newspapers in Austria; 1, blue; 2, yellow; 3 rose.

PRUSSIA.—I. Foursided, erect, *Fred.* William IV., in profile to right, in square frame, shaded by lines, *Freimarke*, printed black, on coloured paper; 1, ½ *Sechs pfenninge* ½, orange; 2, 1 *Ein silber gr.* 1, rose; 3, 2 *Zwei silber gr.* 2, blue; 4, 3 *Drei silber gr.* 3, yellow. II. Like former, but printed in coloured ink, on white paper; 1, 4 *Vier pfenninge* 4, green; 2, ½ *sech pfenninge* ½, orange; 3, 1 *Ein silber gr.* 1; 4, 2 *Zwei silber gr.* 2; 5, 3 *Drei silber gr.* 3, yellow. III. Like latter, but the square frame of the portrait is solid, not lined; 1, 1 *Ein silber gr.* 1, rose; 2, 2 *Zwei silber gr.* 2, blue; 3, 3 *Drei silber gr.* 3, yellow. IV. Fred. William IV., embossed, white profile to right, in coloured oval shield, with embossed white-lined oval or sixsided frame, with an oblique silk thread across the stamp; Poste Couvert. 1, *Ein silber gr.*, with 1 below, oval, red or pink; 2, *Zwei silber gr.*, with 2 below, oval, blue; 3, *Drei silber gr.*, with 3 below, oval, yellow; 4, *Vier silber gr*, with 4 above, six-sided, red brown; 5, *funf. silber gr.*, with 5 below, six-sided, red; 6, *seich silber gr.*, with 6 above, six-sided, green; 7, *seiben silber gr.*, with 7 below, six-sided, red. V. Post couvert, like former, but with the thread, obliquely across the stamp; and with printed inscription on the envelope. VI. stamp foursided, erect, with embossed white single head spread eagle, with sceptre, and orbs in coloured disk, with oval white-lined embossed frame, with number of value on each side, and *Preusen* above; 1, *Ein silb. gr.*, red; 2, *Zwei silb. gr.*, blue; 3, *Drei silb. gr.*, brown. VII. Post couvert, with stamps in corner like former; 1, *Ein silb. gr.*, red; 2, *Zwei silb. gr.*, 3, *Drei silb. gr.*, brown. VIII. Stamp, like former, but in eight-sided frame, with numbers on angles; 1, 4 *vier pfenninge*, green. IX. Post couvert, with stamp in corner, like latter. X. Small square (in fours), crown, on oval transverse, containing value and *Poste marke*; 1, ½ *gute gr.*, 3 *pfenninge*, black ink on brown paper. The Prussian stamps are used in Anhalt Bernberg, Anhalt Evethan, Anhalt Dessau, Birkenfeld, Frankenhausen, and Schlotheim Valderk.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

CHAPTER XI.—THE KITE (*Falco Milvus*).

THE KITE.

THE BUZZARD.

THE Kite, also called the "Royal Kite," "Puttock," and "Glead," is one of those birds which, as regards Great Britain, scarcely exists except in history. It has never yet been seen in Ireland as far as I can ascertain. It was formerly a common bird, and is reported, on unquestionable authority, to have frequented the neighbourhood of London, by hundreds, often coming into the street for the sake of garbage and offal thrown from the houses. On the 3rd of April, 1850, one was seen near London by that accomplished ornithologist, Mr. Bond (see *Zoologist*, p. 2797), and as late as October, 1859, a fine specimen was observed majestically soaring over Piccadilly. (See *Zool.* p. 6432.) We also learn from the *Zoologist*, p. 2595, that until very lately the Kite was common in Oxfordshire; and Mr. Edward, shoemaker and naturalist, of Banff, says, that it was formerly very common in that part of Scotland. I shall frequently refer to Mr. Edward in the course of these chapters: but I cannot refrain from availing myself of this opportunity of expressing my admiration of his industry in acquiring and recording an almost incredible amount of information respecting the natural history of his county. To return to the Kite: although so nearly extinct in this country, it is still common on the Continent, and is mentioned by Captain Watkins, as being extremely plentiful in Andalusia. It frequents large continental cities, building in the lofty cathedrals, and may constantly be seen soaring aloft as though watching over their welfare.

The Kite is easily tamed; in the *Magazine of Zoology and Botany*, Mr. Thompson informs us that a pair of young Kites was procured from a nest on the borders of Loch Awe, in Argyleshire, in 1833. They soon became tame and familiar, and so gentle in disposition as to be most engaging companions. Every morning they had their liberty; never flew far, but soared to a great height, and always returned to their keeper when called. He saw rats let out from a cage-trap while these birds were on the wing, and, as soon as the Kites perceived them, they descended, and captured the poor rats with great adroitness.

The Kite is a cowardly bird, and though so nearly a falcon in appearance, has always been the pursued rather than the pursuer; yet he seems to have a great propensity to attack any uncouth or awkward object: for he was a favourite quarry with the falconer, and Sir John Sebright tells us that Kites were much flown some years ago, by the Earl of Orford, in the neighbourhood of Alconbury Hill. "A great owl," says Sir John, "to the leg of which the falconers usually tie a fox's tail, not only to impede its flight, but to make it, as they fancy, more attractive, is thrown up to draw down the Kite. The owl is trained to fly round in circles, and to return when lured, and thus plays the part of a decoy bird: the Kite sees the uncouth figure from afar, and comes to the attack; then he becomes in his turn the object of attack; the falconer throws off his trained hawk and the chase is commenced; the evolutions of falcon and Kite are said to be graceful in the extreme."

In India the Kite is very common; Captain Hadfield, writing in the *Zoologist*, says, "I have frequently seen the vessels at anchor in the Madras Roads, surrounded by them;

they are neither so troublesome nor so familiar as the crow, but their audacity is even greater, as the following incident will serve to exemplify. When seated at the dinner-table, in readiness for the second course, the excited servants rushed in to inform the company that a thievish and hungry Kite had, while one of them was bearing a joint of meat from the cook-house, made a pounce at the savoury morsel, and succeeded in carrying it off without let or hindrance."

Mr. Yarrell says that Louis XVI. of France tamed powerful falcons called Lanners, obtained from the eastern parts of Europe, to fly at Kites for his own royal and especial gratification; and that from this circumstance the Kite is still called the "Milan royal," and "Milvus regalis,"—so great an honour waits on those who, by being worried, afford pleasure to a king.

The food of the Kite is very varied; I have shown that he has a taste for offal and garbage, for owls' flesh, and for hot roast mutton; but I can add a curious list of articles that are freely eaten by the Kite when a prisoner and captive in a garden. For instance, green-peas, radishes, peaches, and especially figs—nothing in the world seems so acceptable as a thoroughly ripe fig; for this luscious delicacy young rabbits and dead birds have been immediately abandoned. But in addition to this, the Kite is a most successful fisherman—seizing the fish in the water with all the expertness of an osprey.

To sum up the character of the Kite, he is a general and filthy feeder, though delicately clean in his plumage; a great coward, a gentle captive, and the most wonderfully graceful flyer that can be conceived. He seems really to float, and almost to slumber on the air; it has sometimes been my exceeding good fortune to have the opportunity of watching him on the ascent of Plinlymmon, a locality where he may yet occasionally be seen. He will sail round in circles of greater or less diameters, for many minutes in succession, without the slightest perceptible motion either of wings or outspread tail; and I feel certain that I have seen him traverse a mile or more in a direct line, without one visible flap of his powerful wings.

The Kite builds in thick woods; the female placing her nest in a strong fork, and building it chiefly of large sticks; she lays two or three eggs of a dirty-white colour, marked with a few darker spots.*

There is no necessity for a description of this graceful hawk; it is enough to say that his colour is brown, of various tints, and elegantly varied, and that his tail is long and beautifully forked—a character that at once distinguishes him from all other birds of prey.

CHAPTER XII.—The Buzzard (*Falco Buteo*).

The Buzzards show in many respects a similarity to the owls: they are far less daring than the true hawks, a fact so generally acknowledged that the very name often implies a degree of cowardice: the feathers, like those of the owls, are loose and downy, the rays not being closely connected as in the falcons: the outline of the expanded wing, as seen when the bird is flying, is rounded, and their flight is slow: very rarely indeed do they attempt to overtake and capture a bird in the air; but commonly catch young and feeble or helpless birds, or quadrupeds on the ground, stealing after them like cats. They perch much in trees and on stones, and will remain almost motionless for hours together. Notwithstanding this, we may now and then see them on the wing, and may readily recognize the common Buzzard when in the air, by its mewing like a cat.

The common Buzzard, which formerly really deserved the epithet of "common," still occurs in some parts of England, Scotland, and especially of Wales. About the Devil's Bridge, Ponterwydd, Plinlymmon, and Cader Idris, I have occasionally disturbed it when on the ground, and when this has occurred it has risen in evident terror, and has always attained a good height and considerable distance before it has considered that it was quite safe to soar in circles after the manner of its congeners. Mr. Knox never met with the Buzzard in Sussex, nor the Rev. Richard Lubbock in Norfolk, and Mr. Waterton says it is extinct in Yorkshire; it must be of extreme rarity in these counties to have escaped such excellent observers.

The late Mr. Macgillivray, in his "History of British Birds," has informed us that the Buzzard in Scotland makes its nest in the "beds of torrents," a statement which I by no means desire to dispute, on the insufficient ground that I have neither known nor heard of an instance of its doing so; but being perfectly acquainted with the nature of mountain torrents, sometimes a mere thread, sometimes a rushing river, I certainly should consider the tenancy of a nest thus situated, to be held on rather a precarious and uncertain tenure. In England the Buzzard evinces a greater degree of forethought, placing its nest in the forked branches of some sturdy oak deep in a wood where the elements are less to be dreaded than the keepers; as materials for the nest these birds use sticks, twigs, heather, and wool; the last-named article being often found abundantly wherever sheep are pastured. The female lays three eggs, of a dingy white slightly blotched with brown, but I have seen eggs in which this blotching was scarcely to be distinguished. The task of incubating is shared by male and female, and Pennant asserts that should the female be killed during the time of sitting the male will be sure to perform her duties, hatching the eggs and bringing up the young ones.

Mr. Yarrell, in his beautiful work on British Birds, observes that the extreme partiality of the Buzzard for the tasks of incubation and rearing the young has been exemplified in various instances. He mentions one in particular. A few years back, a female Buzzard, kept in the garden of the Chequers Inn, at Uxbridge, showed an inclination to sit, by collecting and bending all the sticks of moderate size, of which, by hook or by crook, she could possibly obtain possession. The landlord, observing this propensity, determined to encourage it by providing a supply of materials fit for making a nest. The Buzzard, delighted with these kind and considerate attentions, completed her architectural labours, but could not manage to produce an egg. So she sat with much gravity on the empty nest. The idea then occurred to mine host that any eggs might do as well as Buzzard's eggs: he therefore placed two hen's eggs under her, which she hatched, and brought off the two chicks in triumph. Since then this notable foster-mother has hatched and brought up a brood of chickens every year. On one occasion, the landlord, her master, imagining the long and dreary task of incubation might, with advantage, be dispensed with, committed to her care a brood of recently-hatched chickens which had unfortunately lost their mother. But this the Buzzard evidently regarded as a deliberate insult: she set to work and destroyed them all. The next year eggs were given her as usual, and she hatched and brought up nine chickens. When flesh was given her she tore it into small pieces, and spread them before her foster-children, and appeared infinitely disgusted when they dropped the savoury morsels in favour of the groats which were also abundantly provided.

The Buzzard is decidedly a partial migrant, numbers passing southward in September and October, others remaining with us all the year; it inhabits the subarctic regions of both continents, and only descends south of Europe in unusually severe seasons.

The beak of the Buzzard is small and weak, but much curved; the upper mandible slender and sharp-pointed, and without a distinct tooth; it is horn-coloured, darker and almost black at the tip: the space round the eyes is naked and yellow. I mention the fact of its being naked, because that common character of the hawk tribe is not possessed by all the buzzards: in the honey buzzard, for instance, the feathers grow close up to the eye itself. The crown of the head and sides of the face are light brown longitudinally streaked with darker brown; the whole upper surface, from the head to the tail, is dark umber-brown; the tail feathers are barred with lighter brown; the wing feathers are dark brown, almost black; the throat is dingy white; the front

* See large Cut p. 73.

of the neck, the breast, belly, and thighs of nearly the same dingy-white hue as the throat, but streaked irregularly with umber brown; the legs and toes are naked and yellow; the claws rather short, but slightly curved and quite black.

SOMETHING ABOUT ANGELS.

It was in the bright and flowery month of June, that Mrs. L., who was a widow, set out with her daughter one Sunday morning for church. Their path lay through fields of green, beautifully enamelled or inlaid with the buttercup and the daisy. A holy stillness reigned all around, as if Nature herself was enjoying her Sabbath of rest. The air was fragrant as incense. The chime of the distant church-bell fell like music on the ear. Everything seemed to minister to holy thought and joyous feeling. Many were on their way to the house of God—coming they were from various points, all meeting under one hallowed roof, and all prepared to take part in the same sublime worship. The morning service over, there was but a short interval between that and the hour of worship in the afternoon. But, lo! a stranger, and not the "pastor of the flock," ascends the pulpit. His theme was the ministry of angels, but the discourse had little of such simplicity of style or variety of illustration as to make it either very intelligible or very attractive to the young. Still it had its interest: for what child is there that does not love to hear of angels, and of the angel world, and of angel visits to this our earth?

After the service, Mrs. L. and her daughter bent their steps towards their own quiet little cottage. It was a humble dwelling; but it was their home. And what a charm there is in that one little word—HOME! There is no other word in our language which has such a sway over the heart and its affections; and the home that is rich in love, is rich in everything else. Home is the abode of love, where all hearts flee into one; it is the throne of peace, where each one is presenting the offering of a purer and more confiding affection; it is the temple of concord, in which sweetest music is stealing from the strings of every soul to make up one full and joyous harmony.

We have said that the theme of the preacher on the Sunday in question was the ministry of angels; a theme which opened up a large field of thought, not only to him, but to his hearers; and in many a family circle gave rise, no doubt, to much lively conversation.

Jane (that was the name of Mrs. L.'s daughter) was much interested in the subject, and was very anxious to get the tea-things out of the way, that her mother might talk to her about it.

"Mother, the minister said that angels were invisible spirits, and their presence could not be known by our senses. Didn't they use to be visible? I read, this morning, about the angel who let Peter out of prison. Did not Peter see him?"

"Yes, Peter, no doubt, saw him. They have power given them, on special occasions, to assume a visible appearance."

"Do the angels love us, mother?"

"I presume they do, for the Lord's sake. What passage of Scripture can you think of which shows that they feel a deep interest in the welfare of men?"

Jane thought for a moment, and then repeated, "'There is joy in heaven, among the angels of God, over one sinner that repenteth.' Mother, are the angels often near us?"

"If there are any here, they are here only to do us good. They are pure and holy fellow-servants of the same Master."

"If they are always with us, must it not make them feel sad when we do wrong?"

"It certainly must grieve them to see God dishonoured, especially by those who have been redeemed by the blood of his Son."

"Is not this another reason why we should be careful not to sin, especially in secret? If everybody remembered that the angels were looking at them, it would restrain them as much as if men were looking at them. And you know we are often ashamed to do wrong before folks."

"I am afraid not:—all men know that God is always looking at them, but it does not restrain them from secret sins."

"That is true, mother. Do good people, when they die, become angels?"

"No: they become perfect spirits."

"I heard Miss R. read a piece of poetry about a little babe that died, and I remember this line—

'Thou art an angel now.'"

"After death, the pious become 'like to the angels.' But, properly speaking, the angels are another order of beings."

"Can the spirits of the pious dead come about us as the angels can?"

"I do not know."

"O, I wish they could: then father's spirit would be always with us."

"It may be so; but we are not certainly informed about it."

"I think that is another reason why we should be careful not to sin. How I should hate to have my father see his little daughter doing wrong! But, mother, did not the minister say, that angels are ministering spirits sent forth to minister to us?"

"He said that they were present to minister to the true and devoted followers of Jesus."

"But how can they help us? Is not God everywhere present, and can He not do for us all that we need?"

"Yes, my child, God is everywhere present, and He is now doing for you and me, and for all His creatures, exceeding abundantly above all that we either ask or think. But that is no reason why He should not employ these bright and blessed spirits in doing His will even in this lower world."

"Well, in what way do angels minister to us? That is what I wish to know."

"That they do so minister to God's children is a fact revealed to us in the Bible, though we are not told as to the way or manner in which they perform their kind and loving offices in our behalf."

"I remember, mother, reading of an angel ministering to Christ in His temptation, and of strengthening him in His agony."

"Then do you not think that if angels could so minister to Christ, who is the Lord of angels, they can also minister to us his humble followers?"

"O yes. I believe it, only I did not see or know how it could be. I do love to read and hear about these good angels; and the story of their carrying the soul of poor Lazarus to Abraham's bosom, I do like very much."

"Well, Jane, here are a few very pretty lines about these angels, which I know will please you much, and which you can commit to memory.

"'How cheering the thought that the spirits in bliss
Will bow their bright wings to a world such as this!

Will leave their sweet songs in the mansions above,
To bring to our bosom some message of love!
They come—on the wings of the morning they come,
Impatient to lead some poor wanderer home:
Some pilgrim to raise from this stormy abode,
And lay him to rest in the bosom of God!"

"How beautiful!—how very beautiful! I should indeed like to learn those lines, and be able to repeat them."

"That's all very well, my dear; but there is something far more important. To have these holy and loving angels to watch over you, their God must be your God. You must have His image impressed upon your soul; you must love Him with all your heart; you must devote all your powers to His service. Then in yon brighter world, of which you so often sing, you may be their companion and associate through everlasting ages."

CALENDAR FOR JULY.

First Week.—Corn sawwort, pheasant's eye, red eyebright, thorough wax, cockle, ivy-leaved wild lettuce, feverfew, wall pepper, privet, common toadflax, perennial wild flax, yellow base rocket, blue bottle, dwarf carline thistle, bulrush, spiked mallow herb, black mullein, chrysanthemum, marigolds, little field madder, calamint, and black horehound in flower—Whortleberries ripe.

Second Week.—Wood betony, round-leaved bell flower, all-good, wild carrot, Indian cress, cat-mint, cow-wheat, crosswort, tufted vetch, wood vetch, little throatwort, sheep's scabious, white lily, hemlock, moneywort, sweet martagon, lesser stitchwort, and fool's parsley in flower—Cranberries ripe—Flying ants appear.

Third Week.—Dwarf elder, potatoe, ragwort, golden rod, star thistle, tree primrose, crown's all-heal, branching willow herb, yellow centaury, yellow vetchling, enchanter's nightshade, water hemp, agrimony, giant throatwort, eyebright, hops, dodder, lesser centaury, creeping water parsnip, common spurrey, wild clover, and buckwheat in flower—Rye harvest begins—Poultry moult.

Fourth Week.—Great burr-reed, Marsh St. John's wort, lundew, March cinquefoil, Lancashire asphodel, hooded willow herb, water dropwort, horehound, water plantain, virgin's bower, teasel, wild marjoram, wood sage, everlasting pea, Trailing St. John's wort, small wild teasel, white hellebore, camomile, lesser field scabious, sunflower, and yellow loosestrife in flower—Wild cherries ripe—Bees kill the drones—Swifts begin to depart.

Moths and Butterflies to be looked for this Month.

A. Galathea.	T. Derasa.
H. Tithonus.	T. Butis.
H. Hyperanthus.	B. Perla.
E. Blandina.	B. Glandifera.
C. Davus.	N. Despecta.
L. Sibylla.	A. Herbida.
C. Cardui.	A. Myrtilli.
S. Oxellatus.	S. Plumaria.
S. Populi.	F. Atomaria.
C. Porcellus.	L. Adustata.
H. Sylvinus.	L. Didymata.
N. Ziczac.	E. Blomerii.
L. Complana.	E. Subciliata.
N. Senex.	C. Dotata.
C. Neustria.	

Caterpillars to be looked for in July, and what they feed on.

Birch.	*Hawthorn.*
T. Betula.	L. Camelina.
P. Palpina.	H. Dispar.
N. Tritophus.	*Poplar.*
N. Dromedarius.	S. Populi.
P. Populi.	C. Bifida.
O. Miniosa.	C. Vinula.
A. Prodromaria.	C. Curtula.
Grasses.	*Willow.*
L. Megcara.	C. Vinula.
C. Pamphilus.	P. Palpina.
	G. Libatrix.

Reviews.

Breeding Cages for Moths and Butterflies. 1*s.* and 3*s.* each. H. Foxcroft, 29, Duke Street, Bloomsbury, W.C.

These are the best and cheapest cages which we have seen. The small one, for 1*s.*, is eight inches high, six inches long, and six inches broad. The large one, for 3*s.*, is fourteen inches high, thirteen inches long, and eight inches broad.

We are informed by Mrs. Foxcroft that she has had the honour of supplying the Royal children, Prince Arthur and Prince Leopold, with these cages. The selection was made by the princes themselves.—Nothing could be better adapted to the purpose.

Pictorial Sunday Readings. 2 vols., pp. 304. J. Sangster & Co., 36, Paternoster Row.

These beautiful volumes are worthy of a wide circulation. The type and paper are good. The same may be said of the pictures, with this addition, that some of them are very superior; the colouring is *très prononcée*, but the impression which they leave is a very pleasant one. The style is easy, with a sort of Sabbath quiet in it. The natural history is correct—a thing which is *not* true of most of the biblical works which contain it. The sentiments are eminently devout. A large amount of reading is compressed, without losing either its clearness or naturalness, into a very small compass, so that a family which buys this book in fact buys a very large library, and that of no mean order, for the highest authorities are laid under contribution.—It is, however, by no means a compilation; it has the freshness of a living production from a mind that is perfect master of the whole subject. It is already a standard family book.

Moral Fables and Parables. By Ingram Cobbin, M.A. Fourth Edition, pp. 176. Ward & Co., Paternoster Row.

This is an illustrated little book for children. It is in Fable what Dr. Watts' Divine and Moral Songs are in Poetry. We wonder the book is not more extensively known; it is only on receiving this edition that we knew it was in existence.

We give one specimen that our readers may judge for themselves:—

Tit for Tat: A True Story.—A little chimney-sweeper was one day sitting on the steps of a door, with a broom in one hand, and a large lump of bread and butter, which somebody had kindly given him, in the other. While he was eating it, and merrily humming a tune, and shuffling his feet to express his pleasure, he saw a poor little dog, quietly sleeping not far from him, and called out to him—"Come here, poor fellow!" The dog, hearing himself kindly spoken to, got up, pricked up his ears, wagged his tail, and seeing the chimney-sweeper eating, approached him, when the rogue held out to him a piece of his bread and butter, and as he stretched out his head to take it, the sweep hastily drew back his hand, and hit him so hard a rap on the nose, that the poor creature ran away, yelling most dreadfully, while the cruel little sweep sat laughing at the mischief he had done.

A gentleman, who was looking from a window on the opposite side of the street, saw the behaviour of the wicked boy, and, opening the street door, beckoned him to cross over, at the same time showing him a sixpence, which he held between his finger and thumb. "Would you like this?" said the gentleman.—"Yes, if you please, sir," said master sweep, smiling, and hastily ran over to seize the prize; but just at the moment that he stretched out his hand, he received so severe a rap on the knuckles from a cane which the gentleman had concealed behind him, that

made him roar out like a bull. "What did you do that for?" said he, making a very long face, and rubbing his smarting knuckles; "I didn't hurt you, nor ask you for the sixpence."—"What did you hurt that poor dog for, just now?" said the gentleman; "he didn't hurt you, nor ask you for your bread and butter: as you served him, I have served you; now remember, dogs can feel as well as boys; and learn to behave kindly towards poor animals in future."

Amusements.

TOPS.

PEG IN THE RING.—Peg in the Ring is at the top of all top-games. It needs more skill to play it than any of the others. Half-a-dozen boys choose an open piece of ground, level, and moderately hard. Make a ring about three or four feet across. You may make a nearly perfect circle if one boy press one end of a top-string to the ground, keeping it at the same place and then twisting the other end round the peg of a top, or a piece of chalk, and another boy therewith describe a circle, keeping the string stretched all the time.

The ring having been made—in the next place draw lots to settle who shall lay down his top first, in the centre of the ring, to be "pegged" at. Agree clearly beforehand whether it shall be the boy who draws the longest or the shortest lot, and then keep the engagement honourably. To prevent mistakes and disputes, let the lots be each one sufficiently different in length from all the others, to determine easily which is the longest or shortest. If you draw the lot which obliges you to lay down your top—down with it, promptly and cheerfully.

The other boys are then to "peg" away. *This had better be done in turn; one boy at a time,* the others, standing out of his way, on either side of him.

If any boy, on throwing his top, should "cast" it *outside* the ring; or if it be "cast" *in* the ring and *not spin*, or if it spin in the ring and fail to roll or "reel" outside the line; or if a boy spins his top in the ring and take it up before it "reels," in every case his top must be considered "dead," and he must place it in the centre to be pegged at with the other or others that may be there before. There the tops must remain until pegged out, or all the tops be dead. In the last case the game must begin again and lots drawn as before. If the top, having "reeled," should lie *with any part of it touching the line*, it is a "dead" top, and must be placed with the others in the centre.

If a boy in "casting" his top at any top in the ring succeed in splitting it, the peg of the split top is his. The chief value of this is that it is a proof of his skill, which in anything is valuable;—for it is worth while trying to excel in anything we do. Of course it will be well in trying to succeed to take pains according to the importance of the object at which we aim. It would be folly to take as much trouble over a peg-top as we should over a lesson or a sum, if trouble be needed to do the one or learn the other, or to do a kind act to any one needing our help.

Those tops spin the longest, and "sleep" the most soundly, whose pegs are the shortest. Those tops which are heaviest, and whose pegs are longest, do the most damage when they come down upon any other, and they "reel" the farthest when they have done spinning, so that they mostly escape the boundary of the ring.

HUMMING TOPS spin and hum better on the hard boards than on a carpet. Do not use a very long *string*. You can judge pretty well of the *tone* of a humming top when you go to buy one, by blowing it something in the same way as you would blow a flute.

A race with WHIPPING TOPS is not a bad game—it is said a dried eel's skin is the best thing to whip them with: a bit of old clothes-line, untwisted and tied to the end of a stick two feet long, will do, we should think, as well.

ANSWERS TO PICTURE PUZZLES IN OUR LAST.

1.

SIR,—The following custom prevalent among the negroes of the West Indies may solve puzzle No. 1 of your number 6.

If a negro loses anything and is unable to find out the thief, he straps a key in a Bible and gets it supported on the one side by a man and a woman on the other. He then repeats the following lines, mentioning the name of the person he suspects:—

By St. Peter, by St. Paul,
If it's ——, it will fall.

If he should prove unsuccessful he then repeats a second time the lines, mentioning the name of another person, and so on until the Bible falls. The person last mentioned is considered guilty.—A. GRANT.

We have received the following Explanation also:—

The key is held by two persons on the index fingers of the left hands, care being taken to allow space enough for the key to turn. In the choice of a book, one must be guided by weight; the Bible we never experimented with from principle, especially as any book will do—one of Bohn's volumes; a thick octavo will do well for a moderate-sized door key. Held as in the cut, for a short time, the key will turn half round, that is, it will become at right angles to its former position. Our readers must not suppose we think it to be magic, or anything else but a new and *probably magnetic fluid, emitted from the persons, and influenced by their will;* if it be not the involuntary muscular action of the holders as suggested by more than one person. It is influenced by the will, as will be proved by the following experiments:—

Fix on a name which both parties know, say "Eliza;" repeat the letters of the alphabet at intervals, by the watch, of five seconds, the key will turn at the letter E. Replace the key, and, the same process the key will move at the letter T, the name "Thomas," being fixed on; the difference of time employed in the experiments being seventy-five seconds. If one of the persons only know the name, the key will turn, but more slowly and hesitatingly, proving that the influence of the will of two is more powerful than that of one; where neither, but a third person present, knows the name, the key will not turn, with certainty that proving that it is merely a scientific experiment, and, as every one but the most credulous must at once perceive, useless for purposes of soothsaying. Our readers will find some amusement in trying these, and especially in testing the strength of one person's will over another.

2.

Cestrian sends the solution:—

Time flies, but friendship stays.

3.

An Eddy—A Neddy—An Ass.

4.

No answer sent. Will the person who sent the riddle send the answer?

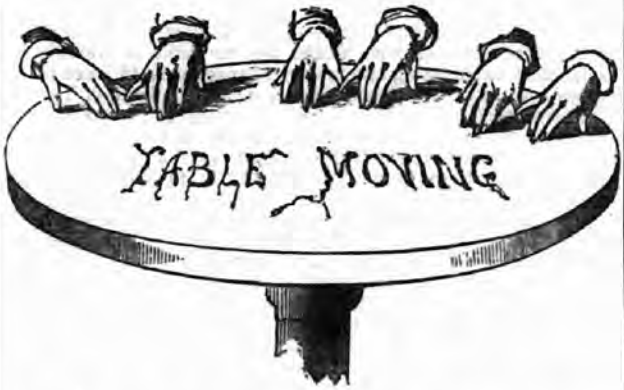
5.

Practice will overcome the difficulty.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

Can any one give us a short rational account of this table-moving?



2.

This was sent us by a little girl for little folks like herself.

The following are from Mr. W. Stanbridge:—

3.

I am of great use in agriculture. Being born quick, if my head is taken off I am still sharp.

4.

When at work I am always obliged to be guided. Then I require a beverage at every certain distance, or else I cannot do my duty with success. If used well, I work well; but if treated in a careless manner I do my task accordingly. Age and use spoil me, like everything else.

5.

Whole I am of no value; but if made less I am worth more.

6.

My first feeds my second, making it my whole. I am an English plant.

7.

My size varies, but my figure is exactly the same. When working quickly I appear motionless. I am useful in time and travelling. If beheaded I am a part of your body, and if treated so again I am a fish.

8.

I am a sound—a letter—and if read backwards a famous place for education; and if then made less, am more than you could lift.

9.

My first is a lady, my second an ornament she wears, and my whole a fish.

10.

I am a number, which, if made one less, am half as much again, and if robbed of my half, am still worth more.

11.

My whole is a change, refreshing and agreeable to weary travellers; behead me, and I am the next thing they wish to do, when at my first.

12.

I am one of the most useful beings, and, reversed, certainly the most mischievous one in existence.

13.

I am always found at my post doing my duty, and, therefore, a respectable character, at the same time helping others to do theirs. My first shows my second.

14.

Why is a clock like a pair of scales?

15.

My abode is in various places. I am very obstinate and self-willed. I will not be driven at once to do my duty, but I make my owner prepare my way ere I start on my journey, then being helped with needful assistance. When once in the place he desires I never desert it by my own wish, but make it my home for life. If encountered with an old antagonist whose face I well remember, he being so much larger and stronger than myself, I am obliged to leave my home, though, perhaps, only for a time; after which I am put gently back again to my old dwelling-place, being, through my obstinacy, a little bruised on my head; but these are only slight injuries (luckily for me), my back being fitted for the burden.

THE ROYAL RIDDLE.—The following enigma is said to have been written by the Queen for the Royal children:—"The initials of the following places form the name of a town in England, and the finals (read upwards) what that town is famous for:—A city in Italy, a river in Germany, a town in the United States, a town in North America, a town in Holland, the Turkish name for Constantinople, a town in Bothnia, a city in Greece, a circle on the globe."

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

CATERPILLARS OF V. ANTIOPA AND N. ZICZAC.—Will you kindly describe to me the caterpillars of V. Antiopa and N. Ziczac?—F. D. CREMER.

[The caterpillar of Vanessa Antiopa, or the Camberwell Beauty, is rare. It may be popularly described as black, with round red spots on the back; the feet also red; long spines; and the body looks as though tied tightly round with string at ten or a dozen intervals. See, however, Mr. Newman's description in the Butterfly Number. Ziczac's caterpillar is very singular ash-coloured above, purplish underneath, a light line at the side, with two prominences on the back.—ED. Y. E.]

MACULATA AND VINULA.—I took three specimens of a small moth the other day in the neighbourhood of Plumstead, all the four wings of which are deep orange, spotted over with brown, body yellow and brown mixed, and antennæ rather long; they were flying in the sunshine. Can you tell me the name of them? Also, if there will be an account of the puss moth in the other extra moth numbers of YOUNG ENGLAND, as I have the first three, which contain the whole of the nocturni, and it is not in them?—A. H. A., Charlton.

[The description answers to *Venilia Maculata*, the Speckled Yellow.

The Puss Moth, *Dicranura Vinula*, is among the Pseudo-Bombyces as arranged by Mr. Doubleday, and will be described when, in due course, we come to them.—ED. Y. E.]

Deer.—A. Wilkinson is quite right. One grand division of animals of the deer kind (Cervus) have their horns bony, and shed them annually; the different species at different times of the year. The horns of the common stag fall in February and are renewed in July and August. The other divisions have their horns hollow and lasting, such as the antelope, gazelle, &c., &c.

Exchange of Insects.—A. Aglaia, T. Tages, S. Populi, A. Connexa, L. Olivaria, N. Zonaria, A. Alni, P. Monacha, H. Dominula, A. Vallica, S. Tillie, C. Porcellus, E. Cassiope.—Address, T. H. Wood, 39, Bondgate, Darlington.

Wm. Cole, of 4, Sutton Place, Hackney, will be glad to exchange young Larvæ of Aretia Mendica, &c., Pupæ of Hybernia Progemmaria, for Larvæ not in his collection. Write before sending boxes.

Birds' Eggs.—George Stedman, Lindfield, Sussex, has the following "British Birds'" Eggs (with several commoner species) to exchange. Persons wishing to exchange will please send their list of duplicates, and then he will arrange respecting an exchange:—Red Back Shrike, Dipper, Ring Ouzel, Stone Chat, Whin Chat, Wheat Ear, Grasshopper Warbler, Nightingale, Black Cap, Garden Warbler, Lesser Whitethroat, Wood Warbler, Chiff-Chaff, Great Tit, Long-tail Tit, Tree Pipit, Rock Pipit, Common Bunting, Cirl Bunting, Goldfinch, Less Redpole, Bullfinch, Jay, Creeper, Nuthatch, Turtle Dove, Green Plover, Moorhen.

Moths. Sir,—Having just taken several specimens of the rare Agrotis Ripæ, M. Albicolon, and others, I am willing to exchange duplicates of them for the Death's Head, Convolvuli, or others, as may be agreed upon.—Dunlop Duncan, North Street, Workington, 14th June, 1862.

A Great Army.—We sometimes hear a great deal about the armies of different nations, and the great standing armies some have, and generally a country is very proud of its army. I suppose most Englishmen are proud of the British Army; so noted as it is for its bravery and power. But there is another great army in Britain, a shame and disgrace to our beloved land, and over which every patriot should weep! These are not brave defenders of our country, but fearful enemies! like canker-worms, eating their way into every grade of society. And it is calculated, upon very good authority, that in this army there are no less than six hundred thousand, and all drunkards! What a sad fact; an army of British drunkards! And to give you an idea of the greatness of this number, if all these drunkards were arranged in a row, standing side by side, they would almost reach in one unbroken line from London to Glasgow, a distance of nearly 400 miles; or, if they were to pass by in succession a particular spot, at the rate of sixty every hour, it would take nearly fourteen months before the long line was exhausted!! It is unnecessary to describe to you what a drunkard is, and what sort of people they are, who form this great army. Alas! you have too often seen him staggering in the street, or unable to stand or walk. You have seen his wild or stupid look, and heard his foolish and wicked language, and no doubt you have sometimes seen him dragged to prison for some crime he has committed, for all sorts of crimes are every day committed under the influence of intoxicating drink; and we cannot look over a newspaper without finding some case or other related where drunkenness has led to some wicked deed. You must all admit that drunkards are enemies to God, themselves, society, and their country, and that this army at any rate ought to be disbanded, and the sooner the better. Now, does your example help to do this? Perhaps we shall say a little more about this army soon, where they come from, &c.—Your sincere friend, Hopeful.

Young England Association.—We find, in a letter received from Mr. Macmillan, a Natural History Society has been formed at Birmingham under the above title.

Captures of Lepidoptera.—Mr. Howard Vaughan, of 14, Gaisford-street, Kentish-town, has captured in a month more than thirty species, some of them rare, among which we observe Libatrix, along the Essex coast, from 15th May to June 13.

W. and S. Dixon have taken two V. Cardui nearly in the same spot as Mr. Wm. Cole took his; also C. Furcula, and bred Elpenor.—Hackney.

The British Moths.—We are glad to find Mr. Chapman has the three numbers containing the whole of the Nocturni. "Nocturni" is the plural form of nocturnus, meaning "by night." It was used at first to distinguish the moths, which mostly fly by night, from the butterflies (*Diurni*), which fly by day. It is retained by Doubleday, whom we follow as the best authority. It must not, however, be supposed that all the moths included under this division fly by night only—the Sphinxes, for instances, fly early in the morning and ate in the evening. If Mr. Chapman wants a book on the moths already printed, he had better get Mr. Stainton's, published by Mr. Van Voorst, Paternoster Row.

Birds' Eggs.—Can be sent safely by post. D. J. G. should write to any of the naturalists who advertise in our paper.

Cosmia Trapezina.—I have some rows of this insect to distribute gratuitously. I shall be happy to send sets (not exceeding six) to any one wanting it, and who will send a box and return postage. Applicants are requested to write before sending a box, that the demand may not be greater than the supply.—Address, F. Lovell Keays, 4, Harringay Villas, Green Lanes, Tottenham, N.

Plan for Exchanges.—Sir,—I think it would be a good plan for all persons who would like to make a practice of honourably exchanging entomological specimens to have their names and residences published in a separate column of Young England, each paying the advertisement charge; it would save trouble in the end, for a list of insects cannot be conveniently published for exchange. By referring to such a list, one might choose an address from a locality likely to yield what he wanted, and forwarding thither a list of duplicates and what he required in exchange, an answer might be obtained soon afterwards. If you can improve the suggestions, or give others to the readers of your excellent paper, I shall be pleased. In the locality I have been in this spring (Northamptonshire) specimens of Vanessa Cardui have been plentiful, and, as it is a general species, those who have not yet captured one will, perhaps, stand a good chance of doing so next harvest time, if the breeding season is good. I captured one of three specimens taken last week in one lordship; it was a good one. I had not one in my collection or I should not have taken it, because I do not hold with destroying hybernated specimens. Several others I saw were more or less faded and injured.—Tinea.

Eggs of the Shrikes.—Sir,—In answer to your correspondent, M. A. Williams, I beg to state that the difference between the eggs of the Great Grey and of the Redbacked Shrike is, that the eggs of the Redbacked Shrike are pale-whitish blue, or sometimes pale green and also pale red for the ground colour; markings, hazel or dull brown, there being an irregular circle of spots of that colour at the larger end. And the eggs of the Great Grey Shrike have yellowish or greyish white ground, and the spots of grey and light brown. The above description is taken from *British Birds' Eggs and Nests*. Routledge.—E. H. Marshall. [This is not satisfactory. It is as much as A. Williams asked for, and very clear; but it will not determine the question which really lies under all, viz., *Were the eggs of the Great Grey Shrike taken from a nest in this country?* If so, who took them and where were they taken? Mr. Williams should obtain this information and send it at once.—Ed. Y. E.]

W. B. Carlisle will find the reason for publishing the British Birds as we do now as we proceed; it would not suit our purpose to give it at the present time.

Postage Stamps.—Dr. Gray has omitted in his description of English stamps to describe the 10d. stamp. It is square, Queen's profile, embossed to left, in six-sided frame, an inner and outer one, postage tenpence, ascending from left side. Fourpenny stamps are sometimes different, some having letters in each angle, others having none.—Yours obediently,

Cestrian.

The Garibaldi Shirt.—Can any one tell me in your next number of what material the red shirts of Garibaldi's soldiers are made?

Medium of Communication for Naturalists.—We have received a sensible, well-written letter, which suggests Young England as a medium of communication for those interested in Natural History, on the same terms as the late *Intelligencer*. We are quite willing to adopt the proposal. Will our correspondent send a clear, succinct statement of his plan, and we will publish it. In the meantime, any original information, properly authenticated by the real name and address of the writer, will be inserted if of sufficient general interest.

How to kill Butterflies, Moths, and Beetles.—Can you inform me the best method for killing insects?—C. Bennett, Birmingham.

[Get three-pennyworth of Cyanide of Potassium and dilute it in water; dip a large needle in the mixture, and pierce the thorax of the insect; its death will be instantaneous.]

Sugaring for Moths.—Can you tell me how to make the compound for sugaring? as well as when, where, and how I may

best use it? as I have been very unsuccessful, only catching one single moth in at least one dozen evenings, in which I have put treacle, beer, and rum, mixed together, on elm trees.—F. D. Cremer.

[A communication from Mr. Corbin supplies the answer:—Many young beginners do not perfectly understand it on account of not practising enough *patience*; if they are not successful the first or second night they give it up as useless. I should, without doubt, have been the same, had I not been favoured with the invaluable assistance of the Rev. J. Greene. I now, for the use of my unsuccessful and disconsolate brothers of the "net and pin" give a few hints, which I hope will meet the approbation of many, and the contempt of few. There are various ways of making this sugar. Mr. Shield, in "Practical Hints," gives the following receipt:—Ale, nearly half-a-pint, common honey, half-a-pound, foots, quarter of a pound, rum, half a wine-glass-full, essential oil of bitter almonds, five drops. Some only use a mixture of ale and sugar. What I use, I make in the following way:—One pound of the thickest treacle you can procure, to which add enough ale to make it the consistency of cream; into this, put two table-spoonfulls of rum, which, after shaking, is fit for use. I carry it in a large-mouthed bottle, so that a painter's small brush will go into it. With this brush I put it perpendicularly upon the trunks of the trees, about five or six feet from the ground. This is done about dusk. One stripe with the brush is sufficient, as a little will attract the moths. Not only trunks, but foliage and posts, or almost anything will do for the purpose. Put on your sugar, not only in one or two places, but the more the better: you must also provide yourself with a bull's-eye lantern. In "Practical Hints" we read, "When the ghost moths (*Hepialidæ*) begin to fly, we may be sure that those insects that will visit our sugar are preparing to start from their hiding-places." We must very soon after this, visit the places we have sugared, and shall, I have no doubt, see several sitting at the sugar busily engaged in appropriating to their own personal use the dainty feast prepared for them. Moths will continue to come for several hours after sunset, and some even to day-break, but if you do not find *any* the first time you look, after dark, there are seldom any that evening. *Damp* evenings, with little moonlight, and the wind in the south-west, will be found the best for sugaring, as then moths fly low. Moonlight nights will generally be found unproductive, but I have taken Cosmia, Diffinis, and Affinis, when the moon shone so bright I could take them off without the aid of a lantern. Some moths will not wait for you to take them off, but slip down the trunk, so it would be as well to have a net to hold under your sugar. There is a moth called "the mouse" (*A. Tragopogonyx*), which comes very freely to sugar, but it adopts this plan of escape, as soon as you show the light upon it; but we will suppose that you have some moths that sit quietly feasting away, and you want to know how to take them off without damage, for you see it is a rare one only just emerged from the pupa, so you must not handle it. Some say put each in a separate pill-box, but I do not like this plan: from experience I know that some moths (take, for instance, the old lady, *Mania Maura*) will not remain quiet in the box. I make use of the following plan:—I get a tin box about six inches long, and of an oval form, with a lid at each end, and a perforated bottom: about two inches from one of these ends, into the small compartments I put some laurel leaves which have been cut and pounded to almost a pulp, and with the other I take the "favourites" off. Be sure and fill the box, so that the laurel cannot shake about. This box is useful for taking moths out of the net, and also for relaxing. Some of the moths which come to your sugar will be very lively, they have not been there long enough, so box those quickly; others you may just touch, and they will fall into your box as if intoxicated, if I may be allowed the expression. The prussic acid which arises from the laurel leaves will only kill the smaller species; the others will only be stupified, and will soon revive if taken out; so you had better carry your poison, when hunting to kill and *pin* them as caught. There seem to be many things required for "sugaring" by my descriptions, and I think that some beginners would suppose such a lot to be cumbersome. I have a bag like a letter-bag, in which I carry the whole, and when I have sugared I hang it on a branch of some neighbouring tree, and employ the time between putting the sugar on and taking the moths off, in "mothing" with the net. Most of those which come to sugar are noctuæ, but I have taken the mottled beauty (*Boarmia Rependata*), and several specimens of a ground beetle (*Carabus violaceus*). I also once saw a larva of one of the footmen (*Lithosidæ*) at sugar on a fir tree. If you are not successful the first four or five nights, do not abandon it as useless, for you know not what "good things" await your efforts. It would be almost impossible to enumerate the once rare, and even unknown, species which have become comparatively common by its use. In the late *Entomologist's Weekly Intelligencer*, No. 292, a correspondent wishes to know the *laws* of sugaring. Round Ringwood they are as follows:—Sugar as many trees as you like, and *have* the moths which come to it, for there is no brother entomologist to interrupt you here; all you have to fear are the gamekeepers—more to be dreaded than an entomologist. Mr. Stainton says, that in the north entomologists are plentiful and trees scarce, but this is quite the reverse in many of the places in the south. The most abundant at sugar are, I think, the great yellow underwings (*Tryphana, Orbora*, and *Pronuba*) which you may take on almost any night. Sugaring seems a very exciting pursuit, as you attract the before-hidden gems within your reach, which otherwise your eyes would never behold. You may sugar from March to October. I have read that when the apple-tree (or, in fact, any tree that has the smell of bitter almonds,) is in bloom, it is useless to try sugaring. I have endeavoured to describe sugaring and the apparatus required as plainly as I could; but I am only a beginner myself, so I hope that all errors will be forgiven, as this is written for the use of those who know nothing of the charms of sugaring.—J. B. Corbin, Ringwood, Hants.

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YOUNG ENGLAND.

VOL. I.—No. 8.] AUGUST 1, 1862. [PRICE ONE PENNY.

THE RIGHT HONOURABLE LORD BROUGHAM AND HIS NEPHEW

THE RIGHT HONOURABLE HENRY, LORD BROUGHAM.

THERE are some men whom no rank can exalt, and whom no titles can dignify. It is enough to pronounce their names to insure all but universal homage. For example—OLIVER CROMWELL and JOHN MILTON are names to which any adventitious distinction or fancied elevation could lend no lustre. They would rather suffer than gain by any addition. And so we may say of the illustrious man who is the subject of our present sketch. Lord Brougham has never been a greater man than Harry Brougham; and as the Lord High Chancellor of England, he did not stand one step higher than when as an untitled barrister he practised at the bar. At that time he was the idol of the nation. The people of England looked up to him with all the admiration and all the reverence which true greatness alone can command. Every child, as well as every grown-up man, was as familiar with his name as if it had been a household word; and while the one was taught to love him, the other was forward to honour him. He had won for himself, by his principles and public conduct, a fame which all might have envied, but which no one else could claim. He devoted himself to the people; and the people soon decreed him his position in an age not at all destitute of great men, and marked by noble and generous activities; nor has he ever lost that place. Though he is now more than fourscore years old, he still lives in the affections of the nation; and with the nation's interests he has still a full and hearty sympathy.

Henry Brougham was born in the city of Edinburgh in 1778, and after spending his earlier years and pursuing his first studies in the schools of that city, he entered its University, in which there were at the time students of no ordinary mark, and among whom he singularly distinguished himself. Not long after the close of his University career, he was called to the Scottish Bar, where he would soon have rivalled and even surpassed all his contemporaries; but which, in a little time, he quitted for the wider practice of an English barrister. The path to the highest legal eminence now opened before him; and that eminence he was resolved to reach. He became the first pleader at the bar, and there was scarcely a case of any importance for which he was not specially retained. His defence of Caroline, Queen of George IV., was one of the grandest bursts of forensic eloquence ever heard. The advocate forfeited the smile of the Sovereign; but the prince was an inferior man to the pleader; and he who stood on the side of injured virtue and of insulted justice, was destined to reach the pinnacle of power.

Brougham entered Parliament, and there found a platform on which to exhibit the might and the mastery of his intellect, with all the fire and the force of his stirring eloquence. The subject of popular education found in him one of its enlightened expositors and unflinching advocates; and negro slavery one of its most determined and dreaded opponents. Some of his speeches on both these points, but especially the latter, are master-pieces of human thought and eloquence. He was at home on almost every subject, and when he left the House of Commons to take his place among the peerage, it was no little loss to that branch of the Legislature and to the country at large. It left that House poorer in mind and in power, and withdrew from the circle of the people, the man to whom above all others they were disposed to look and in whom they were willing to confide.

While Lord Chancellor he disposed of arrears in Chancery which had been accumulating for many years; and, if we are rightly informed, so successfully did he dispose of each case, that not one of his judgments has ever been reversed.

But as if his official duties were not enough for his time and strength, he gave himself largely to the pursuits of science and literature. From very early life he had an intense love of letters, and to this study he has ever since devoted his great, his colossal energies. He was one of the original projectors of the "Edinburgh Review," whose influence is co-extensive with the whole of the civilized world; and there is scarcely any subject within the range of human inquiry on which he has not written and published. His intuitive power is only equalled by the versatility of his genius. Some of his works are of great and permanent interest, and all of them will be referred to as models of English composition. His knowledge of our mother-tongue is greater than that of any other living man; and it is truly astonishing with what effect he can bring out its compass and its power.

It would be easy to specify several of his lordship's works as worthy of the study of our youthful readers. His little volume on "Instinct" is full of interest. His four volumes on "The Statesmen of George the Third's Time" are highly instructive, as throwing great light on that period of our national history, and on the great public questions which then occupied the minds of the first and ablest men. His Parliamentary Speeches, printed in four large volumes, are worthy of his prodigious intellect; while his work on "Natural Theology," and his "Notes" to Paley's book on the same subject, reveal the versatility of his genius and the grasp of his mind.

From the time that he entered on public life—now some sixty years ago—his active mind has been occupied with the most benevolent and philanthropic schemes. He has ever stood on the side of our common humanity; and in every effort which has been made to emancipate and improve the condition of man, he has taken a conspicuous part. He has proved himself the sworn enemy of oppression and wrong in every form; nor has he ever failed to lift high his voice in support of justice and of right. His name has been a guarantee for all that is enlightened and liberal—for all that is just and good in the sphere of social life. And to him not only our country, but humanity, owes a debt of deep and lasting gratitude.

Though he has not been denied the honours to which his active and philanthropic career so justly entitle him, yet many of them have come to him in his later years. We greet him now as their worthy possessor. By a gracious act on the part of the Queen, his peerage descends to his brother and his heirs: nearly three years ago, the University of Edinburgh, on the basis of the Act which gave to the Scottish Universities an independent constitution, elected him as its first chancellor; the Association for the Promotion of Social Science unanimously chose him as their president; and only a few weeks ago the University of Oxford did itself infinite honour by conferring on him one of its highest honorary degrees. Nor this only: many years since he was elected a Member of the French Institute, a distinction but very rarely bestowed on any Englishman; but never more wisely or justly conferred. Yet he has worn his laurels with great meekness, and the simplicity of his character is one of its brightest ornaments.

Here is a man whose early life and studies, whose

long and brilliant career, whose prodigious powers and labours, whose reading and accumulated stores of knowledge, whose versatility of genius, whose philosophy and whose oratory, whose philanthropy and whose activity, should stimulate every youth throughout the land;—a man who has very largely worked his own way to that proud pre-eminence which he now enjoys, and who therefore becomes an example—a model. The same path is open to others, and the noblest ambition may be gratified. But let it never be forgotten, that if we would rise to true greatness—to any eminence worthy to be reached—we must in early youth, as Lord Brougham told the students at Edinburgh on his inauguration as Chancellor, get from true religion "that impression which never can wear out by lapse of time, or be effaced by the rival influences of other contemplations, or be obliterated by the cares of the world;" for "the lessons thus learned and the feelings thus engendered or cherished, will shed their auspicious influence over the mind through life; protection against the seductions of prosperous fortune, solacing in affliction, preparing for the great change that must close the scene, by habitual and confident belief in the King eternal, immortal, invisible—the only wise God,—and in the humble hope of immortality which the study of His works has inspired, and which the gracious announcements of His revealed will abundantly confirm." There is a clear ring in these words—let Young England listen to it.

LONDON, AUGUST 1, 1862.

THREE times three, and a good hearty cheer for the holidays! The schools are broken up, and Latin verses, and Greek plays, and mathematical problems are all for the time given to the winds; and Young England, set free from the restrictions and severer discipline of the class-room, is seen leaping for joy, and, with a heart light and buoyant, is making the very air ring with his loud and merry laugh. The wise man says, "There is a time to play;" and the boy who has really worked from Christmas to Midsummer is entitled to rest and recreation. And whether he be amid the endearments of home, or by the seaside enjoying the water and the breeze, or visiting some of the more lovely spots of his native land and feasting his eye with "Nature's wildest grandeur," or is pursuing his travels on the Continent or in even more distant lands, we wish him, from our very soul, a happy vacation; and hope he may find himself at the end of it stronger both in mind and body for renewed study, or for the more serious business of life. It is no sin for a man to be poor, but, in these days of education and cheap publications, it is a great sin for him to be ignorant. Whatever be the sphere in which we move, and whatever be the vocation in which we are engaged, a good education will be found of invaluable service. Other things being equal, a well-educated, intelligent, virtuous youth is sure in this country to succeed; and in the race for even this world's prizes he will not be a loser.

The schools are empty; but our city was never so full of people as at the present season. Thousands are crowding into it from every county in England; nor is it possible to walk our streets for one short hour without observing how largely the foreign element is with us. The Continent of Europe is fully represented in our midst; nor are more distant nations wanting in the ever-flowing waves of population that we everywhere see moving to and fro. What is the object of attraction? This year has been unusually rich in its provisions to engage and gratify the public taste; but of these the first place is certainly due to the GREAT INTERNATIONAL EXHIBITION. Never in the history of our world was there brought together such a collection of products, physical and mechanical; nor is there any other land on the face of the earth where such an Exhibition could have been secured. It is something altogether unique, stands quite alone, and challenges universal attention. Nor can we but regard it as indicative of the progress and character of the education of these latter days, when so many thousands crowding upon thousands are drawn away from their homes, at no little cost and perhaps inconvenience, to witness such an Exhibition. And if there be any one of our readers who has not seen it, then we say, it must be seen to be appreciated.

In going into the Exhibition we go into a Temple of Concord; but the world is not at peace. The war in America is becoming yet more horrible—more diabolical. In Russia political discontent is leading to the destruction of property and the loss of life. In Italy the work of unification is not yet completed; but events point in that direction; and that is the goal to be reached. Garibaldi is out on his mission; and the people are in expectation. At home, the distress in the north is becoming truly serious. The weather is treacherous: and fears are being entertained about the crops. But the God of Providence is the God of Nature; and He will, in fulfilment of His own promise, crown the year with His goodness, and fill our hearts with food and gladness.

SOCIETY OF ANTIQUARIES.

AT some of the late meetings of the Society of Antiquaries there have been exhibited several objects of great historical interest, and communications made every way worthy of the attention of Archæologists. For example:—

In the parish of Sherfield, near Royston, in a tumulus opened some years ago, there was recently found at a considerable depth a cist, in which was a beautiful little British urn, containing what are believed to be the bones of a child. The perfection and great beauty of the vase, together with the central position in which it was found, seem to indicate some high rank in the person buried.

At one of the meetings of the Society, there was exhibited a square piece of scarlet cloth, said to be a portion of the cloak worn by Charles I. on the scaffold when he was executed, and to have come into the possession of Mr. William Walcott, who was page to the king, and student in the Middle Temple.

Also a rich piece of silk brocade long used in the Walcott family as a christening robe.

At another meeting, there was exhibited an elegant lady's ring of the sixteenth century, lately found in excavating in the Schloss Mansfeldt, near Eisleben, the seat of the Counts of Mansfeldt, and close to the town where the man Luther spent his boyhood.

A week later there were shown pen and ink drawings on vellum, in a small bound volume of thirty-four pages, with stamped ornaments, and richly gilt. The last four of these drawings depict—Christ preaching in a temple to seated crowds; Christ standing alone; Christ seated in the clouds with the angels sounding trumpets; and a bearded man, with a sword in his right hand, and a horse's jaw-bone in his left, walking amongst a number of prostrate figures of men, women, and children.

THE YOUNG NATURALIST.

CHAPTER V.

USEFULNESS OF INSECTS.

Some days after the events had occurred which were mentioned in our last chapter, as the children were walking through the orchard, Robert saw a caterpillar's nest in an apple-tree, and as he pointed it out to William, he remarked, "What destructive things insects are!"

"That may be," replied his brother, "and yet they are made for some wise purpose."

"It seems to me that they do more harm than good. Only think, how many trees the canker worms destroyed last summer."

"Because canker worms do injury, that does not prove that all insects are injurious. Some other kinds may be very useful."

"Caterpillars are another kind; but they are not very useful, are they?" asked Robert, with a smile.

"Why, yes," answered William.

"What, caterpillars useful?"

"Certainly. Father says they are good for the birds. Many a bird has made a good dinner upon them, and if caterpillars and all other insects should be destroyed, many kinds of birds would find it difficult to get enough to eat."

"What I mean," said Robert, "is, that they are not useful to men."

William doubted this, and yet he could not prove that it was incorrect. They agreed to submit the case to their father, for his opinion. Accordingly, when they returned to the house, William, after relating the conversation with his brother, asked Mr. Rogers whether he thought that insects were more injurious than useful. His father told him that the Creator was governed by wisdom and goodness in all His works; and to say that anything which He had made did more injury than good, was to express a sentiment which did the Creator no honour.

"But are not some insects," asked Robert, "very destructive?"

"Certainly," replied his father. "Locusts sometimes overrun whole countries, and devour every green thing which they can find. One kind of insects destroy grain, another devour fruit-trees, another eat up our food. One kind of moths ruin clothes, another kind get into trunks and boxes, and even the solid wood of the beams and timbers of our dwellings, and completely destroy them. Do you know why I sprinkled ashes upon the young cucumber plants and vines in the garden?"

"You said you did it to destroy the bugs."

"True; and if I had not done it, many of those plants would have been ruined. Besides all this, there are some insects which give great annoyance both to man and beast, and sometimes they destroy human life. But we ought not on these accounts to say that insects, as a whole, are more injurious than beneficial. We should remember that there are various other kinds, whose labours are highly profitable, and the advantage which we gain from them is probably greater than the loss occasioned by the others."

At this last remark of his father, Robert was somewhat surprised. He had formed his opinion of insects, in general, from the various species which are found in gardens and orchards, and which he knew were exceedingly destructive; he therefore asked his father what kinds he considered useful. His father told him, that all those species which made articles which men could use for various important purposes, were beneficial.

"And what articles do they make?" asked the inquisitive boy.

"What kind of dress has your mother got on?" was the interrogative reply of Mr. Rogers.

"Silk," answered Robert.

"Is silk a useful article?"

"I think it is, pa."

"You are correct; it is used for gowns, cloaks, hats, handkerchiefs, gloves, stockings, umbrellas, and numerous other purposes. Many thousands of yards are used every year: now, all this silk is made by insects."

"How strange! insects make silk?"

"Yes; a kind of worm or caterpillar spins the silk, and men manufacture it into the various articles which they want. You will allow, then, that silk-worms are useful."

"I can't deny it," replied Robert.

"How is it with bees?" continued Mr. Rogers; "are they useful or injurious?"

"They are useful," said Robert, after a moment's hesitation, who by this time began to have a different opinion of the value of insects from what he had cherished before.

"Certainly: if all the honey which bees in all parts of the world make in one year, were collected together in one place, it would make quite a large lake; and if all the beeswax which they manufacture in the same time, were brought together, it would be almost enough to build a little city upon its shore."

"Oh, how I should like to live in such a place!" whispered Emily to her mother.

"It would be sweet living, my dear, to occupy a wax-house on the borders of a honey-lake. I should hope, however, that the sun would not shine very powerfully."

"Why not, mother?"

"Because it would be a sad misfortune, if, while we were gone to make a few calls, our house should melt down and run away."

This little digression was finished by Mr. Rogers' asking the boys what kind of ink they wrote with at school.

"Black ink," was the answer.

"Is black ink useful?" asked their father. The children could not help smiling; they all knew that ink was valuable, and they could not see the object of their father in asking such a simple question. He therefore answered it himself; and after dwelling upon the usefulness of the article, he informed the children that an important ingredient in ink was nut-galls, which grew upon trees, and were about as large as cherries, and that these nut-galls were produced by insects.

"I don't understand that," said William. "How can these nut-galls grow upon trees, and yet be made by insects?"

"In this way. A certain kind of fly makes a very small hole in the tender bark of the oak; in this hole it deposits its egg. The sap oozes out and covers the egg, and a small wart or bunch makes its appearance over the spot. This increases in size with the growth of the tree, until it is as large as a walnut. This is the gall, or, as some people term it, the nut-gall. In some places they are very numerous. These galls contain little cells, in which the worms live after they are hatched from the eggs which the fly left there. Take some of these galls, bruise them, put some copperas with them, and then pour on water or vinegar, and you will have ink. The gall-fly, then, is another insect, which is highly useful. After we have written a letter with ink made from the labours of the fly, we are then dependent upon insects for wax to seal it."

"How so?" asked one of the boys.

"Why, gum-lac, which is another valuable article, and which is used in making sealing-wax, is produced by insects. Large quantities of this wax are manufactured into varnish, which you know is put on furniture to make it shine.

(To be continued.)

An Aged Vegetarian.—The *Wanderer* of Vienna states that the new curé of Nesseldorf, in Moravia, having been informed that a peasant was residing in the neighbouring village of Czeladna who was in the 147th year of his age, sent an invitation to him to dine with him, and at the same time sent a sort of rustic gig to convey him. The old man accepted the invitation to dinner, but refused the carriage, and walked to the curé's house. He stated that he had passed the greatest part of his life in the cottage which he then occupied, that he had been a soldier, and had remarried at the age of 90. Milk and potatoes had been, he said, his chief nourishment for many years.

SHIPS.—No. IV.

You have read what we have said in the previous numbers about ships in ancient times, and of those in use from the time of the Conquest to the Commonwealth. We now go on to tell you of ships in the present day. We should like you to be able to tell one from the other when you see them. We have, therefore, had some of the chief ones drawn, and if you see them here with the names put to them you will know them again when you see them on the water without the names. We pass by the wherry, yacht, and galley, and begin with the *sloop*, which you see is a very pretty little ship, with *one mast* (No. 16).

FIG. 16.—A SLOOP.

This is the sort of vessel which is most generally used in the coasting trade, carrying from one place to another all sorts of cargoes, such as slates, earthenware, flour, &c. These vessels abound on all parts of the coast where there is a harbour.

The next (No. 17) is a *schooner*, and has *two masts;* she carries topsails, and top sail-yards, but is not *square* rigged like the next one. See how she is going before the wind with all her sails full! The schooner can carry more, sail faster, and go out in worse weather than a sloop.

FIG. 17.—A SCHOONER.

The next (No. 18) is a *brig*, and you see she is square rigged, and has *two masts*. Ships have *three*, as in the clipper

FIG. 18.—A BRIG.

(No. 19). Brigs are employed for service very generally, such as running to the North, to Spain, to the Mediterranean, and to the Coast of Africa.

The triumph of naval architecture is seen in the clipper ship (fig. 19). This is the fastest sailing vessel known: and because it has not the expense of coals for steam, is the cheapest. The clipper ship is built of great length, narrow, and has very fine lines. It is made to spread an enormous surface of canvas, so as to take full advantage of the propitious gale. A great many "clippers" were used in the transport of the troops, during the late Mutiny, to India. They reached Calcutta on an average in 100 days—nearly a month before the other *sailing* vessels. The soldiers were much pleased with them, because they were so roomy, clean,

FIG. 19.—AN AUSTRALIAN CLIPPER.

"well found," and healthy. Clippers are also employed for Australia, and are the only *fast* vessels which have been found to pay. The Americans have produced some of the finest and fastest clippers in the world.

(To be continued.)

THE POSTAGE-STAMPS OF THE WORLD.

By Dr. JOHN EDWARD GRAY, of the British Museum.

No. II.—STAMPS OF EUROPEAN GOVERNMENTS.—*continued.*

SAXONY.—I. Foursided, erect, Frederick Augustus, profile to right, in oval, with number of value, on each side *Sachen.* printed black, on coloured paper; 1, ½ *neu*, ½ *grosch.* ½, white or grey; 2, 1 *neu* 1, *grosch.* 1, red; 3, 2 *neu* 2, *grosch.* 2, blue; 4, 3 *neu* 3, *grosch.* 3, yellow or green. II. Like former, but printed with coloured ink, on white paper; 1, 5 *neu* 5, *grosch.* 5, pale blue; 2, 10 *neu* 10, *grosch.* 10, blue. III. Like former, profile of John, to left, printed black on coloured paper; 1, ½ *neu* ½, *grosch.* ½, white or grey; 2, 1 *neu* 1, *grosch.* 1, rose; 3, 2 *neu* 2, *grosch.* 2, blue; 4, 3 *neu* 3, *grosch.* 3, yellow. IV. Like former, but printed in coloured ink, on white paper; 1, 5 *neu* 5, *grosch.* 5, orange; 2, 10 *neu* 10, *grosch.* 10, pale blue. V. Like former, but with arms in the coloured oval, printed in coloured ink, on white paper; 1, 3. *Drei pfenninge.* 3, green. VI. *Post couvert*, in embossed white profile John, to left, in coloured disk, in embossed white netted oval frame with *Sachem* and number of value on upper part of sides; 1, 1 *Ein neu groschen* 1, rose; 2, 2 *Zwei neu groschen* 2, blue; 3. 3 *Drei neu groschen* 3, yellow; 4, 5 *fuenf. neu groschen* 5, lilac; 5, 10 *Neu groschen* 10, green. VIII. Square, with number indicating value and *Sachem*, printed in colours on white paper; 1, 3 *pfenning*, red.

WURTEMBURG.—I. Square; number of value in lozenge, in a square frame, *Wurttemberg Frei Marke*, &c., printed in black, on coloured paper; 1, 1 pale brown; 2, 3 yellow or blue; 3, 6 green or blue; 4, 9 red; 5, 18 lilac. II. Square-arms with supporters, white, on a coloured ground. *Free-marke*, and value in white letters, on three sides; 1, 1 *kreuzer*, brown; 2, 3 *kreuzers*, yellow; 3, 6 *kreuzers*, green; 4, 9 *kreuzers*, red; 5, 18 *kreuzers*, blue. III. Square arms, printed black, on white paper, *Commission für return breif.*

BAVARIA.—I. Square, large; number of value, of large size, in square frame; *Bayern* in upper margin, printed black, on coloured paper; 1, 1 *Ein kreuzer*, white; 2, 3 *Drei kreuzer*, blue; 3, 6 *sechs kreuzer*, violet; 4, 9 *neun kreuzer*, red. II. Square; number of value, of large size, in circular frame, *Bayern*, and value in white letters, printed in coloured ink, on white paper; 1, 1 *Ein kreuzer*, rose; 2, 3 *Drei kreuzer*, blue; 3, 6 *sechs kreuzer*, brown; 4, 9 *neun kreuzer*, green;

5, 12 *zwolf kreuzer*, red; 6, 18 *Achtzehn kreuzer*, yellow. III. Like latter, but with black ink, on coloured paper; 1, 1 *Ein kreuzer*, blue, mauve or brown; 2, 3 *kreuzers*, blue; 3, 6 *kreuzers*, brown; 4, 9 *kreuzers*, brown or green; only pattern not circulated.

HANOVER.—I. Foursided, erect; arms with supporters above, on black shield, containing the value. *Hanover* on label below, *Franco* on each side, printed with black ink, on coloured paper, without any coloured net-work; 1, 1 *Guteng. Ein, GR.*, green, or grey, or blue; 2, 1/30 *Thaler, Ein, S.GR.*, red (pale or dark); 3, 1/15 *Thaler, Zwei S.GR.* blue; 4, 1/10 *Thaler, Drei S.GR.*, yellow. II. Like above, but printed in black ink, on white paper, and covered with different-coloured network of different coloured inks; 1, 1 *Guteng Ein S.GR.*, green network; 2, 1/30 *Thaler, Ein S.GR.*, red; 3, 1/10 *Thaler, Zwei, S.GR.*, blue; 4, 1/10 *Thaler, Drei S.G.R.*, yellow. III. Foursided, erect, with crown and *Hanover* in an oval, lined disk, printed in red ink, on white paper; 1, 3 *Pfennings, Ein drittell silber groschen.* IV. Like latter, but netted over with black-ink lines; 1, 3 *Pfennings, Ein drittell silber groschen.* V. Foursided, erect, post-horn surrounded by the crown, in square frame, printed black, on white paper, *Hanover* in the upper margin, and ½ *groschen* below. VI. Foursided, erect; king's profile to left, in circular dark shield, *Hanover* below, and value above in dark letters, printed in coloured ink, on white paper; 1, 1 *groschen*, red or deep red; 2, 2 *groschen*, blue or deep blue; 3, 3 *groschen*, orange or pale brown; 4, 10 *groschen*, green. VII. *Envelopes.* King's profile, embossed white, to left, in oval-coloured frame; surrounded with white embossed frame; *Hanover* above, and number of value on sides, and value beneath; 1, 1 *Ein groschen* 1, red; 2, 2 *Zwei groschen* 2, blue; 3, 3 *Drei groschen* 3, yellow. VIII. *Envelope*, like last; but number of value at bottom; 1, *Ein gutter*, 1 *groschen*, green; 2, *Ein silber*, 1 *groschen*; 3, *Zwei silber*, 2 *groschen*, blue; 4, *Drei silber*, 3 *groschen*, yellow; IX. *Envelope*, trefoil post-horn and *Beltell geld frei*, embossed in circular coloured shield, printed in green or yellow paper, for the town of Hanover.

THURN AND TAXIS.—A. *Value on kreuzers for South Germany.* I. square; number of value, large, white, in circular coloured shield, with a white circular frame, inscribed *Friemarke Thurn and Taxis* &c., and value, printed in black ink, on coloured paper: 1, 1 *kreuzer*, green; 2, 3. 3 *kreuzers*, blue or greenish; 3, 6. 6 *kreuzers*, red; 4, 9. 9 *kreuzers*, yellow. II. Like former, printed in coloured inks, on white paper; 1, 1. 1 *kreuzer*, green; 2, 3. 3 *kreuzers*, blue or red; 3, 6. 6 *kreuzers*, rose; 4, 9. 9 *kreuzers*, yellow. III. Like former, but white circular frame, divided into four folds by post-horns; 1. 15. 15 *kreuzers*, lilac; 2, 30. 30 *kreuzers*, orange. IV. *Envelopes*, with embossed six-sided shields, with large white, number of value in centre of oval frame, inscribed *Thurn and Taxis* above, and value below; 1 *Ein kreuzer*, green; 2, 2 *zwei kreuzers*, orange; 3, 3 *drei kreuzers*, red; 4, 6 *sechs kreuzers*, blue; 5, 9 *neun kreuzers*, brown.

B. *Value or silber groschen for North Germany.*—I. square, number of value, large, in coloured square, surrounded by pale square frame, inscribed *Friemarke Thurn and Taxis*, &c., and value printed in black ink, on coloured papers, 1. ½. ½ *silb. grosch.*, yellow or red brown; 2, ½. ½, *silb. grosch.*, pale brown; 3, ½. ½ *silb. grosch.*, green or pale blue; 4, 1. 1 *silb. grosch.*, blue or grey; 5, 2. 2 *silb. grosch.*, red; 6, 3. 3 *silb. grosch.*, yellow; 7, 5. 5 *silb. grosch.* lilac. II. Like former, but printed with coloured ink, on white paper: 1, ½. ½ *silb. grosch.*, red; 2, ½. ½ *silb. grosch.*, pale brown; 3, ½. ½ *silb. grosch.*, green; 4, 1. 1 *silb. grosch.*, blue; 5, 2. 2 *silb. grosch.*, red; 6, 5. 5 *silb. grosch.*, lilac; 7, 10. 10 *silb. grosch.*, orange. The pattern of the inner disk of the ½, ½ and ½. are different from that of the 1, 2 and 3, *silber grosch.*; and the 5 and 10 are different from each other, and the others. II. *Envelopes* with embossed oval shields, with large white numbers, surrounded by an oval-coloured frame, marked with embossed white lines, inscribed *Thurn and Taxis* above, and value beneath: 1, ½. ½. *silb. grosch.*, orange; 2, 1 *Ein silb. grosch.*, red; 3, 2 *Zwei silb. grosch.*, blue; 4, 3, *Drei silb. grosch.* brown.

OLDENBURG.—I. Foursided, erect, Arm, small, surmounted by a crown in mantle above a shield, containing the value in parts of a thaler, *Oldenburg* beneath, with value in labels on side, printed in black, on coloured paper: 1, ½ *silb. gr.*, 4 *schw.*, green; 2, ½ *thaler*, 1⅔ *G.R.*, 1 *S.GR.*, pale blue; 3, ⅓ *thaler*, 4 ⅔ *GR.*, 2 *S.GR*, red; 4, ⅙ *thaler*, 7⅓ *GR.*, 3 *S.GR.*, yellow. II. Foursided, erect, Arms and crown, in oval, erect shield, with label above and below, and number of value on each side, *Oldenburg*, printed in black ink, on coloured paper: 1, ½ *Ein drittel groschen*, green; 2, ½ *Ein halber groschen*, brown; 3, 1 *Ein groschen*, blue; 4, 2 *zwei groschen*, red or white; 5, *drei groschen*, yellow. III. Like last, but printed in coloured ink, on white paper: 1, ½ *Ein groschen*, yellow; 2, ⅓ *Ein drittel groschen*, green; 3, ½ *Ein halben groschen*, brown; 4, 1 *Ein groschen*, blue; 5, 2 *zwei groschen*, red; 6, 3 *drei groschen*, yellow. IV. *Envelopes*, with embossed white Arm, surmounted by the crown, in large oval, embossed, coloured frame, inscribed *Oldenburg*, with number of value on the sides: 1, ½ *Ein halber groschen*, brown; 2, 1 *Ein groschen*, blue; 3, 2 *zwei groschen*, red; 4, 3 *drei groschen*, yellow.

(To be continued.)

CALENDAR FOR AUGUST.

Pour'd from the villages a numerous train,
Now spreads o'er all the fields. In proud array
The reapers move, nor shrink for heat or toil,
By emulation urged. Others dispersed
Or bind in sheaves, or load or guide the wain
That tinkles as it passes. Far behind,
Old age and infancy with careful hand
Pick up each straggling ear.

FIRST WEEK.—Lesser willow herb, middle fleabane, sow-thistle, yellow succory, Canterbury bells, carline thistle, Venetian sumach, burdock, fell wort, in flower—oats and barley cut—swallow-tailed butterfly and plantain fritillary appear—burrel fly lays eggs on horses.

SECOND WEEK.—Wormwood, mugwort, Barnaby's thistle, meadow saffron, Michaelmas daisy, meadow rue, sea holly, China aster, less Venus' looking-glass, in flower.

THIRD WEEK.—Devil's bit, ploughman's spikenard, autumnal dandelion, aster amellus, balsam, milk thistle, in flower—young goldfinches and black-eyed marble butterfly appear—lapwings and linnets congregate—birds resume their spring notes—flies infest the windows—thistle down floats.

FOURTH WEEK.—Soapwort, ladies' graces, and althæa frutex in flower—hop-picking begins—beech turns yellow—swallow sings—great fritillary, small golden black-spotted butterfly, and willow red underwing moth appear.

MOTHS AND BUTTERFLIES TO BE LOOKED FOR THIS MONTH.

G. Rhamni.	L. Complana.
C. Edusa.	D. Hamula.
C. Hyale.	L. Impura.
L. Sinapis.	N. Fulva.
E. Blandina.	X. Scolopacin.
T. Betula.	G. Flavago.
T. Rubi.	C. Diffinis.
P. Egon.	C. Affinis.
P. Agestes.	A. Imitaria.
T. Alveolus.	A. Aversata.
T. Tages.	A. Citraria.
P. Actæon.	A. Gilvaria.
P. Comma.	S. Dubitata.
P. Monacha.	P. Purpuralis.
M. Miniata.	E. Sambucalis.
L. Griseola.	

CATERPILLARS TO BE LOOKED FOR IN AUGUST, AND WHAT THEY FEED ON.

Ash.	*Oak.*
S. Ligustri.	S. Fagi.
C. Ligniperda.	D. Chaonia.
E. Lunaria.	A. Alni.
E. Illustaria.	*Nettle.*
B. Hirtaria.	V. Io.
	V. Atalanta.
Beech.	G. C-Album.
S. Tilica.	*Willow.*
S. Fagi.	S. Ocellatus.
E. Alniaria.	S. Populi.
T. Consonaria.	C. Ligniperda.
G. Papilionaria.	C. Vinula.

HEALTH AND TEMPERANCE.

SONG OF THE WATER-DRINKER.

"OH! water for me! Bright water for me!
It enslaves not the soul—it enchains not the free.
It cooleth the brow, it cooleth the brain,
It maketh the faint one strong again.
It comes o'er the sense like a breeze from the sea,
All freshness, like infant purity.

Fill to the brim! fill, fill to the brim!
Let the flowing crystal kiss the rim!
For my hand is steady, my eye is true,
For I, like the flowers, drink nought but dew.
So water, pure water for me, for me;
'Tis the drink of the wise, 'tis the wine of the free."

E. Johnson.

"On my entrance into Watts's office," says Dr. Franklin, "I worked at first as a pressman, conceiving that I had need of bodily exercise, to which I had been accustomed in America, where the printers work alternately as compositors and at press. I drank nothing but water. The other workmen, to the number of about fifty, were great drinkers of beer.

"I carried occasionally a large form of letters in each hand, up and down stairs, while the rest employed both hands to carry one. They were surprised to see by this and many other examples, that the 'American aquatic,' as they used to call me, was stronger than those who drank porter.

"I endeavoured to convince them that the bodily strength furnished by the beer could only be in proportion to the solid part of the barley dissolved in the water of which the beer was composed: that there was a larger portion of flour in a penny loaf, and that, consequently, if they ate this loaf, and drank a pint of water with it, they would derive more strength from it than from a pint of beer.

"This reasoning, however, did not prevent them from drinking their accustomed quantity of beer, and paying every Saturday night a score of more than four or five shillings a-week for this beverage, an expense from which I was wholly exempt.

"Thus do these poor men continue all their lives in a state of voluntary wretchedness and poverty. After this I lived in the utmost harmony with my fellow-labourers, and soon acquired considerable influence among them.

"My example prevailed upon several of them to renounce their abominable practice of bread and cheese and beer; and they procured, like me, from a neighbouring house, a good basin of warm gruel, in which was a slice of butter, with toasted bread and nutmeg. This was a much better breakfast, which did not cost more than a pint of beer, and at the same time preserved the head clearer."

MAGNITUDE OF THE SOLAR SYSTEM.—Sir John Herschell gives the following "illustration calculated to convey a general impression of the relative magnitudes and distances of our system." "Choose any well-levelled field; on it place a globe, two feet in diameter—this will represent the Sun; Mercury will be represented by a grain of mustard seed, on the circumference of a circle 82 feet distant from the Sun; Venus, a pea, 142 feet; the Earth also a pea, 215 feet; Mars, a rather large pin's head, 327 feet; Juno, Ceres, Vesta, and Pallas, grains of sand in distances from 500 to 600 feet; Jupiter, a moderate-sized orange nearly a quarter of a mile away; Saturn, a small orange distant two-fifths of a mile; Uranus, a full-sized cherry, or small plum, more than three-quarters of a mile; Neptune, a good-sized plum about one mile and a quarter from the centre. To imitate the motions of the planets in the above, Mercury must describe its own diameter in 41 seconds; Venus, in 4 minutes 14 seconds; the Earth, in 7 minutes; Mars, in 4 minutes 48 seconds; Jupiter, in 2 hours 56 minutes; Saturn, in 3 hours 13 minutes; Uranus, in 2 hours 16 minutes; and Neptune in 3 hours 30 minutes."

THE HERRING AND MACKEREL.

THE HERRING.—The picture of the Herring will supply a better description than we can give in words. You will observe there is one fin on the back. If the Herring be held by the forepart of this fin, the head will fall or decline, because the fin is so far back on the body of the fish. Not so with the pilchard, for *that*, if so held, will remain level or in equilibrium. The colour, when the fish is fresh, is a fine blue on the back and silvery white on the belly; but if the fish be stale, these colours are lost, and the cheeks or coverings of the gills become red. The large eye and sharp teeth show it to be well fitted to prey upon smaller fish. When very hungry it will eat almost anything—minute shell-fish, spawn, and fry. The largeness of the eye may also help it to escape from its pursuers. Its roe (the *hard* roe of your bloater) contains 70,000 eggs, of little fish.

The Herring lives in deep water, *where* we do not know, and approaches the shore to lay its eggs or spawn. The roe is full about June, and the spawning season is about October or November;* the interval is the time when the fish are taken on our coasts in full season. They approach in columns of five or six miles in length, ripple the water, and then sink for ten or fifteen minutes. It has been said that the lighting of fires and firing of guns, or the running of steam packets near the shore, will frighten away the fish; but other persons think this altogether a mistake, observing that when the guns are not fired the fish do not come, and that where they are, *there* they happen sometimes to be found.

The Herrings having spawned, retire to deep water, and we see no more of them till the next season.

The earliest reliable accounts of our island mention the Herring fishery. Dunwich, now under water, used to be a famous place for them. Scotland is the principal place where they are caught. They are also taken in large numbers on the Norfolk coast. Is not Yarmouth famous for its bloaters, which supply a delicacy to many a London table? Cornwall takes very few Herrings; but there the Pilchard supplies its place, and is one source of Cornish wealth.

Dark nights are said to be the best time to let down the nets; if the nets be put down by day, it is said the fish are frightened away.

The Dutch have been famous from earliest times for curing Herrings—that is, salting and preserving them. Indeed, it is said, "one Benkels, or Benkelson, of Biervliet, near Sluys, who died in 1397, was the inventor of the process. The Emperor Charles the Fifth visited his grave, and ordered a magnificent tomb to be erected to his memory. The Dutch, it is also said, have maintained their ascendancy in the Herring fishery."† They select the finest fish, and cure them *instantly at sea*.

But the Scottish fishery is now rivalling the foremost. In 1855 40,000 Scotch fishermen, assisted by 28,000 curers and labourers, employing 11,000 boats, cured 766,000 barrels, each barrel containing 550 full-grown fish; the average was 416,000 barrels, containing about 400 millions of fish. Norway takes the same number; the Swedes take 700 millions. Ireland also takes large numbers, and so do Germany, France, and the United States; indeed, Herrings are no small part of the food of the human family.

The City of Norwich is, or was, held by a rent of 24 pies or pastyes of the first new Herrings, to be paid by the sheriffs of Norwich, containing five Herrings in each pie. The pies were to be "well seasoned with the following spices, viz. half a pound of ginger, half a pound of pepper, a quarter of a pound of cinnamon, one pound of cloves, an ounce of long pepper, half an ounce of grains of paradise, and half an ounce of galangals;" which said pies "are to be brought to the King's house wherever he is in England; for which service the person carrying them shall receive there six white loaves, six dishes of meat out of the King's kitchen, one flaggon of wine, one flaggon of beer, one truss of hay, one bushel of oats,

* It has been suggested there are two spawning seasons. In the Frith of Forth the Herrings spawn in January.

† Yarrell.

THE HERRING.

THE MACKEREL.

one pricket of wax, and six tallow candles; and now the sheriffs yearly pay this farm, the *pies* being sent up by them and placed on his Majesty's table." A curious document is on record, in which the King's servants complain of the delivery of the pies in an inferior condition :—

"To Alexander Anguish, Mayor, John Macher and William Gostlin, Sheriffs :—

"After our hearty commendations, we have thought fit to let you understand that upon deliver here at Court of the *herring pyes*, which we lately received from you, we find diverse just exceptions to be taken against the goodness of them, which we must require you to answer, and take such order that the same may be amended for the future tyme as you would avoid further trouble. The exceptions we take are these, *viz.* :—

"*First.* You do not send them according to your *tenure* of the first new herrings that are taken.

"*Secondly.* You do not cause them to be well baked in good and strong pastye, as they ought to be, that they may endure the carriage the better.

"*Thirdly.* Whereas you should by your tenure bake in these pasties *six score* herrings at the least, being the great hundreth, which doth require *five* to be put in every *pye* at the least, we find but *fower* herrings to be in diverse of them.

"*Fourthly.* The number of pyes which you sent at this time, we finde to be fewer than have ben sent heretofore, and diverse of them also much broken.

"And *lastly.* We understand the buyer of them was constrained to make *three* several journeys to you before he could have them, whereas it seemeth he is bound to come but *once*.

"To every of which our exceptions we must pray your particular answer for our better satisfaction, that we may have no cause to question further, and so we bid you heartily farewell. "Your loving friends,

"Hampton Court the (Pembroke) JOHN SAVILE.
iiijth of Oct. 1629." [RICH. MANLEY."

THE MACKEREL scarcely needs description. Its colour in the upper parts is a rich deep blue, with a varying tinge of green, marked by numerous transverse black streaks, which in the male are nearly straight, but in the female beautifully undulated. The under parts are of a bright blue hue, with a slight cast of gold green along the sides.

The mackerel spawn some time in the summer, and are not in season immediately after spawning. The fish are then what fishmongers call "shot," are lean and vapid, and have no roes.

The mackerel live in deep water, and come to the shore in shallow water to spawn; it is then they are caught in large numbers; but these vary much. Sometimes there are more than can be taken into the boats, and at other times the fishermen will bring home a few dozen, or return without a single fish. This is why the price of mackerel varies so remarkably.

We are informed, on what appears respectable authority, that,—

In May, 1807, the first Brighton boat load of mackerel sold at Billingsgate for forty guineas per hundred, seven shillings each, reckoning six score to the hundred, the highest price ever known in that market. The next boat load produced about thirteen guineas per hundred. Mackerel, on the contrary, were so plentiful at Dover in 1808, that sixty were sold for one shilling.

At Brighton, in June of the same year, the shoal of mackerel was so great, that one of the boats had the meshes of her nets so completely occupied by them, that it was impossible to drag them in; the fish and the net, therefore, in the end, sank together, the fishermen thereby sustaining a loss of nearly £60, exclusive of what the cargo, could it have been got into the boat, would have produced. The success of the fishing in 1821 was beyond all precedent. The value of the catch of sixteen boats from Lowestoffe, on the 30th June, amounted to £5252; and it is supposed that there was not less an amount than £14,000 altogether realized by the curers, and those concerned in the fishery off the Suffolk coast. In March, 1833, on a Sunday, four Hastings boats brought on shore 10,800 mackerel, and on the next day two boats brought 7000. Early in the month of February, 1834, one boat's crew from Hastings cleared £100 by the fish caught in one night; and a large quantity of very fine mackerel appeared in the London market in the second week of the same month. They were cried through the streets of London on the 14th and 23rd of March, 1834, and had then been plentiful for a month.

There are different ways of catching mackerel. The "hook and line" fish are the best. The hook baited with a slice of the tail of the mackrel last caught, or two inches of the stem of a tobacco pipe, or a bit of red cloth, is an admirable bait. Another way is to take out a net and drop it in the sea, where it is suspended by cork floats at intervals; the net sinks to perhaps ten or twenty feet under the water—the mackerel try to run through the nets, and are caught by the gills. But when they appear in vast shoals they are surrounded and enclosed and hauled ashore. The capture of the fish is a most exciting scene.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

Chapter XIII.—The Rough-legged Buzzard. (*Falco lagopus.*)

THE ROUGH-LEGGED BUZZARD.

THE HONEY BUZZARD.

The Rough-legged Buzzard is a common North American but very rare British bird. All my information respecting it is derived from Wilson's "American Ornithology"; a very short notice in Montagu's "Ornithological Dictionary"; another in Selby's "British Ornithology"; and a number of short but interesting notices in the "Zoologist." Mr. Wilson's account is by far the best and most instructive. "This handsome species," says the great American ornithologist, "spends the chief part of the winter among our low swamps and meadows, watching for mice, frogs, lame ducks, and other inglorious game. Twenty or thirty of these birds have regularly taken up their winter quarters, for several years past, and probably long anterior to that date, in the meadows below Philadelphia, between the Rivers Delaware and Schuylkill, where they spend their time watching along the dry banks like cats; or sailing, low and slowly, over the surface of the ditches. Though rendered shy from the many attempts made to shoot them, they seldom fly far, usually from one tree to another at no great distance, making a loud squealing as they rise, something resembling the neighing of a young colt, though in a more shrill and savage tone." And again: "They are often seen coursing over the meadows long after sunset, many times in pairs. They generally roost on the tall detached trees that rise from these low grounds, and take their stations, at daybreak, near a ditch-bank or haystack, for hours together watching with patient vigilance for the first unlucky frog, mouse, or lizard that makes its appearance. The instant one of these is descried, the hawk, sliding into the air, and taking a circuitous course along the surface, sweeps over the spot, and in an instant has his prey grappled and sprawling in the air." Montagu never saw a living specimen; but Mr. Selby says he had frequent opportunities of observing two that attached themselves to a marsh in the neighbourhood of his residence at Twizel. "Their flight was smooth but slow, and not unlike that of the Common Buzzard, and they seldom continue for any length of time on the wing. They preyed upon wild ducks and other birds, which they pounced upon on the ground; and it would appear that mice and frogs must have constituted a great part of their food, and the remains of both were found in the stomachs of those that were killed."

The first notice in the "Zoologist" is at page 491, from Mr. Norman, who records that one of these birds was shot at Hull, in October, 1842. At page 935, Mr. Bold records the occurence of a specimen at Newcastle-on-Tyne. At page 1347, the late amiable and energetic Mr. J. Wolley publishes the following account:—"Six or seven years ago there was a great immigration of the Rough-legged Buzzard to the midland counties, which I have not seen recorded. Many specimens were killed at intervals in Nottinghamshire and Derbyshire, and happened to come under my notice. I think I could not have seen less than a dozen, only two of which came into my possession. Most of them were caught in traps, and some I saw before they received their *coup de grâce*. Their projecting eyebrows and piercing eyes gave them a very fierce and noble expression." At page 2018, Mr. Gur-

ney, M.P. for King's Lynn, informs us that a specimen of the Rough-legged Buzzard was taken alive at Bretenham, near Thetford; and Mr. Burroughes states, page 2452, that a second was trapped at Mantley, near the same spot, in December, 1848. In 1825, a pair took up their abode at Middleton Park, near Oxford, and long escaped the vigilance of the gamekeepers. On the 16th of June, 1850, a specimen was killed on Marlborough Downs, and another in Cambridgeshire in 1853, the month not recorded.

This bird does not breed in this country. Sir John Richardson found it breeding in North America. The nest was composed of sticks, and built in a lofty tree standing on a low, moist, alluvial point of land almost encircled by a bend of the Saskatchewan River. The old birds skimmed round the spot in a wide circle, occasionally settling on the top of a tree, but kept beyond the range of gunshot. Temminck also says that it builds in lofty trees, and that it lays four white eggs spotted with reddish brown.* The following description of the adult bird is copied from Mr. Selby's "Illustrations of British Ornithology," Vol. I, p. 60:—"Bill bluish-black, darkest towards the tip, small and weak, rapidly bending from the base; the cutting margin of the upper mandible showing only a faint sinuation. Commissure reaching rather beyond the anterior orbit of the eye. Cere and irides gamboge yellow. Lores covered with small whitish feathers, which are partly concealed by the bristly black hairs disposed in a radiating form. Head, neck, and throat yellowish-white, inclining to cream-colour, with slender streaks of umber-brown. Breast yellowish-white, with large spots of umber-brown. Lower part of the belly umber-brown, forming a broad bend across that region. Thighs cream-yellow, with arrow-shaped brown spots; the feathers very long and soft; tarsi covered with feathers, colour cream-yellow, with a few brown specks. Back and wing-coverts umber-brown, the edges of the feathers paler. Lower part of the inner webs of the greater quill-feathers white. Quills notched and sinuated as in the Common Buzzard. Upper tail-coverts and base of the tail white, the remaining part brown, banded with a darker shade of the same colour. Toes saffron-yellow, short; the inner stronger, and as long as the outer one. Hind and inner toes each having four large scales; the outer five; the middle toe seven or eight. Claws black, long, but not much hooked."

I wish my young readers to know that I am altogether unacquainted with this bird except as stuffed in museums; and, therefore, that I have not related a single fact respecting it from my own observation, or attempted to write any description of my own; but I have most carefully looked through the works of all previous writers, and have transcribed every original observation I can find respecting it. This plan I always regard as more honest than to make up a history from the works of others and give it as original—a practice that has introduced numberless mistakes into every work on natural history that I have ever read.

Chap. XIV.—The Honey Buzzard (*Falco apivorus*).

This singular and uncertain visitor to the British Isles is called the Honey Buzzard from a belief, formerly very general that it fed on honey; and this belief certainly arose from the fact of its having been observed tearing to pieces the combs of wild bees and wasps. It is certain that in a wasp's nest it would find no honey; and it is also certain that the maggots which produce wasps are generally found in the stomach of the Honey Buzzard when it is killed; so that naturalists generally seem to think that the grubs, and not the honey, are the usual food of the bird. This opinion is not, however, universal, for Mr. Bold tells us in the "Zoologist" (p. 1133), that a Honey Buzzard kept in confinement by Mr. John Hancock, of Newcastle-on-Tyne, ate honey with great relish, prefering it to other food. This is quite sufficient reason for retaining a name that has so long been familiar.

On the question of its general food there can be no doubt whatever. Sir William Jardine mentions a specimen that was disturbed in the act of digging a wasps' nest out of a bank; when the bank was examined a large hole was found, and a great quantity of earth scratched out, so that it was clearly proved that the Buzzard had legs and feet as strong and capable of scratching as any barn-door fowl's. The hole was not touched by the observer, who left it purposely that the bird might renew its operations: when he returned, he found that the bird had revisited the spot, had dug out the whole of the nest, torn the comb to pieces, and picked out and eaten all the wasps and grubs. A steel trap, baited with the largest piece of comb that could be found, was set near the spot: the bird returned and was taken; and its stomach contained nothing but wasps and the grubs from which they are produced. The stomachs of a great many other specimens have been examined, and have always been found to contain beetles, bees, wasps, caterpillars, chrysalises, and dragon-flies, so the bird seems to have very little claim to be considered a hawk. A very curious habit has been observed in this bird in the mode in which it captures dragon-flies. Every one who has spent a sunny summer's day in the country must have seen the large, long-bodied dragon-flies soaring over a pond, or wandering up and down the lanes in search of the flies on which they feed. The Honey Buzzard is very fond of these long-bodied dragon-flies, and pursues them on silent wing, with the most graceful evolutions, turning when the dragon-fly turns, and always capturing its nimble prey. But how is this accomplished? The bird jerks forward one of its strong feet, seizes the dragon-fly, and then conveys it from its foot to its mouth. Rarely indeed does the Honey Buzzard breed in this country. White, the naturalist of Selborne, says that a pair of Honey Buzzards built in a tall, slender beech-tree, near the middle of Selborne Hanger, in the summer of 1780; the nest was large and shallow, composed of twigs and lined with dead beech leaves. A boy climbed the tree, and a bold, daring fellow he must have been; for the tree, very tall and very slender, as I have before stated, stood on a precipitous bank. The boy, however, brought down an egg, the only one in the nest. It was smaller than a Common Buzzard's, but not so round; at each end it had several small spots, and round the middle a broad blood-red band. Willughby describes a nest of this bird containing young ones, which were killed, and lizards, frogs, and wasps were found in their stomachs; and Pennant tells us of a Honey Buzzard that was shot on her nest, which contained two eggs, blotched over with two shades of red.*

But by far the most interesting account of the Honey Buzzard's breeding in England is from the pen of Mr. Wilmot, and is published in the "Zoologist" for 1844, at page 437. Early in the month of July, 1838, a female Honey Buzzard was shot on her nest in Wellgrove Wood, in the parish of Bix, near Henley-on-Thames, by one of Lord Camoy's gamekeepers. The nest, a very large one, was placed in the fork of a beech-tree, and was built of sticks of considerable size, with which were intermixed twigs with the leaves on. The lining was composed of leaves and wool. Three years afterwards a pair of Honey Buzzards having been sent to a bird-stuffer at Birmingham, and Mr. Wilmot having ascertained that they had been shot at Lord Leigh's, of Stoneleigh Abbey, wrote to the keeper, and received the following reply:—

"I beg to inform you I shot the birds in Waverley Wood, near Stoneleigh Park. I had seen them about some time previously to killing them, which caused me to look for their nest, which I found they were building and had nearly completed."

This keeper found another nest, which he supposed to belong to another pair of Honey Buzzards, also killed in Waverley Wood. This second nest was built in rather a large oak-tree, near the middle of the wood, and rested on two large arms that grew out from the trunk; it was built with sticks, some of them as thick as the keeper's finger, and mostly without leaves, but there were a few with leaves on intertwined with the others, and there were a few twigs with the leaves on in the nest, just the leafy ends of the oak

* See large Cut, p. 73.

* See large Cut, p. 78.

branches. The nest was nearly flat, with a slight hollow where the eggs were laid. Mr. Wilmot particularly asked whether twigs with the leaves on formed part of the materials of which the nest was made, because he wished to ascertain whether it resembled the nest near Henley in that particular. Live boughs, plucked at the season when all of the Honey Buzzards' nests are built, must necessarily be clothed with leaves. Hence it seems that the Honey Buzzard, like the Rook, uses living as well as dead twigs in the construction of its nest. It seems that the number of eggs laid by the Honey Buzzard does not exceed two. Gilbert White's nest contained but one egg; Pennant's two; Willughby's two young birds; and Mr. Wilmot's two eggs.

Notwithstanding this excellent evidence of the Honey Buzzard having bred in England, we must reckon it a circumstance of such rare occurrence as to be merely accidental; and the visits of the bird to this country are extremely uncertain, and, as far as I have observed, are not regulated by the usual law of migration; that is to say, northwards in spring, and southwards in autumn. It is a native of Asia, Eastern Europe, and Africa; and certainly on the Continent a bird of passage, migrating northwards in the spring, and attaining quite a high latitude in Norway, Sweden, and Russia. In the autumn it moves westwards as well as southwards, sometimes crossing the German Ocean into England, in flocks of ten or twenty individuals. This was particularly the case in 1841, 1848, 1849, and 1854. In these four years it arrived in the month of September on the east coast, and passed westward. In the first year I have named, several were picked up dead on the sea-coast of Durham and Yorkshire, having apparently fallen into the sea from exhaustion. In the midland and western counties single specimens or pairs have been occasionally seen in June, having probably passed the winter in this country. One specimen only is reported to have been seen in Ireland, two in Scotland, and none in Wales.

Unlike our other hawks, the Honey Buzzard has rarely been kept in confinement; there is, however, one instance recorded in the "Zoologist," which is so interesting that I will copy it for the readers of YOUNG ENGLAND. It is related by Mr. G. J. Forster:—"The Honey Buzzard now in my possession," says Mr. Forster, "was wounded in the wing, and taken about three months ago. It was at first confined in a small garden house, and for a day or two refused to eat anything, but at last began to feed upon small birds, but would not touch raw flesh or any kind of offal. Nor has it yet done so, although it has not the smallest objection to a rat or a frog. Many birds of prey, after eating the muscular parts of any animal or bird, leave the entrails untouched; the Honey Buzzard, on the contrary, generally begins by opening the carcase, and then devouring everything it finds within it. It is very fond of the honey comb of the wild bee, and when hungry will swallow large pieces of the comb containing the grub or larva, but when its appetite is not very keen it usually separates the cells, extracts the grub, and throws the wax away. There has been little honey in the combs this year, but when perchance any has dropt from the cells upon the ground, I have seen the bird repeatedly thrust its bill into the earth where it appeared to be moistened by the honey. Unless very hungry, it will not attempt to tear open a large bird, but is exceedingly fond of a fresh herring. There is something capricious in the appetite of birds, as well as in that of the human race. I had an eider duck for three years, and during that time it never could be prevailed upon to taste shellfish; its favourite food was barley-bread, though if grain of any kind was thrown down to it, it would devour it in the same manner, and with the same rapidity, as the common duck. Of all the birds of prey with which I am acquainted, the Honey Buzzard is apparently the gentlest, the kindest, and the most capable of attachment; it seems to possess little of the fierceness of that warlike tribe. It will follow me round the garden, cowering and shaking its wings, though not soliciting food, uttering at the same time a plaintive sound something like the whistle of the garden plover, but softer and more prolonged. Though shy with strangers, it is very fond of being noticed and caressed by those to whose presence it has been accustomed. In the same garden there are three lapwings, a blue-backed gull, and a curlew. The plovers are often seen with the buzzard sitting in the midst of them, showing no signs of caution or apprehension, but seem as if they were listening to a lecture delivered by him. The gull frequently retires into the garden house, probably to enjoy the society of the buzzard. The garden is not the garden of Eden, and yet these birds of different natures, habits, and dispositions, appear to live in perfect harmony, peace, and good-fellowship with each other. I have had three living specimens of the Honey Buzzard in my possession, not one of them in plumage at all resembling the other. One of the three never could be induced to take any food, and, after living about a fortnight, died, I believe, from pure inanition. Besides the plaintive cry above-mentioned, the Honey Buzzard has another and more varied note, apparently of alarm."

The beak of the Honey Buzzard is slender, weak, and very ill-adapted for the raptorial life of a bird of prey: it is of a blue-black colour; the space round the eye is greenish-grey, and the space between the eye and the beak, so commonly naked in birds of prey, is thickly coverered with small round feathers; these are so closely packed together that they look something like scale armour, and are, in all probability, a beneficent provision of an all-wise Creator against the stings of the wasps and bees, with which it seems to wage perpetual warfare. The legs are strong and well adapted for scratching; both legs and feet are yellow, the legs feathered a little below the knee; the claws are black but slightly hooked. As I have never seen two alike, it is no very easy task to describe its plumage; I therefore prefer giving the descriptions of seven very different birds, which, in 1841, came under the notice of Mr. Fisher, who was then one of our most ardent and best-informed naturalists.

No. 1. This bird is in the Norwich Museum, and is of an almost uniform dark clove-brown. There are a few lightish spots about the neck and shoulders. The quill-feathers are almost black, and the tail has three bars of very dark brown, the spaces between which are divided by narrower bars of a lighter tint than the former, but darker than the ground colour of the tail itself.

No. 2. In this the predominating colour is a light brown, rather darker on the back. The feathers round the neck, and also on the breast and thighs, have dark margins; the quill-feathers are black, the secondaries dark brown; the tertials rather lighter, and in both of these last, as well as the wing-coverts, may be seen, in the lighter tint of the tips of the feathers, the commencement of the change which gives the bird the appearance of No. 3. These parts of the bird also exhibit, on being turned to the light, a beautiful purple gloss. The feathers of the back have black shafts, and are darker in the centre than at the margins. The tail of this specimen has acquired the tips of light yellow, which therefore appear to be assumed very shortly after the bird loses the dark hue of No. 1. It is also barred like the other. The cere and legs were of a pale yellow, the irides grey.

No. 3. This specimen was shot in the same year as No. 1, at Horningham, in Norfolk, and is also in the Norwich Museum. The uniform dark-brown plumage of the bird first described is here broken into patches of a more yellowish tint. The head, breast, and belly are of a light brown, with streaks and blotches of a darker colour. The wings dark brown with light tips. The quills, which are nearly black, have also light tips. The tail is almost like that of the last, but of a more yellow-brown, with a light shade of which colour it is also tipped, and the latter mark is found in all the remaining birds.

No. 4. This bird was taken at Yarmouth, in the same year as Nos. 1 and 2, and is now in Mr. Fisher's possession. The feathers on the top of the head and the neck are dark brown, with light tips, giving these parts of the bird a mottled appearance. The space between the beak and the eye, and around the eye, is dark ash grey. There is a large patch of dark brown on the breast, and the patches on the thighs observable in the last specimen are here broken into bars. The wings are also tipped with light brown, which, upon the

quill feathers and secondaries, approaches to white. The tail resembles that of the bird last described.

No. 5. This is a foreign specimen, formerly in the possession of the late Mr. Heysham, of Carlisle; it was said to be a male. The whole head is of a light ash-grey, the beak and wings dark brown, tipped with a lighter colour, the quills tipped with light brown, the whole of the under parts and thighs white, barred with brown. The tail is nearly like that of the last, but has a fourth bar or rather several patches in the form of a bar on the upper end; it is tipped with light yellow-brown. Birds in this state are, I believe, considered by some (as far as regards the head) to be varieties, and are distinguished by the name of "Capped Buzzards." But may not the grey head, which has given rise to that name, be one of the regular changes incidental to this species? I do not see why it should be considered as a mere accidental variety more than the barred plumage, with which it is equally well-known, and appears to be usually found. For I think that in the accidental varieties which occur in the colour of birds, the change is usually produced by the assumption of an entirely new tint, and very seldom by the spreading of any colour which belonged to the individual in its normal state. Still less frequently does it happen that the head, or any particular part of a bird, undergoes an accidental change, leaving the remaining parts in their natural plumage. Thus we occasionally find the starling, the blackbird, the sparrow, and several of the other finches in a wild state, entirely changed to a white or cream colour, of which little or none belonged to the bird in its natural state. But instances do not occur in which the blue bars have spread over the whole wing of the jay; nor do we find that the whole head of the goldcrest ever assumes the light yellow colour from which the bird derives its name. Although marks and spots vary in the depth of their tints, becoming in some species darker, in others brighter, according to the age of the bird, yet Nature seldom permits them to vary in size. She has set them their bounds, which they cannot pass. But, to return to the Capped Buzzard, the specimen figured appears to be in the perfect barred plumage which, as I have already hinted, there seems some reason to suppose to be attained simultaneously with the ash-coloured head. The bird described and drawn by Bewick is in nearly the same plumage as this bird, and that author tells us that "the head is large, flat, and *ash-coloured*." Buffon says, too, that the head is large, flat, and of a grey cinereous; but he does not describe the rest of the bird. Some of the readers of YOUNG ENGLAND who may have met with specimens of the Capped Buzzard, can perhaps inform us if they correspond in other respects with this specimen. If so, a question arises as to the age of the bird in this state of plumage, and whether the grey head is common to both sexes? Another foreign specimen in Mr. Fisher's possession, which was said to be a female, although other respects almost exactly resembling No. 5, has not the grey head. The tail is also somewhat differently marked, being very similar to that of the bird in the British Museum figured in Mr. Yarrell's "History of British Birds."

No. 6. This bird has some patches of brown on the breast, which appear to indicate the former existence of those bars. The forehead is white, the space around the eye, and between it and the beak, is dark ash-grey. The neck, breast, and belly are white, slightly tinged and patched with brown, the belly and thighs having also broad streaks of dark brown. The upper part of the wings white, slightly patched with brown; the secondaries and tertials brown, tipped with white. The tail is barred with two shades of dark brown, and tipped with light brown. The bird was shot at Gawdy Hall Wood, near Harleston, in Norfolk, and is in the Norwich Museum.

No. 7. Although like the preceding in the markings of the head and neck, the breast and under parts of this bird retain no vestige of the brown patches which distinguish that last described. The dark streaks on the same parts are also much narrowed, and the feathers on the upper parts of the wings are now only tipped with white, which is also the case with the secondaries and tertials. The tail resembles that of the last. This bird was killed at Horning, in Norfolk, in 1841, and is also in the Norwich Museum.

Our great ornithologists, Montagu, Bewick, Selby, and Yarrell, appear to have been totally unacquainted with this bird, except through museum specimens, a kind of natural history at which we out-of-doors men are very apt to smile. If you see hanging up in a friend's house an overcoat that belongs to a friend on whose back you have frequently seen it, you recognize the coat at once, and say, "Ah, there is Jones's coat:" but a bird's skin is a far worse guide than a coat, if you have no knowledge of the bird that wore it. These considerations have induced me to take so much pains about the Honey Buzzard, for I cannot help feeling that I am able to diffuse more information respecting it, than is to be found in all our natural histories put together. Let me repeat its peculiarities: here is a hawk, apparently incapable of catching birds or quadrupeds, but digging wasps' nests and bees' nests out of the earth, and devouring grubs and honey, hunting dragon-flies on the wing, catching them with its foot, and handing them to its mouth; pulling off twigs and little branches of oak-trees in full leaf, and building its nest with them; visiting us in flocks now and then, but at no fixed time; travelling from east to west, and never known to return: finally, so extremely unlike in plumage that no description will serve for two specimens.

Amusements.

KITES.

THE Chinese are very fond of kite-flying. The ninth day of the ninth moon is a national holiday, when the whole population, men, women and children, turn out and fly their kites. Thousands and thousands may be seen flying. They construct them very cleverly, and make the string hum like a top.

After flying them for the day, they cut the strings and let them go wherever the wind will take them.

Dr. Franklin used to send up a kite when he went into the water to bathe, and then the kite would draw him about in the water. He also drew down the electric fluid, and collected it in a Leyden jar—that is, a jar made on purpose to hold it.

Mr. Pocock, a schoolmaster at Bristol, made kites to draw little carriages: we have seen these kites drawing the carriages, with his pupils in them, along the road. We believe he himself went in this way from Bristol to London.

The great secret of making a good kite is to have the lath and bender tough but light, and if you wish it to fly well, mind it balances exactly: first, by letting the lath rest on its two ends; if it turns over, you may balance it by a heavier wing on one side than the other to restore the equilibrium, that is, to make one side as heavy as the other. Secondly, when you put the belly-band into the straighter, or lath, at

that part of the belly-band where the kite balances, fasten the string by which you let it up. Don't be discouraged if your kite does not fly well the first time. Much depends on the state of the wind. If a kite is *very* light it will fly with little wind; but if heavy it will require a good strong wind to take it up. Many kites which will not fly one part of the day, if the wind freshen will go up beautifully another. If you make a kite, succeed if it cost you weeks of care; if you are not determined to succeed, do not touch it.

ANSWERS TO PICTURE RIDDLES IN OUR LAST.

1. We wait for a reply.
2. May YOUNG ENGLAND's Paper be welcomed in all places.
3. Hedge—Edge.

No. 4 is thus answered by J. Cornhill.

As cries the master, loud and stern,
"Now, William Jones, what's this I see?
Your copy-book I'll surely burn,
If stained with *Ink* you bring it me."
Poor William stood with downcast look
Before his master's rostrum then,
Who, with a frown, said, "Take up your book,
Be careful how you use your *pen*."

5. None—one. 6. Water-lily. 7. Wheel—heel—eel.

8.

A sound, a letter, do you say?
Then what's a letter but a *note*?
And if I read one it shall be
Such as an *Eton* boy has wrote.
Etonians though they be, and famed
For deeds of daring, love of fun,
'Twould more than one Etonian's strength
Take, I should say, to move a *ton*. J. CORNHILL.

9. Her—ring. 10. Six=6, ix=9, x=10.
11. Seat—cat. 12. Rail—liar. 13. Lamp-post.
14. Because it is turned by weights. 15. A screw.

Solution of the Royal Riddle.

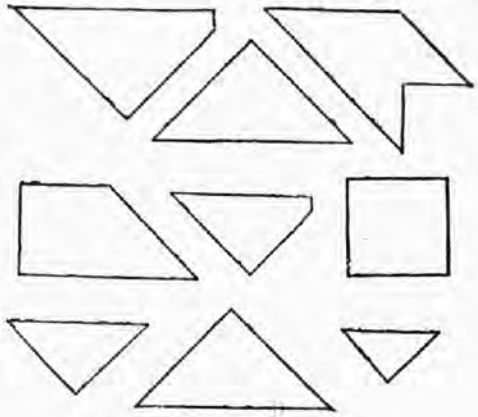
Newcastle famous
N aples
E lbe
W ashington
C incinnati
A msterdam
S tamboul
T ornea
L epanto
E cliptic
for its Coal mines.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

2.

How many pieces of each design will be required, and how must they be placed, to make a complete square? Pieces to be cut out in cardboard.



3.

AN ENIGMATICAL GARLAND.

1. An Irish conveyance, and a body of people.
2. An article, and a spirituous liquor.
3. A colour, and a noisy invention.
4. One of the divisions of time, and the best expression of the soul.
5. A great city, and an evil quality.
6. Precise, and a flower.
7. A pretence, and a firm foundation.
8. The seat of life, a letter, and comfort.
9. An unsociable member of society, and a portion of his dress.

4.

On the battle field my first is found,
Where much is strewn and shed around.
My second's place is on the ground,
Not far from the soft bugle's sound.
My whole is of the canine race,
The rest I leave for you to place.

5.

Now if my whole you rightly view,
A river in Scotland is known to you.
But change my head, I then shall show
A lake in Ireland that you know.

6.

My first is useless by itself, so is my second; but if my last be supplied with my first it will form a part of England's boast.

7.

Whole, I may set a town on fire; behead me, and you have an enclosure; curtail again, and I once contained all living beings.

8.

The initials of the following names will give a large city in England, and the finals will name the river it is situated on:—The name for a young hare, a large bird, a river in Russia, a county in England, a river in Yorkshire, and some sharp rocks near the Isle of Wight.

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

POSTAGE STAMPS.—Sir,—I beg to inform you that Dr. Gray has omitted two stamps in his list, an Austrian and a Prussian. The Austrian is—Four-sided erect, arms on body of double-headed spread eagle, on a shield, surmounted by a crown. Above, K.K. Post Stemple; underneath, 6, Kreuzer. Brown.

The Prussian is—Eight-sided frame; Fred. William IV. in profile to right. Value, Fünf silber groschen. Lilac.

PEREGRINE FALCON.—Can any of your young naturalist friends tell me the colour of the young peregrine falcon? I fear not, as Newman gives the colour of the adult as brown, tanned with black; others blue, *i. e.* on the back. We have also, along the cliffs on the north coast of Cornwall, a small red hawk. I believe 'tis with us all the year round, as I never found it wanting. 'Tis in every respect like as the Hobby is described, but minus the dove-coloured feathers in the tail, which I have never noticed.—A. SUBSCRIBER.

SCENE FROM AN UNPUBLISHED MELODRAMA.

Dramatis Personæ.

Nad Slim—"A gem of purest ray serene."
Snuff Oadbyger—"A village Hampden."
Scene—High Street, Lactodurum.

Snuff.—Hallo, Nad! Have you seen this month's *Young England?*

Nad.—No, not I. I expect it's as weak as ever.

S.—Weak? You should just read the leader on the marriage of the Princess Alice. It's a first-rate piece of composition, and the sentiments are such as enliven and elevate any fireside, and should find a place in every heart.

N.—Well, it perhaps may be very decent, but then you know it's paid for; besides anybody could write a good leader on that.

S.—I don't see that latter proposition.

N.—You don't see everything, remember. But what else is there in it?

S.—Why, there's a letter from "HOPEFUL."

N.—A member of the Band of Hope, no doubt.

S.—Then there's a fine paper on Genius, an instructive one on Ships; and you know that J. E. Gray, of the British Museum, is giving a description of the stamps of the world.

N.—Well, what else?

S.—Why, there's a Chapter on British Birds.

N.—Ha! ha! ha! Those British Birds were hatched a long time ago, and I for one wish they had flown by this time.

S.—Well, the reason they are being republished is, no doubt, to gratify new subscribers.

N.—But isn't it enough to turn off the old ones, eh?

S.—Then, there's a lot of correspondence.

N.—Correspondence, indeed! Why, as for the answers to some of the questions, if the Editor is not tired of answering, I am tired of seeing them answered. There is always some "Young Naturalist" asking for the best method of killing insects; and the number of times "A Constant Subscriber" has been told the best compound for Sugaring, is something amazing. I don't think I have a single number in which one or both of the questions is not answered.

S.—Gammon!

N.—No gammon, I assure you. Now, that question about the material of Garibaldi shirts, in July number, is really an uncommon one, although not being likely to be answered.

S.—Well, perhaps there is some truth in your remarks; but I so love YOUNG ENGLAND that I don't like ——

N.—So do I love YOUNG ENGLAND, for it has kindled in me the love of Nature; and I hope, when I can no longer be classed among its readers, that flame will burn undimmed by the toil of business and unquenched by the cares of life. But go on.

S.—After such an eloquent sentence as your last I think I ought to be silent; but I wanted to say, that you had better draw up a petition to the Editor, and I would sign it, and, like all the other petitioners, would "ever pray."

N.—Better give him an account of our conversation to print.

S.—Très bien, bon soir. [*Exeunt.*

Curtain falls.

CAPTURES.—By W. and S. Dixon, C. Furcula and C. Vinula, the latter resting on some beef at Camberwell.—By A. Alchin, Charlton, Dicranura Vinula and Chelonia Villica.

R. Wallis, jun., and A. H. Waters, of Cambridge, have taken V. Cardui, S. Tiliæ, A. Mendica, together with several others too numerous to mention, and have bred S. Ocellatus, A. Betularia, S. Populi, &c. V. Cardui was plentiful here about three weeks ago; the specimens taken were in very good condition.

Since I last wrote I have made the following captures, besides many common species:—A. Villica, Falcula, E. Glyphica, Sexalata, M. Euphorbiata, Porata, A. Rubidata, L. Adustata, on the Essex coast, C. Lignlperda, A. Putris, A. Tridens, O. Ypsiloro, A. Tuplasia, O. Sambucata, at Kentish Town; and have bred Z. Esculi from larvæ taken at Tottenham.—HOWARD VAUGHAN, 15th July, 1862.

THE OSPREY.—A very fine adult male specimen of the *Osprey* (*Falco haliætus*) was shot last week on the banks of the river Swale, about a mile distant from this town. He measured from tip to tip of wing 5 feet, from beak to end of tail, 21 inches, and weighed 2 lbs. 10½ oz. He has been preserved and set up by Mr. Milligan, bird preserver, of this town, at whose shop he may now be seen.—J. ASPDIN, Richmond, Yorkshire, July 8, 1862.

BATS: AN ODD FISH.—I was out trout-fishing last month at about 9 o'clock in the evening, and when casting the fly was astonished to find that I had hooked a bat fairly in the mouth. I forgot to notice which fly it was on. I was fishing with the grey drakes alderbud, black gnat, and large grey palmer. Could any of your readers tell me if they have ever experienced the same thing? I know that bats are insectivorous, but never before heard of their taking the artificial fly.—R. G. B.

EXCHANGE OF SHELLS.—I have a number of land and fresh water shells to dispose of, in the way of exchange, for land and fresh water shells.—ABRAHAM HEYS, Bond's Court, Acrington.

EXCHANGE OF LEPIDOPTERA.—Will you be so kind as to correct an error which was in my list of exchange in your last number, stating that I had A. Alni, P. Monacha, H. Dominica, A. Villica, S. Tilica, C. Porcellus, and E. Cassiope, for exchange, when I had not; but I have good specimens of A. Aglaia, Tages, S. Populi, A. Connexia, L. Olivaria, N. Tonaria, to exchange for them. The letters I have received about them are so many that I cannot answer all, but this will do as well. I have a good many things to exchange. I am in want of the following species; if any of your readers have them, they will perhaps write to me:—A. Atropos, T. Derasa, Bicupis, A. Alni, Glandifera, P. Palpina, G. Papilionaria, P. Cassinea, P. Monacha.—T. H. WOOD, 39, Bondgate, Darlington.

LIPARIS DISPAR.—If any of your readers would like to breed Liparis Dispar (the Gipsy Moth), and will send me *a stamped directed envelope*, I shall have great pleasure in forwarding them a few ova. They will require keeping in a cold place till the hawthorn buds next year; then, if put into a warm place, they will hatch and feed for about six weeks, and then attach themselves to the top or sides of the breeding-cage, and change into pupæ, in which state they will continue for about three weeks. They like hawthorn and oak best.—B. GIBSON, Kirkgate, Wakefield, July 10, 1862.

TO STUFF AND PRESERVE FISH.—Will any of our readers inform J. M—K how to stuff and preserve fish?

MOLLUSCA.—J. M—K also wishes to be informed how to preserve mollusca.

LICHENS.—J. M—K prefers another request: how to preserve lichens?

F. W., Redwell.—Very ingenious, but the trouble of "setting up" would not be repaid by the publication.

FLEAS.—Sir,—I hope by this time G. C. has found a remedy to rid himself of this annoyance. The opinion of "A Subscriber" as to its being attributable to the feline race, is probably correct, but if fowls are kept near the house, it may arise from them, or perhaps from dogs. We find the following receipt in *Kirby and Spence's Entomology*:—

> "While wormwood hath seeds, get a handful or twaine,
> To save against March, to make flea to refraine:
> When chamber is sweeped, and wormwood is strown,
> No flea for his life dare abide to be known."

G. C. is not like the old lady who said, "Don't you like *fleas?* Well, I think they are the prettiest little merry things in the world. I never saw a dull flea in all my life."—Yours truly, CARABUS NITENS.

EGGS OF THE SHRIKE.—Many thanks to Mr. Marshall for a characteristic description of the eggs of the Great Grey Shrike and Red-backed Shrike, which accurately accords with the specimens of the eggs of each bird, given by me to, and now in the possession of, A. Williams, of Farnham. Ed. Y. E. asks, "Were the eggs of the Great Grey Shrike taken from a nest in this country?" Yes. Two years ago my brother and I surprised the bird on her nest and had a good view of her. She had built in a high hedge in a woody part of Ightham, in Kent, and had laid six eggs. To our then mysterious discovery we now date our first interest in the innocent and pleasing study of ornithology. —C. E. ROUMIEU, Farnham.

WHITE EGGS ON THE GROUND.—A boy brought me three eggs the other evening that he had found in the grass. They were perfectly white, and he could not tell me the name. I know of no bird building on the ground whose eggs are white, and so I seek information from YOUNG ENGLAND. The eggs

are very oval, about eight-tenths of an inch long and six-tenths broad; very thin-shelled, and before they were blown had a golden hue. The nest was of very coarse dry grass, similar to the materials composing the outside of the bunting's nest. I am inclined to think the eggs may be only a variety. Could any of your correspondents inform me also whether they know for a certainty of the Yellowhammer laying eggs purely white? I have had them brought to me; and the boys in this neighbourhood say they often find them, but always late in the season. It would be a matter of curiosity to make special collections of the eggs of some particular species. I might mention the Blackbird, Yellowhammer, and more especially the House Sparrow. I have one of the House Sparrow's eggs quite white. —HENRY ULLYETT, High Wycombe, July 4th.

SKELETON LEAVES.—Can any of your readers inform me of the expeditious method of obtaining skeleton leaves?—A SUBSCRIBER.

J. BAILEY.—Our esteemed correspondent will, we think, approve of our plan when it is fully developed.

ABRAXUS GROSSULARIATA.—A gooseberry or currant moth. We do not know whether the caterpillar will thrive as well on black currant as red. Its natural food appears to be the blackthorn; it is also very fond of gooseberry and currant leaves.

CICADA SPUMARIA.—As I was walking out one summer's day in the country with uncle, we came into a shady lane; we found the hedge-bank dotted over with a sort of white froth, or foam. On examining them we found a little green insect in the middle of it. Could you tell me the name of the insect, and give me some account of its history?—ROBERT BUTTERWORTH BARKER.

The froth is called by the country people "Cuckoo-spit." The froth is produced by the larva of the *Cicada Spumaria*. The perfect insect is of a brown colour, with two white spots on the upper wings. Some of the Cicada family have the power of making a chirping noise, which has been noticed by many of the poets. One of the old ones very ungallantly says,—

> "Happy the Cicada lives,
> Since they all have voiceless wives."

Mr. Newman, also, in his beautiful little book, *The Insect Hunters*, celebrates the Cicada:—

> "Happy Cicada, perch'd on lofty branches
> Deep in the forest, cheerful as a monarch
> Tasting the dewdrops, making all the mountains
> Echo thy chirping!"

ED. Y. E.

R. ALBERY.—It is true the first number of YOUNG ENGLAND is all sold, but it is not "out of print;" it is to be reprinted.

DICRANURA VINULA.—Sir,—I have in my possession two chrysalides of the moth *Dicranura Vinula* (Puss Moth), which have been in that state upwards of two years. Not having heard of that moth stopping in the chrysalis so long, I beg leave to ask if you can give any explanation?—E. J. MASON.

We know of no instance of the chrysalis of *Dicranura Vinula* remaining alive for more than two years. It generally feeds up in autumn and appears in the summer of the next year. In what state is the chrysalis? Has it been cut out of its agglutinated chip-wood cocoon? If so, the probability is it is dead. —ED. Y. E.

CANARIES.—Dear Sir,—My children are constant readers of YOUNG ENGLAND illustrated paper, and I should be glad if you could give me any information, through the medium of your paper, on the construction and management of an aviary for *canaries only*.—E. N., Conway.

A room at the top of the house is the best place. Wicker nests, placed where they will be hid from view, having hair and wool in them; or the materials may be placed within reach of the birds in properly-constructed breeding-cages, hung up in the room, with the doors open. We have known a common hair broom, turned up on the handle, selected by a canary for her nest. Fir or holly trees, in boxes and pots, introduced into the room, would be a great addition. Perches should be driven into the walls or placed across the room; not too large. The windows of the room should be thrown up during the day in mild or warm weather, and then have a net stretched across the open part. If southern aspect, the birds must be provided with some place of shade inside. Sand the floor well; give them plenty of pure fresh water daily. There should be plenty of canary and rape-seed. If a particular pair be intended to consort with each other, these might be shut in a cage together on the close of the winter. Cages are the best preservatives of the little ones whilst being reared. We have seen canaries breeding in an aviary at the bottom of a garden this year, part of which was open to the air, and the other part roofed and glazed. Do not visit the birds too often, and *never* alarm or frighten them. When all is complete, beware of cats both inside and outside of the house. If a room at the top of the house be selected, this last precaution is especially necessary.—ED. Y. E.

THE RING DOVE.—Also, whether the Ring or Turtle Dove would breed in an aviary.—E. N., Conway.

Yes, if properly managed.—ED. Y. E.

PLAN FOR EXCHANGES.—Dear Sir,—If the plan for exchanging, by having addresses published in YOUNG ENGLAND, is appreciated and adopted, a few observations on the subject will not be unnecessary. The list of specimens for exchange should be accompanied by a corresponding one in number of what is required, and both sufficiently large, that a quantity may be matched that will prove a remuneration for trouble. To insure an answer to inquiries, a stamped directed envelope should also be forwarded. The plan of transmission may be decided as best suits contracting parties. If boxes are used (for insects) they should be lined with slips of cork, and the insects fixed high enough upon the pins to allow the cork to be well penetrated. Entomological pins must be used, because good insects are often spoiled by using clumsy common ones. The boxes should be stout and strong, to prevent being easily crushed. Precautions must be remembered, and a little trouble not minded, to insure success: and a successful exchange will well repay, if justly made.—Yours truly, O. S., July, 1862.

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YOUNG ENGLAND.

VOL. I.—No. 9.] SEPTEMBER 1, 1862. [PRICE ONE PENNY.

GEORGE STEPHENSON.

GENIUS does not depend on rank or birth. More true greatness comes from the cottage than from the palace. Nor is it in the power of the fondest mother, as she bends over the cradle of her new-born infant, and watches the smile that is playing on its features, to know what is to be its future history or destiny in the world. No persons ever dreamed, as they looked on the face of the infant Columbus, that he was to be the discoverer of a new world; or that Luther was to rise up and effect such a revolution in human thought and religious opinion as to carry its effects into all lands and through all ages; or that Cromwell was to become the saviour of his country, when the very life of his country was being trodden out by the foot of a proud and imperious oppression; or that George Stephenson, by laying down a few iron rails

GEORGE STEPHENSON.

through the length and breadth of the land was, comparatively speaking, to annihilate space and time; and by giving us a perfectly new mode of transit, was to convert England into one great neighbourhood, whether in relation to the cottage of the labouring man, or the lordly mansion of the first peer of the realm; and thus bring the very extremes of society into immediate and daily contact. Yet this he achieved; and surely the history of such a man is worthy of our knowledge and study.

GEORGE STEPHENSON was born in the neighbourhood of Newcastle on June 9th, 1781. His father was nothing more than a fireman to a colliery engine; and his son George, when yet a child, was sent to herd cattle at twopence a-day. His time was very much his own; and he filled up its precious moments in

sometimes seeking for birds' nests, but, more frequently and more profitably, in trying to model engines out of the clay which the bog supplied. From tending cattle, he rose to drive the gin-horse at the colliery; then to be assistant fireman; and, finally, to be entrusted with the working of the engine itself. Nothing could have better suited his taste, or have given him a better opportunity of gratifying his favourite bent.

Though his parents were too poor to give him anything approaching to an education, he had within himself—as we all have—the power of self-application and of self-culture. It is no crime for a man to be poor, but it is a great crime to be ignorant. Young Stephenson was bent on learning; and he went to an evening school three times a-week, in which he soon acquired the power, not only to read and write, but became distinguished in arithmetic. In this simple fact we have another development of his mental power and tendencies. For when he was afterwards appointed as brakesman to superintend the drawing of the coals out of the pit, he employed his leisure time in working some more difficult sums on a slate; while every success in figures acted upon him like a higher inspiration. And onward he pressed in this course of self-improvement till he left his equals all behind him, and promised to be the man of the coming age.

As is usual with most men of genius, Stephenson, having saved a little money, entered on married life, and settled in a small cottage, the chimney of which, we are told, once took fire; and, in the attempt on the part of his neighbours to put it out, several articles of furniture were injured. Among these was an eight-day clock, which, instead of sending to the clock-maker to be repaired, Stephenson undertook to put to rights with his own hand; and thus he became celebrated for his skill in this new department of labour.

He afterwards removed to Killingworth, and was engaged as brakesman at the colliery. To his equal grief and loss, he here lost his wife. But nothing can repress life; and genius will force itself into the light of day. At Killingworth one of the pumping-engines failed to draw the water out of the pit, and caused the workmen much trouble. Stephenson said he thought he could cure it, and on being allowed to try, he took the engine to pieces, and in a few days made it perform its work admirably. The pit was soon cleared of water, and Stephenson received a present of £10 for his skill.

Here we find him spending his evenings in cleaning clocks, and repairing watches, and making models of steam-engines; but in nowise neglecting his arithmetic and other studies. The consequence was that he was promoted to be engine-wright to the colliery at a salary of £100 per annum. Here it was, after many difficulties and disappointments, from the want of men sufficiently skilled in mechanics to carry out his design, he built his first locomotive, which was placed on the Killingworth railway, and, drawing a weight of some thirty tons up a slight incline, moved at the rate of four miles per hour. This experiment encouraged Stephenson, who saw in it, if others did not, the future and more perfect revelation of his own grand conception.

While his only son—for he had an only son—was down yonder in Scotland, pursuing his studies at the University of Edinburgh, and working hard for the first prize in mathematics, men in Parliament, and men out of Parliament, were busy discussing the merits of the railway project. In the midst of their strife and din, a Bill was passed in the House of Commons permitting a line to be laid down between Stockton and Darlington, of which Stephenson was appointed engineer, and which was opened on the 27th of September, 1825. There was an immense crowd of people assembled on the occasion, many of whom expected that it would be a failure. It was successful, however; a locomotive, driven by Mr. Stephenson, drew a train of six waggons laden with coal and flour, a coachful of the directors and their friends, twenty-one waggons for passengers, and six more waggons of coal—thirty-eight carriages in all—a distance of about nine miles in sixty-five minutes, going sometimes at the rate of twelve miles an hour. It was considered a complete success, and the traffic that immediately followed surpassed all the expectations of the projectors of the line.

As might have been expected, other lines were immediately projected, but not without great opposition on the part of landed proprietors and other parties, who at the time were alike blind to their own interest and the public good. The first line contemplated was that between Manchester and Liverpool, which was opposed by a tide of unmeaning prejudice, and the Bill for which was at the outset thrown out by a majority of the House of Commons, although on its re-introduction, the next Session, it was carried. In constructing this line almost insuperable difficulties had to be overcome; but Stephenson, who was chosen as engineer, had, like the immortal Chatham, learned to trample upon impossibilities; and he did what all the first and most distinguished engineers of the day said could not be done. On the 15th day of September, 1830, this railway was opened with great *éclat*, in the presence of the Duke of Wellington and other notable gentleman.

This line having proved a grand success, both for the carrying of passengers, who travelled at the rate of 1200 per day, and also for the conveyance of immense traffic, then followed the line between London and Birmingham, the advantages of which both to the travelling and the trading community challenge the power of words to express. Stephenson's time was now more than occupied. He was consulted by all parties, and his correspondence was immense—so much so that he was compelled to keep a secretary, to whom he dictated his letters, at which employment he could continue for many hours without weariness. Besides this, he travelled in three years upwards of 20,000 miles in a post-chaise, with his secretary.

We might refer to his labours in connection with the North Midland and other lines; to the fact of his being consulted by the present King of the Belgians in reference to the introduction of railways into his dominions; to his subsequent visits to Belgium and to Spain—but our space forbids us. One thing, however, must not be passed over. In the earlier history of railways it became a question whether fixed or locomotive engines should be used. The majority of engineers were in favour of a fixed engine; but Stephenson, with a keener preception and a clearer foresight, contended for the locomotive. He had a few years before begun a manufactory at Newcastle for locomotives; and here, under the superintendence of his son Robert, an engine was constructed, which on the day of its trial ran at the rate of fifteen miles an hour; and when the Liverpool line was opened, he had constructed not fewer than eight locomotives.

After a life of such incessant and unwearied activity, both body and mind called for corresponding rest. Stephenson, therefore, withdrew into comparative seclusion. In 1838 he fixed his residence in Taplin House,

in the county of Derby, where he cultivated flowers and fruits, received his friends with a hearty welcome, took delight in birds and natural history, and where, in the sixty-seventh year of his age, he dropped mortality for ever.

Next to the printing-press, the railway is one of the greatest of inventions; and next to the penny postage one of the greatest boons to the public. But what shall we say of its social, intellectual, political, and moral influence. The railway has proved no mean schoolmaster, who is always abroad with his lessons, and whose teaching is affecting all classes. In connection with the Telegraphic Wire, the railway is revolutionizing the mind and manner of England, of Europe, of the world; and its final effects will be seen and appreciated only amid the universal spread and triumph of our Christian faith. YOUNG ENGLAND has its Walls, and Arkwrights, and Stephensons still; but YOUNG ENGLAND will be all the greater and all the more powerful as it is CHRISTIAN.

LONDON, SEPTEMBER 1, 1862.

THE holidays are coming to a close, and the school-room is again throwing open its doors to welcome back those who have not yet finished their studies. Now as we had three-times-three for the holidays, let us have three-times-three for school-life. Let not YOUNG ENGLAND be sullen and sour because they have again to leave home and enter again upon their studies; as if life at school had nothing bright or sunny in it. The days so spent may be among the happiest on earth. The sun may shed down his rays in more noon-tide fulness and glory, but unless the eye be sunny, it cannot see the light; and so, unless there be a sunshine within the soul itself, no place will be attractive, and no scene will be bright. Let YOUNG ENGLAND take a sunny soul back to school, and then say whether even the school-room is not a pleasant place, and all the duties of the school-room have not in them elements of true enjoyment. To work, then, to work, with heart and soul; and be satisfied with nothing short of the first prize.

YOUNG ENGLAND is returning to school; and Old England has gone out to enjoy his vacation. Parliament was dissolved in the early part of last month, and Lords and Commons are out on their travels, or gone to enjoy the shooting, or otherwise to recruit their health, and brace up their system for future work. The Session, though not a very laborious one, has been long, and these bigger boys have got their holidays. The Queen, having been pleased to express herself satisfied with their conduct during the past six months, has set them free; and never did a school-boy hail his summer holidays with a lighter or more buoyant heart than do these parliamentary gentlemen their recess. It is to be hoped that they will make the best of their time thus given them, and return to their places qualified for far more earnest work. The progress of events and of society is rendering every man's duties more serious, and it becomes every man to be abreast with the age in which he lives.

There is the Queen herself down yonder in the deep retirement of her Highland home, driving out every day to enjoy the bracing air of the north, and luxuriate amidst the beauty and the grandeur which everywhere meet her eye; while by her beneficence and her presence she is shedding light and gladness over the hearts and the homes of a busy and virtuous peasantry. His Royal Highness the Prince of Wales has his chateau at Birkhall, from which he comes every other day to visit his Royal mother at Balmoral. There can be no doubt that that Highland retreat is much enjoyed by all the members of the Royal family.

Her Majesty has not, however, been unmindful of the privations and the sufferings now being borne with such manly fortitude by tens of thousands of her loyal subjects in the north of England, and has expressed her sympathy by sending a contribution of £2000 to relieve immediate want. Thousands on thousands will follow the example thus set by the Sovereign; and it is to be hoped that the public subscription, together with the legal measures to be adopted, will be sufficient to tide over the winter; and before spring begins to reveal her life and beauty the savage war now raging in America shall have come to an end.

What glorious weather for the harvest there has lately been! Heaven is pouring out its bounty, and our fields are covered over with corn, inviting the hand of the mower. Thanks be to God for such a year of plenty! Let the voice of rejoicing be heard in every dwelling.

A DONATION TO THE EGYPTIAN MUSEUM: LOUVRE.—Count Tyszkiewicz, a young and learned Polish traveller, has made a handsome present to this museum of some very precious objects collected during his researches in Egypt. These comprise one hundred and forty bronzes, one-half of which are remarkable for their beauty. They represent the various gods of the Egyptian Pantheon, and are in a state of fine preservation. They bear inscriptions, which leave no doubt as to the name of the personage represented. Some of these divinities are very rare or even quite new to science, and several others, hitherto only known by paintings. In that class may be mentioned a large snake in bronze, 28½ inches in length, a god with the head of a crocodile, and a personage whose head is surmounted by a star. There is also an ivory palette for a scribe, furnished with its reeds, and with two cakes of red and black ink scarcely touched. The reeds are cut at each end, one for the red and the other for the black ink. A knife of yellow bronze is remarkable for its fine form and for its keen edge. A square amulet in green spath, which bears the name of a functionary in the time of Osorchon I., who reigned in the ninth century before the Christian era; the head of the goddess Hathon is engraved in relief on this object. A pendant of a necklace, the material of which resembles chrysoprase, represents a Nile goose lying down. The lower surface bears the name of the Princess Neferon-ra, daughter of Tontines III. This jewel was therefore cut at least 1500 years before the Christian era. Engraving in relief on hard stone was, however, executed in Egypt at a much more distant period, as is proved by a small square amulet in sardonyx, bearing at the back the name of Amenemtre III. of the twelfth dynasty. This king, who is well-known as the founder of the famous labyrinth, belonged to the powerful family which covered Egypt with its monuments from Tanis to the bottom of Nubia, before the invasion of the Shepherds. At the back part of the amulet the king is represented as overthrowing an enemy. This scene and the royal motto is incised. On the other side is engraved, in relief, an Egyptian named Harbes, seated before an altar. . . . . There is also among the collection a fine specimen of a coffin-lid, in yellow varnish; an earthen cup, enamelled in brilliant blue; and a wooden footstool, of a simple form, but valuable for its preservation. Prince Sgnace Zagull, the travelling companion of Count Tyszkiewicz, has added to the collection a funeral papyrus in hieratic writing; and which is worthy of a place in the museum from its fine condition.

THE YOUNG NATURALIST.

CHAPTER V.—*continued.*

USEFULNESS OF INSECTS.

"Did you ever see any Cochineal?"

"Yes," replied Robert; "I bought some a few days ago for mother to dye some silk with."

"Did you know what they were?"

"I thought they were seeds of some kind. I noticed when the apothecary put them up, that they were of a greyish colour, and about the size of some kind of seeds."

"You are not the only one who has been led into that error. They are of the size, and have the appearance of some kind of seeds; and another resemblance between them is, they are found upon plants; yet they are—insects; each cochineal is a perfect insect. In South America they are considered so valuable, that the people take great pains to raise them. The manner of raising them is very singular. They live upon the nopal plant, and remain fixed to one spot upon the plant during almost their whole life.

"The people place a few of the old insects upon one of the plants, at a certain season of the year, and in a few weeks they become thousands. The young ones scatter themselves over the plant, and after attaching themselves to some particular spot, remain there till they reach their full size. It is said that some planters inoculate the tree with the insect. They take a handful of the young cochineal and rub them on the tree. The young insects fasten themselves to the bark, and there remain, sucking nourishment from the sap until they come to maturity. There are some plantations containing more than fifty thousand trees, on which this insect is raised; and it is estimated that the quantity which is sent every year from South America, is worth more than two hundred and fifty thousand pounds."

"I think Robert will not deny that cochineal is a useful insect," said William.

"I should like to have our orchard full of them," replied his brother; "I think they would bring more than the apples will."

"There is another valuable insect which apothecaries sell, which perhaps you have seen," said Mr. Rogers.

"What is it, pa?"

"Spanish Flies, my son. In some diseases, blisters are very useful. I have no doubt that there are many cases where blisters have been the means of curing diseases, and thus of saving lives. Now, Spanish flies are so powerful, that if ground to powder, and made into a plaister and laid upon the skin, in a few hours they will produce a blister, and they are generally used for this purpose by physicians."

"Are they those beautiful green flies which the apothecary keeps in a glass jar?" asked Robert.

"They are."

"Then I have seen them, and I have wondered what they were used for."

"Even locusts, which I have said sometimes overrun whole countries and destroy all kinds of vegetation, are not exclusively injurious," continued Mr. Rogers; "some nations use them for food."

"What!" exclaimed Robert, "people eat locusts? why it seems to me that I would as soon eat a spider. How should you like to have a plate of locusts for dinner, William?"

"I should have to be a great deal more hungry than I am now," answered his brother, "before I could eat them."

"Your feelings of aversion, my children, arise altogether from early education and association. If it was as common for us to eat locusts as it is to eat birds, you would have no more aversion towards the one than the other. You have been in the habit of supposing that locusts were a loathsome kind of insect, which should always be avoided. Hence you have cherished the same feelings towards them that you have towards spiders. But if you had always lived among the Arabs, who are accustomed to gather and eat locusts, your feelings would have been different; you would then, provided you liked the taste of them, have eaten them as readily as you now eat fish. Do you recollect what John the Baptist lived upon in the wilderness?"

"Yes, sir; the Testament says, 'locusts and wild honey,'" answered William; "but I always thought that what are there called locusts were the fruit of some kind of tree. There are locust-trees growing in this country, but they do not bear anything good for food, and I always supposed that the locust-trees which grew in this country where John was, were of a different kind, and that their fruit was good to eat."

"Many persons have supposed so; but it is a mistake. The locusts that John the Baptist used for food were a species of insect. The inhabitants of Eastern nations boil them, or roast them; sometimes they preserve a quantity of them in salt, and use them as they want them. It is one of the flying creeping things that the Jews were allowed to eat, by the Mosaic law; if you will hand me the Bible, Emily, I will find the passage which refers to it."

The little girl, who had been an attentive listener to the conversation, immediately left her seat, and brought her father the Scriptures. Mr. Rogers turned to the eleventh chapter of the Book of Leviticus, the twenty-first and twenty-second verses, and read as follows: "Yet these may ye eat: of every flying creeping thing that goeth upon all four, which have legs above their feet, to leap withal upon the earth; even these of them ye may eat; the locust after his kind, and the beetle after his kind, and the grasshopper after his kind."

"It appears, from this passage," continued Mr. Rogers, "that the Jews were permitted not only to eat locusts, but also certain other kinds of insects, such as beetles and grasshoppers. Now, as some kind of insects supply us with materials for clothing, others with medicine, and others are used by some nations for food, or other valuable purposes, it seems to me that on the whole, insects are more beneficial than injurious. Besides, they furnish food for birds and for each other. This prevents them from becoming more numerous than they are. If they were not eaten by the birds and by each other, they would become so abundant as to devour everything which we might plant, and in various other ways they would give us a great deal more annoyance than they do now."

(*To be continued.*)

AN EXAMPLE FOR YOUTH.

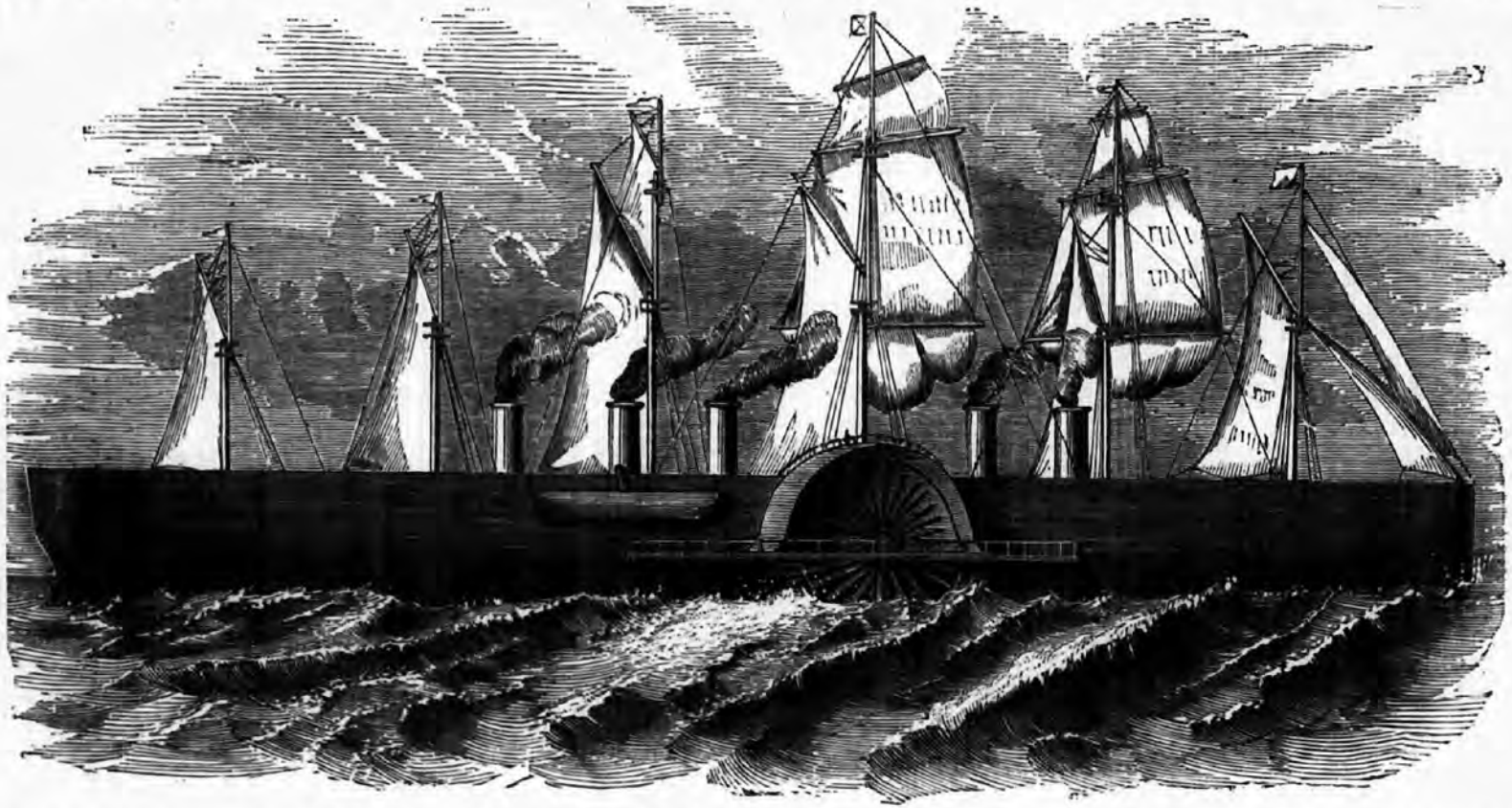
WHEN, on Thursday, July 10, the Corporation of London conferred the freedom of the city on Mr. GEORGE PEABODY, an American citizen who has devoted the princely sum of £150,000 towards aiding in some effective mode the more deserving and industrious poor of this great metropolis, that gentleman, in the course of his reply to the address of the Chamberlain, is reported to have said:—

"I am not unmindful of the fact that my ability to make a gift for the benefit of the poor of London, is less due to my own merits than to the kind Providence which has so highly favoured me in the acquisition of property: and I should have neglected an obvious duty if I had failed to employ a portion of my means for the advantage of others. It is but just to say, that in my effort to do good I am not a pioneer, but a follower of many public benefactors, whose munificent charities have illustrated your history. I have always held the opinion, that among those who had a special claim to participate in whatever good fortune I might enjoy were the communities in which I acquired the means of being useful to my fellow-men; and I should indeed be ungrateful if, in carrying out my long-cherished design, I should forget the great city where I had experienced so much kindness and passed so many years of happiness and prosperity. . . . . I have never forgotten, and never can forget, the great privations of my early years; and to encourage and stimulate to exertion the youth of this great city and country, who have no reliance except on their own characters and exertions to raise themselves in society, allow me to say that there are few persons among them whose opportunities for a prosperous life are not better than were my own at their age."

We shall close our notices of Ships used for commerce by an account of the Great Eastern.

The Great Eastern, then, is much larger than any ship that has ever been built. It was Mr. Brunel, the great engineer, who first thought of building a ship so large, and he it was who got the Eastern Steam Navigation Company to have the experiment tried. This Company got Mr. Scott Russell, of Millwall, to build it. The Great Eastern is one-eighth of a mile in length.

When we tell you that the length of the Great Eastern is 692 feet, and the breadth 83 feet, without including the paddle-boxes, you will understand how it is that a walk once round the deck will be a quarter of a mile in length, or that her length is greater than the height of the Monument added to that of St. Paul's Cathedral. And when you know further, that she is about sixty feet high from the keel, or bottom, to the top of the hull, or upper, deck, you will perhaps be prepared to hear that the Great Eastern is larger than the Ark which was built by Noah. In the sixth chapter of the Book of Genesis, we are told that the length of the ark was 300 cubits; the breadth, 50 cubits, and the height, 30 cubits. Now, according to the highest reckoning, that would make the number of feet to be, in length, 547, or 145 feet less than our ship; breadth, 91, or eight feet more; and the depth, 55, or five feet less than the Great Eastern. So that, reckoning by the usual rules, the latter will carry 1300 tons more than Noah's Ark could have done! The Great Eastern will carry 22,500 tons builder's measure, besides her own weight when complete, which is estimated at 12,000 tons, making a total of 34,500 tons. The largest vessel we have in the world does not carry more than 5000 tons.



She will accommodate with ease 4000 passengers, and when fully laden will have one-half of her hull below the water.

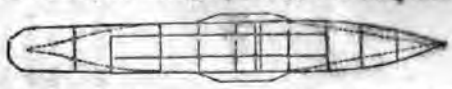
In order that you may form some idea of the size, as compared with other

vessels, we give a diagram, which shows the measurements of four of our largest vessels as compared with those of the Great Eastern. The long marks to the left are for the length, and the short ones to the right for the breadth.

But whilst you have been reading this, some of our readers have been thinking, "Ah, it is very fine to have so large a vessel to hold so many persons, and to carry so much merchandize, but what a dreadful thing it would be if any accident were to happen to her! What could then become of all those on board? Surely they stand a much greater risk of drowning!" In answer to this, we may well affirm that the Great Eastern is one of the strongest and safest vessels ever built. In proof, look to her construction. First, she is made entirely of iron, and therefore not liable to be worm-eaten, and less likely to be damaged by grounding upon a rock than if she were of timber. In the second, the whole of that part which will be beneath the water, is made double, in the way shown in the diagram. It is as though one ship were made rather smaller than

another, and having been placed in it, were fastened to the larger one by means of cross plates, running lengthwise and crosswise the entire length and breadth of the hull, and dividing the whole into compartments or chambers, each six feet square in the upper part, and about half that size in the bottom of the ship, where the greatest strength is needed. By this means there are two walls, with a distance of two feet ten inches between them, which serve the several purposes of increasing the strength and lightness of the whole structure, while they lessen the danger of water entering the ship from knocking a hole through her hull, and form, besides a means of making the ship heavier when wanted, by admitting 3000 tons of water as ballast between the two walls, or "skins," as they are called by ship-builders.

Still further to increase the strength and safety, the ship is divided into compartments or rooms, by eleven iron walls —upon the same double principle—which run right across the vessel from side to side; and being all of them perfectly water-tight, a leak sprung in any two or three of them—a thing very unlikely to occur—would not at all endanger the safety of the ship. Besides these cross-walls, or bulkheads, there are two others which run along the vessel 35 feet apart for the length of 350 feet, and these increase the strength and compactness of those which run across. As it is necessary to have a communication or passage through these latter for steam-pipes and machinery, and as an open passage would of course prevent the separate rooms from being water-tight, there are two very large iron tubes or tunnels which are fixed right along near the bottom of the ship, and, passing through the cross-walls, may be closed up quite water-tight when all the pipes have been placed within. Add to all this that the upper deck, which is also iron, is made upon the same double principle, and you have a structure which, for strength, safety, and adaptation, sur-

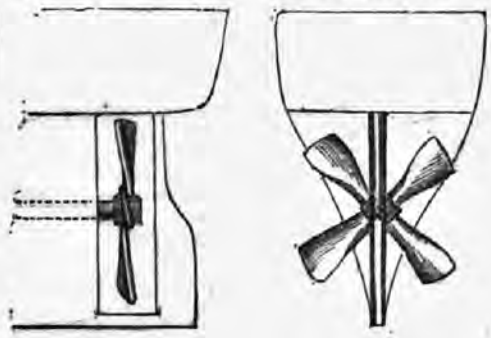


passes anything which was ever built. By looking at the accompanying diagram, our readers will better understand the arrangement of the bulkheads, besides which they will be able to form a better idea of the shape of the ship. The outside line shows the shape of the upper deck, and the dotted line the form of the hull below, which you will see is so arranged that it will meet with but a small resistance from the water through which it passes.

It has three different sources of power, or locomotion. The first is by the paddle-wheels, of gigantic size, which you observe in the picture. These are worked by four steam-engines, with separate boilers, each boiler having ten furnaces, making in all forty for the paddle-engines, the smoke from which is carried away by the two funnels or chimneys in the fore part of the ship. Each of these four engines has a cylinder which required thirty-three tons of liquid metal to cast it! The paddle-wheels, which are turned by these engines, weigh each ninety tons, and cause the ship to move by pressing boards or floats against the water, in the same way that a boat is rowed with oars.

Then there is the screw propeller. This is a piece of machinery fixed in the stern or back part of the ship, by means of which a part of a screw is made to revolve or turn round in the water so quickly as to impart motion to the vessel with which it is connected. Have you ever watched a carpenter put a screw into a wooden beam? If you have, you have seen that as he turned it, it forced its way quite into the wood. Well, if you get a part of a screw of the proper form, and, having fastened it to the end of a ship by means of an axis or pin through it, can make it revolve quickly in the water, it will make its way through the water, just as a common screw does into wood; the water offering so much resistance, that it will cause the movement of the whole ship, rather than be displaced by the screw-like blades.

This sketch will show you how the screw is fixed, by the side and front views given. You will see, too, that this



piece of machinery is not a perfect screw, but has four blades of screw-like form, which are found to answer the purpose as well as a large screw, and are besides much more convenient. The screw propeller is worked by four engines, the largest ever made. The cylinders to these are seven feet in diameter, or through the circle, and are supplied by six boilers. These boilers have each 12 furnaces, or 72 in all, from which the smoke is carried away by the three chimneys behind the paddle-boxes.

Besides these powerful means of locomotion—or moving from place to place—the Great Eastern has six masts, five of them iron, and hollow, and the last, or mizen-mast, of wood. The main rigging of iron-wire rope, 8½ inches in circumference, or measure round. She can spread to the wind 6500 yards of canvas, although she only makes use of her sails occasionally. May this noble ship, notwithstanding her reverses, prove grandly successful!

WEALTH.—The prospect of acquiring wealth and distinction, is a proper incentive to virtuous exertion; and when these are bestowed as rewards of personal desert, he must be more insensible than a stoic, who does not rejoice in the possession of them. But when they cannot be procured except by intrigue, adulation, loss of character, and prostitution of principle, to me they become not only worthless, but abominable objects of pursuit.—*Bishop Watson.*

THE POSTAGE-STAMPS OF THE WORLD.

By Dr. JOHN EDWARD GRAY, of the British Museum.

No. II.—STAMPS OF EUROPEAN GOVERNMENTS.—*Continued.*

BADEN.—I. Square number of value, of moderate size, in circular disk, in square frame, *Baden Freimarke*, printed in black ink, on coloured paper: 1, 1, white or pale brown paper; 2, 3, pale blue, 1859, or yellow, 1850, or green, 1855; 3, 6, green, 1850, or yellow, 1855; 4, 9, white, 1850, or red, 1855. II. Square Arms, with supporters, white, on coloured ground, in square frame, with *Freimarke Baden Post verein*, and value, in white letters, printed in coloured ink, on white paper: 1, 1 *kreuzer*, black; 2, 3 *kreuzer*, blue, or greenish; 3, 6 *kreuzer*, orange; 4, 9 *kreuzer*, rose. III. *Envelope*, profile of Grand Duke, to right, in oval-coloured frame: 1, 3 *drei kreuzer*, blue; 2, 6 *sechs kreuzer*, yellow; 3, 9 *neun kreuzer*, rose; 4, 12 *zwolf kreuzer*, ; 5, 18 *achzehen kreuzer*, red or brown.

MECKLENBURG SCHWERIN.—I. Square, small (in fours) Bull-head, in square frame, with *Mecklenb., Freimarke, Schwerin*, in margin, printed in coloured ink: 1, ¼ *schelling* ¼, red. II. Square, large Bull-head, in shield, surmounted by a crown, in square frame, *Mecklenb., Freimarke, Schwerin*, in margin, and number of value in angles, in coloured ink, on white paper: 1, 3 *schillinge* 3, yellow; 2, 4 *schillinge* 4, red; 3, 5 *schillinge* 5, blue. III. Poste couvert, embossed, white shield (with Bull-head), surrounded by a crown, and *Gross. H. Mecklenb. Schwerin*, in coloured oval, surrounded by an oval frame, with embossed white lines, with value above and number below: 1, 1 *Ein schillinge* 1, red; 2, 1½ *Ein u. einen halben schilling* 1½, green; 3, 3 *drei schilling* 3, yellow; 4, 5 *frien schilling* 5, blue.

BRUNSWICK.—I. Square, small (in fours) crown, with value in transverse oval, *Postmarke*: 1, 1½ *gutegr.*, 3 *pfenninge*, in black ink, on brown paper. II. Foursided, transverse, horse, with crown above, in transverse oval disk, with label, containing *Braunschweig* above, and value below, and number of value on each side, printed in black ink, on coloured paper: 1, ½ *vier silb. pf.* ½, white; 2, 1 *ein silb. gr.* 1, yellow or orange; 3, 2 *zwei silb. gr.* 2, dark blue; 4, 3 *drei silb. gr.* 3, pink. III. Like latter, but printed in coloured ink, on white paper: 1, 1 *Ein silb. gr.* 1, pink; 2, 2 *zwei silb. gr.* 2, pale blue; 3, 3 *drei silb. gr.* 3, orange. IV. *Post couvert, Stadt post Freimarke*, in frame, struck by hand for Town of Brunswick. V. *Post couvert*, Horse and Crown, white, embossed, in coloured disk, surrounded by white embossed white lined oval frame, with value above and number below: 1, *Ein silber groschen* 1, yellow; 2, *zwei silber groschen*, 2, blue; 3, *Drei silber groschen* 3, rose.

LUXEMBOURG.—I. Foursided, erect, profile of Duke, to left, in oval, *Postes*: 1, 10 *dix centimes*, black; 2, *un silbergros*, red or brown. II. Foursided, erect Arms, in oval, *G. D. de Luxembourg*: 1, 10 *centimes*, blue; 2, 12½ *centimes*, rose; 3, 25 *centimes*, chestnut; 4, 30 *centimes*, violet; 5, 37½ *centimes*, green; 6, 40 *centimes*, orange or vermilion; 12½, 25, and 37½ *centimes* are for use in Germany. III. Foursided, Arms (small), in circle, with number of value on each side, *G. D. de Luxembourg*: 1, 2 *centimes*, black; 2, 4 *centimes*, yellow.

LUBECK.—Foursided, erect, double-headed Spread Eagle, surmounted by *Lubeck*, with a label containing value and *Postmarke*, and number of value, in angles of a four-sided frame, printed in coloured ink, on white paper: 1, ½ *Ein halb schilling* ½, violet; 2, 1 *Ein schilling* 1, orange; 3, 2 *zwei schilling* 2, brown; 4, 2½ *zwei een halb. schilling* 2½, red; 5, 4 *vier schilling* 4, green.

BREMEN.—I. Foursided, erect; a key in oval disk, surrounded by oblong frame, *Bremen* in upper margin, printed in coloured inks, 1 *V.* 5 *s. gr. V.*, green. II. Foursided, erect; a key, in a squarish shield, surrounded by a crown, with number of value on each side, *Bremen Stadt Post Ant.*, printed in black ink, for Bremen; 1, 3. 3, blue or grey paper; 2. 4. 4; ——— ? 3, 5. 5, rose paper; 4, 7. 7 green or pearl grey; 5, 10. 10, white. III. Foursided, erect, large, a key in a squarish shield, surrounded by a crown, with number of value on each side, *Franco Marke*, inclosed in an oblong frame, printed in black on coloured paper: 1, 5 *funf. grote* 5, pink or red; 2, 7 *Sieben grote* 7, white or yellow. IV. Post couvert, a key, in shield, and *Bremen Stadt Post*, in small oval frame, struck by hand in upper, and *Franco* in lower, part of envelope for Bremen.

HAMBURG.—Foursided, erect. Arms, three towers, with the label *Hamburg* above, *Postmarke* below, and value on side of frame, printed in colours: 1, ½ *Ein halber schilling*, black; 2, *Ein* 1 *schilling*, brown; 3, 2 *Zwei schilling*, red; 4, 3 *Drei schilling*, blue; 5, 4 *Vier schilling*, green; 6, 7 *Sieben schilling*, cinnabar; 7, 9 *Neun schilling*, yellow.

These stamps are only used for England and Holland and other places beyond the sea. There are six other Post-offices in Hamburg, belonging to the neighbouring countries, which only allow their own stamps to pass.

Special office, I. *C. Hamer and Co., Institute, Hambourg. Boten*, with number of value, black on coloured paper: 1, ½ *schilling*, green; 2, 1 *schilling*, ——— ? 3, 2 *schillings*. II. Stamp on yellow and white paper cover as envelopes: 1, ½ *schilling*, vermilion; 2, 1 *schilling*, ; 3, 2 *schilling*.

BERGEDORF.—I. Square, with arms of Lubeck and Hamburg, *Bergedorff*, in circle in square frame, printed black, on coloured paper, increasing in size with the value: 1, ½ *half-schilling*, blue or violet; 2, 1 *Ein schilling*, white; 3, 1½ *Ein and halfer schilling*, yellow; 4, 3 *Drei schillings*, dark rose; 5, 4 *fier schillings*, buff. II. Like former, but printed in coloured ink, on red paper: 3 *Drei schillings*, blue.

DENMARK.—I. Square, small, sword and sceptre, crossed, surrounded by a crown, in a circular wreath, with dotted ground, in square frame, inscribed *K.G.L., Post F.R.M.*, and value below, printed in coloured ink, on white paper: 1, 1*s.*, brown; 2, 2*s.*, blue; 3, 4*s.*, red or brown; 4, 8*s.*, green; 5, 16*s.* lilac. II. Like former, but the ground of the frame with waved horizontal lines: 1, 4*s.* red; 2, 8*s.* green. III. Like latter: 1, 4 *Ringsbank skilling*, brown, more or less dark. IV. Like latter, but *Kongeliet, Post Freimærke*, and *a fire RB.S*, red. V. Square, value in circular garter, with crown above, and post-horn below, inscribed *Frimærke, K.G.L. Poste*, printed in coloured ink: 1, 2 *Ringsbank skilling*, blue for Copenhagen; 2, "3 *thiele*," black. VI. Head of Mercury (a trial stamp): 1, 4 *Ringsbank skilling* (1 ¼*s.*). brown. VII. Portrait of the king (a trial stamp): 1, 8 *Ringsbank skilling* (2 ½*s.*), brown.

SCHLESWIG-HOLSTEIN.—Foursided, erect; Lion and Eagle in body of two-headed Eagle, *S. H* in upper, and value in lower angle, printed in colours: 1, 1 *skilling*, blue; 2. 2 *skillings*, rose. Only used in 1848, and now replaced by Danish.

ST. THOMAS.—I. Like Danish stamps in II., but value in *cents*, on pale yellow paper; 1, 3 *cents.*, red. II. Like former, but on red paper; 1, 3 *cents*, red.

SWEDEN.—I. Foursided, erect; arm or shield, surmounted by a crown, surrounded by a foursided frame, inscribed, *Frimarke Sveringe Frimarke*, with number of value at upper angles: 1, 3 *Tre skill., B^co* 3, green; 2, 4 *Tyra skill., B^co*, 4; 3, 6 *Sex skill. B^co.*, 6, grey; 4, 8 *Atta skill. B^co.*, 8, yellow; 5, 24 *Tjugu fyra sk. B^co.* 24, orange. II. Like preceding, but value in öre: 1, 5 *fem. öre* 5; 2, 9 *nio öre* 9, lilac; 3, 12 *Tolf öre* 12, blue; 4, 24 *Tjuju fyra öre* 24, orange; 5, 30 *Tretio öre* 30, brown; 6, 50 *femto öre* 50, red. III. Foursided transverse, *Frimarke fur locak. bref.*, in oval transverse disk, a foursided frame, in black ink on white paper, for *Stockholm*.

NORWAY.—I. Foursided, erect; arms, lion rampant, with battle-axe, in arms in shield, surrounded by a crown, in circular disk, in a foursided frame, *Frimærke* above, value beneath, in coloured ink, on white paper: 1, 4 *skilling*, blue; 2, ? 3 ? vermilion. II. square, Charles XV. profile to left, in circle, in square frame, inscribed *Frimærke, Norge, Frimærke*, in coloured ink, on white paper: 1, 2 *To skilling* 2, yellow; 2, 3 *Tre skilling* 3, lilac; 3, 4 *fire skilling* 4, blue; 4, 8 *otte skilling* 8, crimson.

(To be continued.)

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

CHAP. XV.—THE MARSH HARRIER. (*Falco æruginosus.*)

THE MARSH HARRIER.

THE HEN HARRIER (Male and Female).

THE word "Harrier" has puzzled ornithologists sorely: some have derived it from the mode in which these hawks hunt for prey, like the hound known as the "harrier"; others suggest that they hunt hares, and so are "harriers"; but I think there can be little doubt that the word is derived from the old English verb to "harry," that is, to worry, to drive about, to persecute. Thus, King James I., who has been called the English Solomon, and who turned churchman immediately on his ascending the English throne, harangued a deputation of Presbyterians, from whose faith he had been a few months converted, in this style:—"I'll mak' ye conform, or harry you out of the land"—the meaning was, that he would worry or drive them out of the land. The word occurs in Shakspeare, and other authors of a later period, always in the same sense. These hawks are remarkably addicted to stealing and devouring the young of birds; hens with chickens are perpetually worried by them: hence the term "Hen-harrier," that is, a hawk that worries hens. There are three English species of harrier, the Marsh Harrier, the Hen Harrier, and the Ash-coloured Harrier. In all three species the males when matured are ash-coloured, the females retaining through life the brown plumage of the young. The figure of this bird in Bewick is the most perfect ever published. My artist, in drawing from a stuffed specimen, was not likely to produce anything so life-like; but, compared with all other representations of the bird, his portrait is admirable.

The Marsh Harrier—Moor Buzzard, Harpy, White-headed Harpy, or Harpy Falcon, for by all these names it has been called by naturalists—is not a bird of common occurrence in England, although there is scarcely a county in which it has not been either shot or trapped; and I can find no preference to any part of our island as regards north, south, east, or west, but a decided partiality for the neighbourhood of the sea, especially where the sea-coast is marshy and uncultivated. Montagu says it is the most common falcon in Carmarthenshire, and in the "Zoologist" are well authenticated records of its occurrence on the coasts of Hampshire, Sussex, Kent, Essex, Norfolk, Lincolnshire, and Durham.

A careful comparison of dates leaves me no alternative but to believe that it is a partial migrant, being more commonly procured at the periods of the vernal and autumnal migrations than at any other period of the year; still, I have evidence before me of its remaining here throughout the winter as well as throughout the summer. On the continent of Europe it certainly joins the vast throng of migrants which pass northwards in spring and southwards in autumn.

The food of the Marsh Harrier is very various. Montagu says that it preys on young rabbits, and that on one occasion he saw nine of these hawks feasting on the carcase of a dead sheep; the same great English naturalist also says that it preys on young ducks and other waterfowl, skimming close over the surface of the ground, diligently searching for prey,

THE HEN HARRIER ABOUT TO TAKE ITS PREY.

THE HEN HARRIER FEASTING ON ITS PREY.

which it seizes on the ground. He also mentions frogs, lizards, worms, insects, and fish as its occasional food.

Mr. Hogg, at page 1053 of the "Zoologist," says, in his most interesting account of the birds of Durham: "I have in different years in the autumn seen this bird frequenting the bare limestone cliffs on the Durham coast. It sits perched on a rock, and watches the sea-birds till an opportunity occurs of seizing one for its prey. It is here vulgarly called the Duck-hawk, and comes from the moors to the sea-coast in search of water-fowl. It is a remarkably elegant and active species. The gamekeepers on some of our moors hunt this bird with pointers in the spring, for the purpose of finding its nest; having marked the spot, they afterwards shoot the old birds, and destroy their eggs or young."

In the Crimea, at the time of the late war, the Marsh Harrier was most abundant, and exhibited the same propensity as the vultures to feed on unburied carcases.

The nest of this hawk is built on the ground, among low brushwood, furze, or fern; it is composed of sticks, rushes, and coarse grass; it sometimes also, but very rarely, builds in the fork of a large tree. Colonel Montagu found its nest in both situations. The eggs are four in number, very nearly round, but slightly smaller at one end, and pure white. Latham, and the complier of the letterpress of Bewick's "History of British Birds," both state erroneously that the eggs are spotted. I may here remark that the text of Bewick's "Birds" is a work of no authority whatever; these volumes consist of inimitable figures coupled with wretched letterpress.

It is difficult to describe the plumage of this bird, it is so excessively liable to variation. I will extract Mr. Selby's description. "The female bird of this species measures twenty-three inches in length, and in breath, with extended wings, four feet five inches. The bill is bluish black. The cutting edge of the upper mandible has a very slight tooth. The space round the eye lemon-yellow. Nostrils covered with upturned bristles; eyes blackish brown. Crown of the head throat, and cheeks, straw-yellow streaked with brown. Behind the ears and surrounding the neck, is a ruff of stiffish feathers. Upon the ridge of the wing is a patch of straw-yellow. The rest of the body is dark umber-brown, passing upon the belly into reddish brown. Legs long and slender, and, together with the toes, yellow. The claws are black. The male is rather inferior in size, and of an uniform umber-brown colour, with the exception of a small spot of straw-yellow on the head; his eyes are yellow instead of brown. The young birds differ from the old ones in being without the yellow on the head or wing coverts."

The yellow crown of the head is most remarkable, and, in some beautiful specimens I have seen. this distinctive mark is pure white, instead of straw-colour; and Colonel Montagu speaks of similiar specimens. This cowl or hood is so conspicuous that it distinguishes this bird from all its congeners; yet I have never been able to satisfy myself whether it is a distinctive character of male or female, of old or young; and, after a fruitless search among books and specimens, I am obliged to leave this curious problem without a solution. It is evident that Mr. Selby regards the "bald pate," as this white head is called, a sign of maturity; for he says, "the young birds are without it;" and Mr. Yarrell says, "this character is not assumed until the third year;" but strangely enough, this eminent author has figured a bird which he says is adult, but in which no trace of the bald head appears. So that, if Mr. Yarrell be correct, the Marsh Harrier gains the bald head in its fourth year, and loses it again on becoming adult, which must be a few months or a year or two afterwards. On the same subject, and in unison with Mr. Selby's view of the case, Mr. Hogg writes thus in the "Zoologist":—"I have noticed that the younger birds are without the yellowish-white mark on the top of the head, and have only a grayish or light-coloured spot on the throat." This remark provoked a rejoinder from Mr. T. J. Bold, a naturalist whose acute observation and perfect familiarity with English Natural History are abundantly displayed in every volume of the "Zoologist"; this gentleman's remarks are extremely interesting, because incontrovertible, and because opposed to all our book-knowledge.

In the "Zoologist," p. 1053, I find the remarks that "the younger birds of the Marsh Harrier are without the yellowish mark on the crown of the head. As this seems contrary to what I have observed, I will briefly state the fact, hoping that some more able observer may attend to the subject. I

have now before me the skin of a male in the nest-plumage; the colour is of a very dark brown, both above and below, with the head, from the base of the bill to beyond the occiput, the throat, and a few feathers on the breast, cream-coloured, very slightly tinted with brown, the shafts of the feathers alone being dark; the tail secondaries, wing coverts, and scapulars are tipped with red-brown. This and two other specimens (male and female, which are precisely similar in colour to the above) were purchased in Leadenhall Market by Mr. John Hancock in the summer of 1843. They were all from one nest, and so young as to have the down upon them; on the feathers becoming perfect, they proved beyond doubt that this bird in its nest-plumage has a cream-coloured head. The male and female are in Mr. Hancock's collection, the male in that of Mr. George Balmer, who also has a fine male in a dress which I should think approaches maturity, being uniform, and very dark brown, the upper parts appearing bronzed in some lights; the crown of the head is rather lighter than the other parts of the plumage; the tail is ash-grey, and a few feathers of the same colour are appearing on the wings. This species must be rare, or very local, as I only know of one flesh specimen that has reached here (Newcastle) for many years, and none of our dealers have ever had even a skin through their hands."

With such conflicting evidence it seems impossible to decide the exact meaning of this curious adornment, which however, is so common that Colonel Montagu found more than twenty specimens he examined to possess it. I am inclined, therefore, to believe that it is characteristic of the species, and that absence is merely accidental.

I find I have so far exceeded the limits to which the description of one bird should be confined, that I must defer more particular mention of the Harrier's "ruff," or radiating feathers round the eye, to another chapter.

Chap. XVI.—The Hen Harrier.—*Falco cyaneus.*

The Hen Harrier is, as I have already explained, a harrier or worrier of hens and other birds when surrounded by their defenceless young ones. When in Ireland in 1839, I had an excellent opportunity of studying the habits of this beautiful bird. Knapsack on back, I walked almost round the island, and not having any business engagements to interfere with my time or my progress, I went in any direction I pleased, and stayed by the way as I liked. Between Roundstone and the town of Galway, I saw more than a dozen of these birds at different times; and on one occassion four at a time, all of them males. The curlews seemed to have been breeding abundantly on the moors (or bogs, as they are generally termed) among heath and the lovely Menziesia. I saw them every now and then racing over the smoother places of the waste; and ever and anon rising on buoyant wing, and making the hills echo and reëcho with their piercing, screaming whistle. The Harriers, with buoyant, elastic flight, looked to me like dove-coloured owls, as they floated over the moor, their heads always turned to the ground, searching, as I thought, for juvenile curlews, born with the faculty of running, but for months unable to fly. The occasional swoop of the Harrier, and the increased screaming of the curlews that constantly attended him, suggested the idea that a young one had been secured and carried off; but I cannot state positively that this was the case, for I never got near enough to the birds to perceive so small an object as a curlew-chick. I must, however, state that I have found these little creatures on the dreary bogs of Ireland, always led to their whereabouts by the gymnastic and vociferous performances of the old birds, who attempted, by their extraordinary aërial evolutions and reiterated screamings, to attract my attention from their offspring to themselves. The louder the cries and the nearer the approach of the old birds, the more certain did I feel that I approached the young, and when the old ones exhibited more carelessness, I was equally certain that I was rambling away from the little ones. When I found these curious little fellows, they were bearing very little resemblance to their parents, and looking like round balls of down, with two little sticks of legs, two bright black eyes, and a short straight beak.

The Hen Harrier's flight is as silent as the owl's; the feathers are low, and the rays of the feathers are not fastened together; round the eyes only are the feathers stiff and harsh; and there they radiate from the eye, forming a kind of ruff, such an one as Queen Elizabeth is represented as having worn round her neck; and in another respect the Harriers resemble the owls: they are excellent mousers, and may often be seen quartering the ground like a pointer-dog late in the evening, searching for any unlucky mouse that ventures to exhibit himself outside his retreat.

In addition to young curlews and mice, the Hen Harrier eats lizards and frogs, and Mr. Yarrell even charges him with killing partridges, red grouse, and pheasants, and adds—"They have been observed to hunt the same ground regularly, and a male bird has been seen to examine a large wheat stubble thoroughly, crossing it in various directions always about the same hour in the afternoon, and for many days in succession." Mr. Yarrell, whose judgment in all questions of natural history is entitled to the greatest possible respect, seems to have regarded this "hunting" as having reference to the game mentioned in the same paragraph; but well knowing, as I do, the love of mice for what sportsmen call the "glorious stubble," and the love of Hen Harriers for mice, I am almost ready to differ from the learned author in question, and to suppose that mice formed the principal attraction.

The Hen Harrier makes its nest on the ground in the wildest and most unfrequented moors; but prefers the shelter of some stunted heath or dwarf furze-bush, on a prostrate branch of which the nest is generally placed. The nest itself is extremely simple, consisting only of a few sticks and scraps of bleached lichen, or wool torn by the brambles from the backs of sheep: the female lays four or five eggs, which Mr. Selby describes as "round at each end, and of a skim-milk white." I must confess that I have never found the nest of this bird, altogether I have sought for it for hours on the vast bogs of Ireland, where the birds I saw were almost invariably males, leading me to believe the females were sitting on their eggs.

The males and females of this species are so extremely dissimilar, that almost all naturalists have described them as different birds, calling the male the Hen Harrier, and in science *Falco cyaneus*; and the female the Ringtail, and in science *Falco pygargus*. The male is of that delicate blue-grey so common in our domestic pigeons; but the female is coloured with various shades of brown like most other English falcons; but in addition to this cursory and too superficial description, I will quote the more exact and scientific descriptions given of each by that accomplished naturalist, Mr. Selby.

"The Male, or Hen Harrier.—Bill bluish black. Cere, wax yellow, almost hidden by the projecting bristles at the base of the bill. Irides king's yellow. Head, neck, upper part of the breast, back, scapulars, and wing coverts, bluish grey, passing into pearl grey. The rump white. Quills black. Breast, belly, under wing and tail coverts, pure white without any spots or streaks. Middle tail-feathers grey; the outer ones having their inner webs white, barred with blackish grey. Legs and toes lemon-yellow.

"The Female, or Ringtail.—The space surrounding the orbits of the eyes white. Crown of the head and ear coverts umber brown. The ruff composed of stiff white feathers with brown shafts. Upper parts amber brown, more or less varied with yellowish or reddish brown. Quills dusky, barred underneath with white. Breast, belly, and thighs yellowish white, with long streaks of deep orange brown. Rump white. Tail barred with clove and umber brown. Legs yellow."

The young naturalist may well inquire my reasons for asserting that two birds so very unlike each other are the male and female of the same species; and, if on this, or on any other subject connected with natural history any of the readers of Young England incline to question me, it will give me the greatest pleasure to give an explicit answer.

To render assistance to those whose opportunites of learning may, from various causes, not be so good as my own, is one of the favourite objects of my life; and I trust that those more learned than myself will not criticise too severely errors that may very possibly creep in, when the teaching is so diversified as that which I have undertaken. It is impossible to know everything; and I have always believed it better to impart as much knowledge as we can at the time being, rather than wait until we are satisfied that our knowledge is complete.

In this spirit have I endeavoured to find evidence of what I do not entertain the slightest doubt, that these dissimilar birds are male and female of one and the same species. It is not enough for me that Mr. Yarrell or Mr. Selby thought so, and it is not enough that I feel in my own mind convinced of the fact. I wanted some evidence to convince others, and this I think I have found in the ninth volume of the "Transactions of the Linnæan Society," where is a most convincing paper written by the late Colonel Montagu, the very best of all our ornithologists. I will transcribe it here, as it is very little known, even to the scientific.

"About the latter end of June, in the year 1805, my friend Mr. Vaughan informed me that his servant had found the nest of a Hen Harrier in some furze, which contained three young and an addled egg. At this time the infant birds were very small, and only covered with white down; it was therefore determined to take them as soon as we deemed them sufficiently large to be brought up by hand. When that period arrived, the servant was directed to shoot one, and, if possible, both of the old birds, previously to his bearing away what was considered a prize of no small value. On the return of the man with the young, he brought with him also the Hen Harrier, which he assured us he had, under concealment in the furze, shot in the act of dropping a thrush into the nest while the female (as he seemed to consider the other, and which he described to be a brown hawk) was covering the young. He afterwards shotat and wounded the female, but could not obtain her. Strong as this person's evidence was in our minds, yet it conveyed no more to the public mind than what had been so repeatedly asserted on similar authority. Being, however, in possession of the aerie, the means were in our power of fully determining the point in question; and to enable me to observe and note the changes that might take place in the plumage, I undertook the care of the whole brood. At this time the two largest had thrown out many feathers, sufficient to discover the plumage of the Ringtail approaching; the other, by its appearance, must have been hatched much later. In about a month it was evident from size that there was but one male, so that all my hopes rested on this single life. As they became full-feathered, there was at first no distinction in plumage, but the eyes of the supposed male were always lighter than those of the others, whose irides were so dark as not to be distinguished at a small distance from the pupil. In the dress of the Ringtail, the whole continued through the winter, when the one which had been weakly from the first died; this circumstance induced me to force a premature change in some of the quill and tail feathers of the others, fearing some accident might frustrate my earnest desire of bringing the matter to a decisive proof, and about the middle of June, I was highly gratified by discovering an appearance of the new feathers in the place of those which had been plucked out, that clearly evinced the smaller bird to be a Hen Harrier, and the larger a Ringtail. Thus I had compelled Nature to disclose her secrets before the appointed time; for in every other respect their plumage was yet similar excepting about the sides of the face, which were paler in colour in the former, in which also the irides were of a dull yellow, somewhat mottled, whereas in the latter they still continued dark. The shyness of these hawks had occasioned their breaking most of their larger feathers, although in a place ten feet in length by five in width; and as their regular moulting season was advancing, they were turned into a garden surrounded by a wall, where after some time the female died of the cramp in her legs. The male had, about the 20th of July, thrown out many of the new feathers naturally, especially the greater coverts of the wing, and a few grey feathers in different parts of the body. On the 20th of August the greater part of the quill and tail feathers were grown to their full length, and a gradual increase of grey feathers appeared on most other parts; the eyes also became more orange; but it was not till the middle of October that it attained that state which made it desirable to be retained as an existing fact of the change; it was then killed and is in my museum. In this state the plumage of the Ringtail or female still remains about the neck, the smaller coverts of the wings, the thighs, and part of the belly, intermixed with the male plumage; the top of the head and wreath have also a mixture of the feathers of both sexes; the quills, scapulars, and tail, are completely masculine; in the last of these are a few small broken bars of cinereous brown on a white ground in the three outer feathers; the exterior margins cinereous grey; the six middle feathers are almost wholly grey, and the markings are very obscure beneath. From the account here given of the Hen Harrier, it is quite clear that the change of plumage is effected in the autumn of the year after it leaves its nest, and not in the same year; and as it is between three and four months in the act of moulting, it is certainly very extraordinary that so few instances have occurred of its being killed in that state, which might have been decisive. That such has been taken is evident by the description of *Falco Hudsonius* of authors, which is, doubtless, this bird in change of plumage."

I have twice spoken of the ruff or circle round the eye of the Harriers. The feathers which compose this ruff are stiff and bristly; they are inserted very close together and very near to the eye, and radiate from it in every direction. A similiar ruff surrounds the eye of every owl, and the fact of the Harriers possessing it so very distinctly shows that the owls and hawks seem connected together in the great tribe of Birds of Prey by these singular owl-like hawks, which combine the characters of the two families.

This elegant hawk, the last of my series, is also the last distinguished as a distinct species. In the preceding chapter I have shown that we are indebted to the late Colonel Montagu for proving that the Hen Harrier and Ringtail were the sexes of one species. From the same acute and gifted ornithologist we derive the information that a third species of Harrier inhabits these Islands, a species to which he has given the name of Ash-coloured Harrier, or *Falco cenerac-cus*. Out of compliment to the discoverer, Mr. Yarrow has proposed to alter the name to Montagu's Harrier and *Li-curs Montagui*, a change which I cannot adopt, holding the rule to be absolute that a name once given to an object in natural history must not be changed for any reason whatever.

The Ash-coloured Harrier is not so common a bird in this country as the Hen Harrier, but occurs here occasionally as well as all over the continent of Europe. It has exactly the same habits as the Hen Harrier, frequenting furze-clad moors, building its nest at the bottom of furze bushes, using only a few sticks and a little moss and wool, and laying four or five quite white eggs. Nevertheless the two birds are, without any doubt, perfectly distinct, and I shall proceed to point out the characters in which they differ.

The Ash-coloured Harrier is a larger-looking bird than the Hen Harrier; it has longer wings, and is longer altogether, measured from the tip of the beak to the tip of the tail; but notwithstanding this difference in length, it is fully one-third lighter in weight, weighing only nine ounces, while the Hen Harrier weighs at least thirteen ounces, and sometimes more. Then, the third quill of the wing of the Ash-coloured Harrier is much longer than either of the others, and the wings when closed reach beyond the tip of the tail. In the Hen Harrier the third wing-feather is not materially longer than the rest, and the tips of the wings when closed are two inches shorter than the tip of the tail. The flight of this hawk is still more buoyant and elastic than that of the Hen Harrier; it is almost like a swallow in the air, so long and pointed are its wings, so easy and graceful its evolutions.

In order to render this history as complete as possible, I will again quote Mr. Selby's descriptions of male and female, by which the reader will see that the sexes differ almost as much as those of the Hen Harrier.

"*Male.*—Bill bluish black; cere lemon yellow; irides yellow; head and upper parts of the body deep ash-grey, the tips and middle parts of most of the feathers blackish-grey; throat and breast deep ash-grey; belly, sides, and thighs white, with reddish-brown streaks; under-wing coverts barred with reddish brown. Primary quills black, secondaries ash-grey above, beneath paler, with three blackish bars, one of which is visible on the outer side of the wing. Tail long, the two middle feathers grey, with a tinge of brown, the rest grey on the outer web, the inner having five reddish-brown bars. Legs slender and yellow; toes short the claws black.

"*Female.*—Bill bluish-black; cere wax-yellow; irides bright yellow; crown of the head reddish-brown, with blackish-brown spots; nape of the neck varied with orange-brown and white. Above and below the eye is a streak of pale reddish-white; ear coverts deep umber-brown. Upper parts of the body umber-brown, the feathers margined with pale orange-brown; lower part of the rump and the tail coverts white, streaked with pale orange-brown; the whole of the under parts orange-brown, without *spot* or *streak;* tail having the two middle feathers nearly of an uniform brown, the rest being barred with pale orange-brown and umber-brown except the outer feather, which are barred with orange-brown and white. The young males, previous to the first moult, are similiar in plumage to the female bird."

Birdnesting, and Death from the Bite of an Adder. Caution.—As a little boy, named Wilkins, of Burgess-hill, was returning from school one evening in the summer, he clambered up a bank to examine a bird's nest, and groping with his hand among the moss, he felt, as he supposed, a sharp prick from a thorn, but which afterwards turned out to be a bite from an adder. As the real cause of the wound was not suspected, the swelling of the hand and arm was not properly attended to until the virus of the reptile had spread into the system, when he was taken to a surgeon, but it was too late, and the poor little fellow died under it on the second day. The same paper records another case:—A little boy named Newland, about nine years of age, residing with his parents at Sayers-common, Hurstpierpoint, on his way home from school, about five in the afternoon, crossed some fields lying between Hurst and Sayers-common, and amused himself by birdnesting. Upon discovering the nest of a graybird, he thrust his left hand into it, and though he never saw the adder, was immediately bitten on the back of the forefinger. The boy's cries brought to his assistance a man named Standing, who drew what he believed to be an adder's tooth from the finger, and conveyed the boy to his home, where he was shortly afterwards attended by Dr. Holman. A search was made the same evening for the adder, but without success. Four days after, however, a person named Press succeeded in killing a female adder, about two feet in length, near the spot where the boy was bitten, and which is believed to be the reptile that bit the boy, as it has a tooth missing. Much sympathy is shown for the poor little fellow, and, although he has suffered greatly, we believe his case is not considered hopeless."—*Sussex Express.* Dr. Edwin Bishop, of Moreton Hampstead, Devon, says, "The remedy for the bite of an adder, and indeed all poisonous snakes, is simple. It has been proved by experiment over and over again, that poisons of this character are harmless when applied to a mucous surface, and quantities have been swallowed without producing any ill effect. The bite, nine times out of ten, is in some part of the hand, and immediately it is felt, the wounded part should be well sucked by the mouth, and a piece of string tied round the finger or the wrist (according to the seat of the bite) to prevent the poison from being absorbed into the system. If this simple plan was generally known and acted upon, death or injury from the bite of an adder would be rare indeed."

CALENDAR FOR SEPTEMBER.

Now softened suns a mellow lustre shed,
The laden orchards glow with tempting red;
On hazel boughs the clusters hang embrowned,
And with the sportsman's war the new-shorn fields resound.

First Week.—Grapes ripen—Stone Curlew clamours—Wild Owls hoot—Ringousel appears—Fly-catcher last seen—Saffron Butterfly appears.

Second Week.—Ivy in flower—Beans cut—Stares congregate.

Third Week.—Wild Honeysuckles in flower a second time.

Fourth Week.—Woodlark sings—Woodcock returns.

Lepidoptera to be looked for in September.

G. Ramni.	H. Hispida.
C. Edusa.	C. Haworthii.
C. Hyale.	C. Vaccinii.
C. Cardui.	C. Spadicea.
U. Antiopa.	C. Nupta.
V. Polychoros.	E. Apiciaria.
G. C-Album.	E. Tiliaria.
A. Atropus.	E. Angularia.
S. Convolvuli.	C. Testata.
D. Pulchella.	A. Citraria.
A. Australis.	P. Maccana.
Ash.	*Bedstraw.*
S. Ligustri.	D. Gallii.
C. Ligniperda.	E. Satyrata.
A. Ligustri.	M. Occellata.
S. Illunaria.	
S. Illustraria.	*Poplar.*
S. Lunaria.	S. Populi.
Birch.	N. Tritophus.
N. Dromedarius.	C. Bifida.
L. Carelina.	N. Ziczac.
S. Fagi.	P. Palpina.
D. Harpyia.	C. Curtula.
C. Duplaris.	C. Ocularis.

Whooping Cough.—Mr. Jason says that an infusion of wild thyme will, in many cases of whooping cough and affections of the air-passages, remove the complaint when all other remedies fail.—*Lancet.*

Amusements.

MARBLES.

The best marbles are made of *marble,* and the best of these are *white,* called *alleys;* the others are clays. The best of these are made by the Dutch; the others, at our potteries in Staffordshire.

Bonce is played with very large marbles. One boy pitches his *bonce*, and another tries to strike it, each throwing by turns: if the bonce be struck, its owner pays a forfeit of one or more marbles, as agreed on.

Hit or Span is somewhat like *bonce*, only you must *shoot* the marble instead of throwing it. This is played with marbles of ordinary size. If the marble be hit or reached within a span, the forfeit is paid as before.

Three Holes.—These are made at any distance you please—two yards will do very well. You shoot from a mark fixed on, to the first hole: if you shoot into it, or within a span of it, you try for the next; and if you miss, the second boy shoots, and goes on till he misses one of the holes; then a third or fourth, until all in the game have had their regular turn; then the first boy goes on again, followed by the rest. He who gets to the end first wins the game, and gets the marbles for which the game was played. The game generally consists in going over the holes three times.

The *Pyramid* is formed by one boy placing three marbles close together on the ground, and one more on the top of the three. These are enclosed in a small ring. Any other boy may then *shoot* a *bonce* at the pyramid from a fixed mark. He pays so many marbles for the shot or bonce, and gets all he knocks out of the ring.

Plum-pudding is formed by either a straight or circular line. The marbles are placed on the line, each player putting down an eqnal number, and then in turn shooting or throwing from a mark three or four yards distant at the pudding. All the plums "picked off" the line are the property of him who picks them.

Laggings-out is played by one boy striking a marble against a wall, and letting it roll out; another does the same—and a third, fourth, fifth, or sixth. He who first succeeds in hitting a marble already on the ground, picks up all there as a reward for his play.

Handers is played by making a large hole, not more than three or four inches across at the top. All who play give one or more marbles to the boy who plays first: these he places on his open hand, and throws them from the agreed standing-place, if he can, into the hole. All he throws in are his. The remainder are taken by a second boy, who tries his luck in the same way as the first; and so on in turn till all are thrown into the hole.

Eggs in the nest are guessed at. Not more than two should play at this. The boy who goes first, places, unseen by the other, as many marbles as he pleases in his hand, and asks, "How many eggs are there in the nest?" If the other guesses the right number, they are his—if not, he has to pay as many as he guesses, *more* or *less* than those in the nest.

Ringtaw is played by drawing a large circle, in the middle of which, as many as play put an equal number of marbles. Each in turn, then shoots from the ring; if a taw stops in the ring it *must remain there*, and the owner put down in the ring any marbles he may have previously shot out—the others than shoot and get all they knock out.

Pound is played by making a smaller ring, and shooting first from a mark called the offing. If in the course of the game a "taw" be hit, the owner must give to the boy who hits it all the marbles he may have knocked out of the pound, put into the ring as many as he put down at first, go to the offing and shoot towards the "pound" just as he did at first. Having once shot from the offing, you must then shoot from the place where your taw rests. In shooting from the offing you may shoot from your knee.

The golden rule for marbles is *Knuckle down fairly and pay promptly.*

ANSWERS TO PICTURE RIDDLES IN OUR LAST.

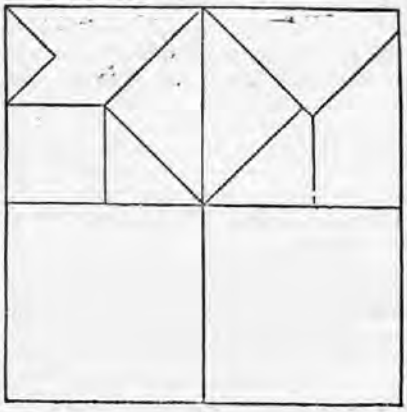
Note.—No. 1 of July not yet answered.

1.

Maidenhead, Bow, and Highgate.

2.

Two of each—placed as in this cut.



3.

1. Carnation.
2. A—rum.
3. Bluebell.
4. Days—Eye.
5. London Pride.
6. Primrose.
7. Shamrock.
8. Hearts—ease.
9. Bachelor's Button.

4.

Bloodhound.

5.

Dee—Ree.

6.

Steam Engine.

7.

Spark—park—ark.

8.

London.

L evere T
O stric H
N ev A
D urha M
O us E
N eedle S

Thames.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

2.

My first is a fruit, my second a small river in Yorkshire; my whole a symbol used in arithmetic.

3.

I am a fish of a flat nature; beheaded I am a small river; repeat the same and then I am, perhaps, what you have often been.

4.

What word relating to love can be converted into a simple sentence?

5.

Whole I am odd; behead me and I am even; curtailed I am a notable female.

6.

My first to those is given that gallant deeds have done;
My second always in the brutes is placed as number one;
My whole is used by persons great
In offices of rank and state.

7.

My whole shows terror and alarm; behead me and I am very cool and collected; repeat the same and I am a package of goods.

8.

A part of the head and a covering for the same will name a common insect.

9.

My second is my first, which is my whole; rob me of my first and I am the same; take away my second, and I am my first.

10.

My second makes my first, and the same teaches you my whole.

11.

What person is like a thousand and five hundred?

12.

From time to time I prepare your food for you, yet sometimes you court my visits, at others you despise them; sometimes I meet you, at others I follow you, yet you never see me; I am to be heard sometimes when in a hurry to leave you. I often bring other visitors with me, always leaving traces of our footsteps behind us. What am I?

13.

The initials of following will give the name of a pretty garden flower, the finals a fragrant wild one:—

A foreign bird.
A word meaning to *incite*.
A living member of Parliament.
An ancient poem.
A destructive insect.
The French word for "*yes*."
A town in the east of England.
The reverse of the word "*unite*."

14.

You often hear but never see me. You could not do without me, though I do you no good; in fact, I often give offence. I travel fast. If robbed of my eye I am then an indispensable feature to you.

15.

Decapitate my name, you'll spy
What 'tis when darkness veils the sky.
But as it stands, you there may see
To some a title, a name to me.
My Christian name, if you backward set,
And the first of my Surname add to it,
A rogue you'll find without a doubt:
What is my name?—Pray find it out.
With the sultry dogstar into being I came—
What month it was in I allow you to name:
If by 2, 3, 5, 6, my age you divide,
And only have one remaining beside,
Then you may say, without any doubt,
You are clever enough to find my age out.
My name, my age, and my birthday is plain.
To find it all out will puzzle your brain.

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Mr. Paine.—Long since out of print.

At them again appears to us hardly sufficiently considerate of others: besides, he has come to a conclusion without some important evidence not yet given.

Artificial Snow and Rock.—R. C. will be obliged if any one will tell him how to produce them.

Our Great Army.—Where do they come from?—We said something in July about a great army of drunkards in Britain, and some may wonder how it is that there are so many in our land. Where have they all come from? Were they always drunkards? No; they were once as free from the habit and sin of intemperance as the very staunchest abstainer in the land. They were once cheerful boys and girls, and as temperate and happy as the little birds that quench their thirst only from the crystal spring. Now, I will tell you how they became drunkards. It was by beginning to drink *a little* now and then—a little beer, wine, or spirits, or other intoxicant, till, by and by, they came *to like it* so well as to think they could not do without it, and thus by degrees—slow, perhaps, but sure—they became what they are. Now, what happened before will happen again, unless a different course is adopted; and if you, who are now young, will not become abstainers, the result will be that *many* of you will become drunkards; and when the present generation of them—the six hundred thousand now alive—have passed away from the stage of time, you will occupy the place which they now fill; you may be the drunkards of the next generation, pests to society, a curse to your kindred, and on the way to everlasting woe! For you know what the Bible says about the drunkard; and, knowing all this, my dear young friends, we wish to save you in time from ever becoming such. Oh, do not run the *least risk*, but remember if you take these drinks *at all* there is *some risk!* You may not think it or know it, but *there is*. You cannot tell how it may affect you in years to come, nor under what circumstances you may be placed. You do not intend to become a drunkard, nor do I suppose anyone ever did. However *moderately you may drink, there is risk:* in abstinence lies your safety, and why hesitate to give up that which, if you are *in health*, can do you *no good*, but may do you much harm?—Hopeful.

Bats and Swallows.—A correspondent asks "if any of your readers have met with a similar incident of hooking a bat in the mouth?" I have never before heard of hooking a bat in the mouth, but I have the pleasure of knowing two different gentlemen, now living in Yorkshire, who, whilst fishing at the same time as "R. G. B.," have each in a similar manner hooked a swallow.—R. B. Garstang, Bolton-le-Moors.

Stamps.—Sir,—Can any of your readers inform me what country the following stamp belongs to? It is four-sided, oval in the centre, printed black on white paper, having on the top "Franco Bollo," on the left "Giornali," and on the right "Stampe," and at the bottom "Centi. uno."—Philip Wright, Osmaston Manor, Derby.

Postage Stamps.—I can supply parties with Foreign Postage Stamps, and will also buy of any one that has got them to sell.—Address, T. E. G., Box 179, Post Office, Hull.

To Dye Paper or Parchment.—*Green.*—Paper or parchment may be dyed green by the solution of verdigris in vinegar. *Purple.*—Paper or parchment may be stained purple by the tincture of logwood. The juice of ripe privet berries expressed will also give a purple dye.

To Stain Ivory.—Sir,—In reply to your advertisement respecting the staining of ivory blue or green, I have the pleasure of informing you that I have stained ivory green by putting it for two days in a strong solution of nitric acid and copper wire, commonly called nitrate of copper. My own experienced way of doing it:—Put sufficient nitric acid to cover the ivory into a test tube, then put the copper wire in with the nitric acid, and boiled it over a spirit lamp for ten minutes. After it is boiled, pour it into a glass pot; when it is cold, put the ivory in, and after being in for two days it becomes a beautiful dark green. Purple:—Put into nitric acid one quarter of its weight of sal ammoniac, and soak the ivory in it.

The Swift's Egg.—I hope you will excuse my taking the liberty of correcting the shape of the swift's egg, as I have got two of the eggs, and have seen a great many, and I am very fond of studying Natural History. I have never seen one the shape you represent in the egg number of Young England. I therefore take the liberty of describing the egg to you, and

also send a copy from nature. The egg is of a long oval form, rather pointed, and one inch long. If there is anything else that you want to know at any time, I will do my best to answer it. I shall be very glad if you would answer my letter, and inform me whether your opinion agrees with mine concerning the swift's egg, and also if you succeed in the ivory. —T. G. MELLERSH.

POSTAGE STAMPS.—Having a large variety of Foreign Postage Stamps, I shall be glad either to buy, sell, or exchange with any of your readers.—J. E. JOSELIN, care of G. Flamini and Co., 30, Coleman Street, London, E.C.—N.B. Almost any variety can be obtained if required.

BATS AND SWALLOWS TAKING THE FLY.—Sir,—In answer to your correspondent "R. G. B." regarding bats taking the artificial fly, I can state that it is not a very uncommon circumstance. I have been told on very good authority of several such instances; and what perhaps is rather more uncommon, that the swallows will dart after the fly. I am not much of a fisherman myself, and cannot tell you the name of the fly. My informant told me of a gentleman whom he knew, who brought home one evening a fish, a swallow, and a bat, all caught on the same hook.—HY. ULLYETT, High Wycombe.

SLUGS.—What is the distinction in the large slug? Is the brown one the female, and the black the male? What is the best way of getting rid of them? Do they reproduce the parts if they are cut in two, as the worm does? How does the slug increase—do they lay eggs, like a snail, and if so, at what period of the year? Is the same true of the common white slug?—PUG.

EXCHANGE.—Sir,—It may be interesting to your readers to learn that I have caught a very good specimen of *Arctia Menthrasti*, and should be glad to exchange eggs of the same. Address, E. J. BENTLEY, 6, Thornhill Square, Barnsbury Park, Islington, N.

I have a quantity of birds' eggs of various kinds to exchange for lepidoptera; any of your readers who would like to exchange, I should be glad to treat with, on any terms we may agree upon.—E. T. HEPPER, Alphington Road, Exeter.

TREES FOR STUFFED BIRDS.—Can any of your readers inform me which is the best way for making small trees for stuffed birds to stand on? Answer in next number.—T. H.

POSTAGE STAMPS.—Sir,—Would you inform your readers that are desirous of making or completing a collection of foreign postage stamps, either by buying, selling, or exchanging, that they will have an opportunity of procuring some of the most choice and rare stamps on reasonable terms, by writing to C. R. W., 107, Osborne Street, Hull?

PRESERVING BIRDSKINS.—Can any of your numerous readers inform me of the best preparation to preserve birdskins prior to stuffing?—as I find arsenical soap is injurious, unless used with great caution. Yours truly, G. B. C.

CAPTURES.—Unfavourable weather prevents a long category. Since the first of June I have taken examples of the following, mostly single specimens:—S. Tiliæ, L. Mesomella, E. Cribrum, C. Dominula, E. Advenaria, E. Fasciaria, S. Belgiaria, S. Pluro, A. Strigillaria, L. Sexalata, A. Rubidata, S. Undulata, D. Pinastri, P. Æneа, E. Flammealis, and P. Palumbella, beside a few commoner species.—GEORGE B. CORBIN, Ringwood, Hants, Aug. 7, 1862.

Z. Esculi, M. Stellatarum, and V. Cardui.—A. H. A.

KILLING MOTHS.—Sir,—In your July number you say that the "cyanide of potassium" would kill moths *instantaneously*. I have tried it upon tiger moths, but find it has no effect.—THOMAS FOX, Allen Glass Works, Scotland.

SHELLS.—Could anyone inform me how to clean shells of any animal matter left inside them?—J. H.

BOOKBINDING.—And tell me of a work on bookbinding?—J. H.

SKELETON LEAVES.—Take a table-spoonful of chloride of lime in a liquid state, and mix it with a quart of pure spring water. Soak the leaves in this mixture for about four hours, then take them out and wash them well in a large basin filled with water. Then expose them to the light and air, and leave them to dry. If the leaves are large forest ones, it is necessary to leave them half-an-hour longer in the mixture.—K. B. WILLIAMS. P.S. The above is from "Cassell's Handbook of Amusing Experiments."—K. W.

LOCUSTS.—I have in my possession a locust which was taken at Brighton a few days ago. Is it usual to meet with them in England?—A. H. A.

FOSSILS.—Sir,—Can any of your readers recommend to me a cheap *Dictionary of Fossils*? Also, if any of your readers are engaged in fossil research, I should be glad to make an exchange of duplicates.—ORYCTOLOGY.

COURAGE OF FOWLS.—Sir,—In our poultry yard there are some rabbit hutches, under which there is a rat-hole, from which came a rat one day about one o'clock to get food. As soon as it was out of the hole, the hens (some of which had chickens) and the cock set upon it and pecked it so unceasingly that the poor animal became so exhausted that it could hardly get to its hole again. Is not this a striking instance of the courage of hens in defending their young?—LEO.

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YOUNG ENGLAND.

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ROWLAND HILL OF THE POST-OFFICE.

How much the world is indebted to individual conceptions! A man gets hold of a thought or an idea which so fills his mind, and has such an influence over him, as to have all the weight and all the force of an inspiration. At first this ruling thought or idea is confined to the individual mind, but sooner or later it seeks an outward and visible embodiment; and, when once it has taken shape and form, every one

ROWLAND HILL.

is struck with the simplicity of the conception, and wonders how the same thought never occurred to himself. Just as in the great universe, of which our earth forms a part, we find that the infinitely wise and the infinitely wealthy Creator always chooses the simplest means to effect his purpose—just as all his works are majestic in their own simplicity; so it is to be taken as a general rule, that the grandest human inventions or devices have had their origin in the simplest principles; and the simplicity of the principles may be traced again to the simplicity of the conception in the individual mind.

How much of what is commonly called genius depends on little incidents! We are told, in the life of Chatterton, that, in his early boyhood, he was looked upon as rather a dull intellect, till he fell in love with the illuminated capitals of an old musical manuscript in French, from which his mother taught him his letters; and then with a black-letter Bible from which she afterwards taught him to read. And yet such was the character of his genius, in after life, as "to make grey-headed erudition bend before it." The simple circumstance of Adanson, the illustrious French naturalist, receiving the works of Pliny and Aristotle as a school-prize, led him to pay so much attention to the subjects treated of by these ancient inquirers into Nature, that at the age of THIRTEEN he ventured to write notes on the works of those distinguished masters. Even Vaucansen the celebrated mechanician, who, from his stupidity, was said to be as much a machine as any of the machines which he made, happened, when a boy, to be long and frequently shut up in a room in which there was nothing but a clock, which, for amusement, he occupied himself with minutely examining, so as at last to make himself familiar with the connection and the uses of its several parts. And this little incident it was which afterwards made the construction of machines, not only his occupation, but his delight. We are told that Rowland Hill early showed signs of genius; that while still young, he employed himself in teaching mathematics in the town of Birmingham; that he helped his father in conducting a school which he kept, and even introduced some valuable improvements in its general management. But whether the grand idea in connection with our Post-office system, which in fact originated with Dr. Gray, of the British Museum, had yet taken possession of his mind, we know not. It was not till he had reached the manly age of forty, that he published his famous pamphlet on "Post-Office Reform," and that the eye of all England was fixed on him as a man raised up to be one of the noblest benefactors of his country and of humanity.

ROWLAND HILL was born in the town of Kidderminster in 1795; and the fact that his father was devoted to education as a profession, leads us to infer that the tuition of his son would be an object of the first importance—a chief end in the life of that father. Young Hill was worthy of all the time and labour that was bestowed upon his early training, and his future life has more than repaid it all. From teaching mathematics in Birmingham, he was taken, in 1833, to fill the office of Secretary to the Board of Commissioners for founding a colony in South Australia; but though he rendered important service in this department of labour, it was not the sphere in which he was destined to shine. The founding of a new colony is nothing less than laying the basis of future empires, and is worthy of the mightiest and most devoted energies which any man can bring to the task; and yet in such a scheme, men of genius, but whose genius points in another direction, would utterly fail. Mr. Hill had now got another idea. Hence the appearance of his pamphlet on "Post-Office Reform," which awakened not only the attention of the public, but which challenged the consideration of Parliament, and the consent of the Government; and in January, 1840, the system of our Penny Postage was brought into operation.

It was a happy thought, that PENNY POSTAGE—it was indeed. And now that the system which it involves has been at work for more than twenty years, we are in a position to speak of its advantages in terms of unlimited commendation. Its bearings—immediate and remote—on individual character, on family relations, on social life, on commerce, on literature, and on public morals, are, in fact, unspeakable. It is one of the great educators and regenerators of society. It is doing the work of a thousand schoolmasters, and of ten thousand preachers. It is like a stream of light diffusing itself through the land, scattering the darkness wherever it goes; or like a stream of life winding its way through all classes of the community, imparting vitality and happiness on the right hand and on the left. Myriads of voices have invoked Heaven's blessing on Rowland Hill; and the voice has been but the feebler echo of the heart with its deeper feelings. Talk of immortality! Here is something to perpetuate a man's name, and to embalm that name in the memory of a whole nation, from the peasant in his cottage now learning to write, up to the First Minister of the Crown, with the weight of a kingdom pressing upon him. Rowland Hill need covet no other monument than his PENNY POSTAGE.

So impressed was the nation with the benefit which had been conferred upon them, that, in 1844, a general subscription was opened to present Mr. Hill with some definite expression of public gratitude; and in a short time no less a sum than £15,000 was raised, and proffered to him as a well-merited gift. Soon afterwards he was appointed one of the secretaries to the Postmaster General; and, in 1854, he was raised to the Secretariate of the Post-Office Department. To such a position he was justly entitled; and that position he still fills with great efficiency and honour.

The division of London into so many postal districts, and by which the delivery of letters is so much facilitated, is another proof of his genius, and was proposed by him more than twenty years ago. In the Money Order Department, also, he has rendered great service, and been the author of not a few improvements; nor can the fact be overlooked, that other members of the same family have been his co-workers in the business of Post-Office improvement and management. One of his brothers, Mr. Frederick Hill, is the author of the "Postal Guide;" and another, Mr. Edwin Hill, is the inventor of the machinery for making postage envelopes. A third brother, Mr. Matthew Davenport Hill, Q.C., was Recorder of Birmingham, and well known for his efforts in the reformation of juvenile criminals.

Much, no doubt, has been done; but still our postage arrangements are not complete. The OCEAN PENNY POSTAGE must, sooner or later, be established; and perhaps one universal system of Penny Postage for the world. But there are improvements to be made more immediately affecting ourselves as a people, to which immediate attention should be given. The provision for the transmission of books and manuscripts is a positive boon to the literary world, and to every publisher throughout the kingdom. The Money-Order department is another positive good; while the introduction of the Savings' Bank system entitles the Post-Office authorities to the highest praise. But in the Money-Order branch there are two improvements imperatively demanded.

The first consists in reducing the charge on money orders. A domestic servant, out of her hard-earned wages, is desirous of sending, say ten shillings per quarter, to her aged father or mother. If she enclose the money in a letter, she runs the risk of losing it in the course of its transmission; or, if she send it through the medium of the Money Office, she must pay threepence for the order, and another penny for the postage of her letter, one thirtieth of the whole amount; while if a tradesman or a merchant send

five pounds through the same channel, he pays but sixpence, or one two-hundredth part of the amount. What we should like to see is, one uniform rate of charge of ONE PENNY IN THE POUND, and remove any existing limit to the amounts which may be remitted; so that while the servant-girl can remit her ten or twenty shillings for the small charge of one penny, the merchant may send his ten pounds for as many pence.

The second improvement which is required is, to reduce the charge on registered letters to one uniform rate, corresponding with the arrangement in the Money-Office department. For every twenty shillings contained in the letter, whether in the form of gold, note, or cheque, there should be the charge of one penny.

These would be positive improvements on the present system in both of these branches, and would become, we are persuaded, sources of great revenue. We do not write in the spirit of discontent: far from it. Our postal arrangements are, upon the whole, admirable. Nor can we fully estimate the debt of gratitude which we owe for such a system of quick, easy, and certain communication with each other, however wide may be the geographical distance which separates us. The man at the Land's End can communicate in a comparatively few hours with the man down at John-o'-Groat's. The father can follow his son with almost daily counsel; and the mother can pour out her heart into that of her daughter, and throw around her the strong forces of maternal love. Brother can have companionship with brother, and sister have communion with sister, and friend converse with friend; and all be conscious that the bond of their union is neither sundered nor relaxed. If so, then let YOUNG ENGLAND never fail to keep up correspondence with HOME.

LONDON, OCTOBER 1, 1862.

THE public journals have of late been filled with reports of murders and suicides, robberies and thefts, frauds and forgeries, peculation and embezzlement. It is not only the increase of crime which we have to deplore; but its aggravated and daring character, and, what is more than either, that it is so prevalent among our youth. This augurs bad for our country—for any country. Corrupt its youth, and its downfall is certain and speedy. Let YOUNG ENGLAND take warning in time. Let them shun any doubtful and devious path and course of action; be deaf to the voice of every temptation; and resolute against the seductions to evil. Virtue in youth will give dignity to manhood. A heart fortified by religious principles is best prepared to withstand and overcome those influences and forces which assail the young and unwary. One false step may be the ruin of the man for life; whereas one victory over evil may be his salvation and his happiness for ever.

Heaven has smiled upon us, and the harvest, which is good, has been largely and safely reaped.

The distress in the North rather increases, and takes a still worse type. What the privation and the suffering may come to during the approaching winter, it is impossible to say. But the heart and the hand of all England are open for generous deeds; and the stream of a patriotic charity will daily deepen and widen in its course, till it has carried relief and succour to every dwelling of want and woe.

Nor can we be silent on the American war:—a war for an end to which an insulted and outraged humanity calls aloud. If any one ever dreamed that the question of slavery had anything to do with this nameless civil contest, the address of Mr. President Lincoln to the coloured deputation who waited on him the other day, must have freed them from the delusion. The South are fighting not so much for slavery as for independence; and the North are not fighting for the emancipation of the negro, but for the lust of power. Mr. Lincoln, with all his despotic power, dare not—even were he so disposed, which he is not—treat the man of colour as he does the white man. If he were, he would kindle a flame which would be more fatal to him and the States than the war which is now raging with such diabolical results. Speak of the genius of the American Constitution! Shade of Washington! where art thou? Speak of American Revivals! Spirits of Edwards and Payson! where are ye? Those temples which were reared and dedicated to the Prince of Peace, are now given up to Moloch or to Mars; and from their altars the Spirit of love has fled, and given place to the evil genius of war. It is a war for which we can find no name. But we appeal to universal Christendom, if it be not time that she demand, with a voice whose echo shall come back from the throne of Eternal Light and Love, that this war shall now and for ever cease.

Is there no architect alive who can give us a design for a drinking-fountain at once useful and beautiful? Where is the *kalirekrene*, "the fair-flowing fountain" of the metropolis? The only one approaching the true and the beautiful is by an artist now deceased, who has adorned Islington Green with a statue of Sir Hugh Myddelton, and, very appropriately, has on each side of the London Aquarius, a little child pouring out from a sort of pitcher, a streamlet of water. The Royal Exchange is but a copy of a well-known picture; nevertheless, its adaptation is ingenious and commendable. But for the first city in the world,—with a Society and Committee and *Secretary* for supplying the inhabitants in their daily toil and travel with pure water free of charge,—a Society which has originated and led a "movement" as sagacious, practical, influential, and benevolent as any of the age,—to be, up to the present time, without a single design which can command the admiration of the populace, is a wonder, a disgrace, and a lamentation! When, also, we have a company which has the enviable, entire control of a New River, and which is said to be one of the richest companies of London, having the reputation of a wise and liberal management, it is unaccountable that the metropolis still lacks its fair-flowing fountain. The fountains which we have seen are miserable driblets—attempts and failures—water coming from an inverted shell, the leaf of a bullrush, an obese pot, or something worse. Oh! where is the taste, the genius, and inventiveness of modern statuary? Is there no sculptor, like Bailey for instance, who has endowed the nation with that wonderfully beautiful "Eve at the Fountain," the parabola of whose face has fed our earlier days with sweetest beauty—no sculptor who can give to modern London "a thing of beauty," which shall be "a joy for ever;" and mark the present time as conferring one of the greatest blessings upon the crowded city pent? Ye sculptors! where in our noble city is the kalirekrene? O Phidias! if thou wert alive, the drinking-fountain would commemorate thee to latest time, and the last traveller, as he passed away, would quench his thirst with God's best gift, and man's highest art.

GARIBALDI A PRISONER.

WITH A PICTURE OF NICE, HIS BIRTHPLACE.

GARIBALDI a prisoner! These three words, when they first fell upon the ear, stunned all Europe for the moment; and even now we could weep while we exclaim—How are the mighty fallen! It may be that, in his capture, order triumphed over anarchy; and authority over rebellion. Still we cannot but sympathize with this great hero in his fall. Here is a man, who, with the patriotic tide coursing through his veins, devoted himself, on the altar of a self-sacrificing love, to the salvation of his country; who, by the daring and the cunning of his genius, won a crown, and then gave it away; who subdued kingdoms, and then resigned them into other hands; and who, in taking that fatal step which has led to his humiliation, was actuated by the lofty motive of perfecting the freedom and the unity of his nation by delivering it from the grasp of a foreign Power, and that worst of all tyrannies—an ecclesiastical despotism.

In his case it has been strikingly true, that "the child is father of the man." We go back to the days of his boyhood, when he was wont to range those mountain heights on the shore of the Mediterranean, at whose base stands the lovely Nice, his native place, and where he drank in his first inspirations of heroic life. Children who are born and brought up in the midst of nature's wilder grandeur have generally a dash of the heroic in their composition; just as those who are from infancy familiar with the sea, and a sea-faring life, have in them the element of daring. It was at Nice, with the waters of the great Western Sea washing his feet, and the mountains rising behind into heaven, as types of physical greatness, that Garibaldi got his first ideas of that daring—of that heroism we ought to say—which has been so conspicuous in his life and action. It was here he learnt to swim, and fish, and sail his boat; in fact, to become a sailor, which has proved of such signal service to him in his successful expedition to Sicily. His manhood has been but the riper development of his childhood. He has grown up with those elements of character which only lacked the occasion for their revelation and practical results. That occasion came. In the depth and quiet of his own retirement, Garibaldi watched the rising tide of events; but he knew that events are subject to law; and therefore he was not impatient. As becomes its majesty, law is slow in its march and movement; nor can it be forced by any human arrangement; and Garibaldi had the wisdom to follow in the footsteps of Providence, rather than venture to take the lead. He was an instrument in the hand of God; and it was the will of God, as revealed in what was taking place around him, rather than any inclination of his own, which he had to take for the rule of his action. In this fact, we think, lay his success. We think of his landing in Marsala, and his subsequent march to Calah Tuni, and his victorious battle there. We call to mind his taking Palermo, and receiving the capitulation of the Neapolitan army. We cannot forget that greatest feat in modern warfare, his going forth with 800 men to conquer 18,000! and of his returning with the laurel of victory in his hand as master of Sicily.

Nor can we blot from our memory the fact, that he had long and patiently waited for the Italian Government to take some decisive step to make Rome the capital of the newly-acquired kingdom. He believed that it was the will of Victor Emmanuel that Rome should be held neither by the Pope nor by France; and that its possession was indispensable to insure the unification of Italy. It was this, in connection with his own intense desire, which prompted him to his latest deed of patriotism. Perhaps he was premature. It may be that he was mistaken in his calculations, and became impatient of results. His impatience has resulted in his fall. But we protest that he has not fallen as a traitor. Rebellion and anarchy were far away from his thoughts when he set out for Rome, and in his fall, Garibaldi is a patriot still. Yet it pains us to think of him in his present position, with all the States of Europe speculating as to what is to be done with him, and the Italian Government afraid to take a step. Garibaldi, who was entitled to stand side by side with Cromwell or with Washington, now a state prisoner! Garibaldi, the saviour of his country, now at the mercy of her law! God grant that this unpromising event may be but the backward step to that bound which is to set all Italy free!

THE POSTAGE-STAMPS OF THE WORLD.

By Dr. JOHN EDWARD GRAY, of the British Museum.

No. V.—STAMPS OF EUROPEAN GOVERNMENTS.—*Continued.*

RUSSIA.—I. Foursided small, erect, double-headed spread eagle, surmounted by a crown, white embossed, on coloured disk, surrounded by an oval frame, containing the value, and ПОqТОВАR МАРКА on a mantle, surmounted by a crown, all contained in a foursided frame, printed in two colours, on white paper: 1, 10 КОП 3А. 2 *А*ОТА, blue shield on brown frame; 2, 20 КОП 3 А,2 *А*ОТА orange shield on blue frame; 3, 30 КОП 3 А, 2 *А*ОТА, green shield on rose frame. II. Like latter, but only the value in the oval frame: 1, 3 *А LOT. КОРІО*, red shield in blue frame. III. White embossed double-headed spread eagle, surmounted by a crown, in a white lined disk, surrounded by a circular embossed white-lined frame, on the centre of the upper flap of the envelope: 1, 10*К.*, 3, *А*ОТА; 1 *К*ОП, 3 А, *К*ОНВ, black; 2, 20 *К.*, 7А 2, *А*ОТА, 1 *К.*, 3 А, *К*ОНВ blue; 3, 30 *К.* 3 *А.* 3 *А*ОТА. 1 *К* 3 *А К*ОНВ., red. The one Kopec is for the envelope. IV. Double-headed spread eagle, surmounted by a crown, with two post-horns beneath, surrounded by a circular frame, inscribed, printed by hand, in coloured ink, on white paper, on the upper right hand corner of the envelope: 1, 5 *К.С.*, ———; 1, *К.С.*, blue, for St. Petersburg.

POLAND.—I. Foursided, erect, double-headed spread eagle, surmounted by a crown, white embossed on coloured disk, surrounded by an oval frame, containing the value on a mantle, surmounted by a crown, in a foursided frame, printed in two colours, on white paper: 1, 10 КОП, red shield, in blue frame. II. Envelopes, double-headed spread eagle, surmounted by a crown, white embossed, in a circular frame: 1, 3 КОП, 1 КОП, blue ink, for Varsovie; 2, 10 КОП, I. КОП black ink.

FINLAND.—I. *Envelope.* ? Arm surmounted by a crown, with two post-horns below, value on each side, in oval transverse frame, struck by hand, with coloured ink, on white paper: 1. 5 *Kop.* 5 КОП., blue; 2, 10 *Kop.* 10 КОП, red. II. *Envelope.* Arms, in oval frame, struck by hand, in black ink: 1, 20 *Kop.*, 20 КОП. III. Foursided, erect, large, lion rampant, with tail in claws, in a shield, surmounted by a crown, in an oval disk, surrounded by an oblong frame, with value on upper and lower margin, coloured ink: 1, 5 КОП, 5 *Kop.*, blue; 2, 10 КОП, 10 *Kop.*, red, on white or coloured paper. IV. *Envelope*, with stamp like preceding: 5 *Kop.*, blue; 10 *Kop.* red.

MOLDAVIA.—Foursided. Bull's head, a star, and a post-horn: *Porto seris orei* in oblong purple frame, struck by the hand in coloured ink, on white paper: 1, 5 ПАР, black; 2, 40 ПАР, blue; 3, 62 ПАР, green; 4, 80 ПАР, red.

POSTAGE-STAMPS OF AMERICAN GOVERNMENTS.

1. UNITED STATES.—I. Portraits (of different persons), in oval disk, *U. S. Postage* in label above, enclosed in a foursided frame, on white paper: 1, *one cent*, profile of Franklin to right, blue ink; 2, *three cents*, profile of Washington to left, red ink; 3, *five cents*, portrait of ———? to right, brown ink (frame engine-turned, and indented edges); 4, *twelve cents*, portrait of Washington to left, black; 5, *twenty-four cents*, portrait of ——— to right, lilac ink, with engine-turned, indented frame. II. Like former, but in oblong frame, arched above: 1, *ninety cents*, portrait of Jackson? to left, blue. III. Like former, with portrait in oval to left, with value, in Roman numerals, at upper corners: 1, *ten cents*, green ink. IV. With Portraits of different persons, in different shaped disks, with *U. S. Postage* above, and number showing value in upper, and *U. S.* in lower corners: 1, *one cent*, profile of Franklin, in oval, engine-turned frame, blue; 2, *three cents*, profile of Washington, in oblong, engine-turned frame, red; 3, *five cents*, portrait of pale brown; 4, *ten cents*, portrait of Washington, in oval, with stars above and on sides, green; 5, *twelve cents*, portrait of Washington, in oval, black; 6, *twenty-four cents*, portrait of ——? in hexagon, blue; 7, *thirty cents*, profile of Franklin, in circle, orange. V. Portrait of ———? to right, in oval disk, *Post-office* above, *U. S.* at the upper, and *X. X.* at the lower corners: 1, *ten cents*, black ink on white paper. VI. Profile of Franklin, to left, embossed, inclosed in oval frame, inscribed *U. S. Postage* below: 1, *three cents*, red ink on yellow paper envelope. VII. Like latter, but rather smaller, red ink on white or yellow paper envelope. VIII. Like latter, but profile to right: 1, *one cent*, blue on yellow paper envelope. IX. Profile of Franklin, to left, embossed, inclosed in an oval frame, inscribed with value above and below: 1, *three cents*, red, printed on yellow or white paper envelope; 2, *six cents*, green, printed on yellow paper envelope; 3, *ten cents*, green, printed on white or yellow paper envelope. X. Like former, but smaller: 1, *three cents*, red, printed on white paper envelope. XI. Profile of ———? to left, embossed, in oval, erect frame, inscribed, with pale-edged embossed letters, *United States*, and value on each side and below: 1, *three cents*, red, on yellow paper envelope. XII. Profile of Franklin, in erect, oval frame, inscribed *U. S. Postage*, in oval, transverse frame, inclosing figures on each side: 1, *ten cents*, green, on white paper envelope.

SPECIAL OR PRIVATE AMERICAN POSTAGE-STAMPS.—I. *American Express Company Postage*, 2 *c. paid.* II. *Avenue Eighth Post-office, paid;* square, red ink on white paper. III. *Baltimore, Griffins Dispatch*; 1 *cent*, square, black ink. IV. *Bank and Insurance City Office;* square, black on white or yellow, red on white. V. *Boston, Chewert Towle, Seven-Stall Street, City Letter Delivery;* 2 *cents*, blue, circular. VI. *Boston, Hall & Co.*; blue, octagonal. VII. *Boyd's City Express Post*, Eagle: 1, *one cent*, black on lilac or bottle green; 2, *two cents*, black on vermilion or green; 3, *two cents*, gold, on red or white; 4, *two cents*, red on white, oval; 5, *three cents*, black on green, oval. VIII. *Boyce's City Express Post;* 2 *cents*, black on green, oval. IX. *Brady & Co., Express Post*, 1 *cent*, X. *Broadway Post-office; Observer*, black on white, oblong. XI. *Brooklyn City Express Post*, Pigeon: 2 *cents*, black on amaranthe, oval. XII. *Browne & Co.'s City Post*, number of value in oval, oblong: 1 *cent*, 2 *cents*, black on white. XIII. *Carrier's Dispatch*, 1 *cent*, rose, oblong. XIV. *City Dispatch Post*, Portrait: 2 *cents*, *c. c.*, black, on glazed green paper. XV. *Cie. Franco Americane*, above *Gauthier Frères et Cie.*, Steamship in oval, in oblong frame, brick red, small, transverse, foursided. XVI. *East River P. O.*, Steamship, black, on glazed green paper, oblong, small. XVII. *Essex Letter Express;* 2 *cents.* XVIII. *Floyd's Penny Post*, Portrait to left, black on blue, square. XIX. *Gordon's City Express*, Postman: 2 *cents*, black, on glazed green paper. XX. *Honour's City Post;* black on grey, oblong, small. XXI. *Hussey's Bank and Insurance Notice Delivery Office;* 1 *cent.* XXII. *Messenkope Union Square Post-office.* XXIII. *Messenkope Entire City Express Post*, Mercury: 2 *cents*, carmine. XXIV. *New York Post-office; 5 cents*, black. XXV. *New York Union Square P. O. to the Mail*, a small shield: 1, 1 *cent*, black on green; 2, 1 *cent*, black on rose. XXVI. *New York Metropolitan, Ferrand et Carrier*, a large shield, red: 1, 1 *cent;* 2, 5 *cents;* 3, 10 *cents;* 4, 20 *cents.* XXVII. Similar to last, blue, double face: 1, 1 *cent;* 2, 5 *cents;* 3, 10 *cents;* 4, 20 *cents.* XXVIII. Similar to last, but embossed, red: 2 *cents.* XXIX. *New York P. O.*, 13, *American Bible House*, in white embossed letters, red, octagonal. XXX. *New York P. O. Express Mail, H. W. Laws, P. M.*, a small shield, with embossed letters: 1 *cent*, red. XXXI. *New Jersey Express Co.*; embossed head of Horse, oval, green, on yellow envelope. XXXII. *Ocean Postage;* head of Mercury. XXXIII. *Ocean Penny Postage;* 1, vessel; 2, sailor; 3, steamboat; 4, angel; black on white. XXXIV. *Philadelphia, Blood's Penny Post;* 1, gilt on grey; 2, gilt on glazed black; 3, blue on grey paper. XXXV. *Philadelphia, Rochesper & Co., Blood's Penny Post;* profile, black on white, square. XXXVI. Similar, on red, embossed, circular stamp, on yellow envelope. XXXVII. *Philadelphia, Feese & Co.'s Penny Post;* small, oblong, blue

on bluish paper. XXXVIII. *Post Office Dispatch;* 1 *cent*, blue on white, small, oblong. XXXIX. *Price's City Express Post;* 2 *cents.* XL. *Russell Post Office, Eighth Area;* profile to right, black on pale green, oblong. XLI. *Smith's City Express Post,* 2 *c. paid.* XLII. *Squier et Co.'s City Letter Dispatch,* Pigeon: 1 *cent*, red; 1 *cent*, green; square. XLIII. *Steam-packet Office,* Sir Walter Raleigh, ship, embossed white, oval. XLIV. *Steenmeyer's City Post-paid;* 1, 2 *cents*, black on rose; 2, 2 *cents*, black on yellow; small, oblong. XLV. *Swart's City Dispatch,* portrait of Chatham, red on white, square. XLVI. *Swart's City Dispatch,* profile to left, red, square. XLVII. *Warwick's City Dispatch,* small size: 1, 2 *cents*, carmine; 2, 2 *cents*, yellow. XLVIII. Same, large size: 1, 2 *cents*, yellow. XLIX. *Washington City Dispatch,* Courier: 1, 1 *cent*, lilac, square. L. *Wells, Fargo & Co.'s Penny Express,* Horseman: 1, 1 *dollar*, red; 2, 2 *dollars*, red; 3, 4 *dollars*, green, square. LI. *Wells, Fargo & Co., Paid, Throughout California and Atlantic Express;* red ink on white, elongated, transverse, with embossed head of Washington, in oval frame, inscribed *three* above, *cents* below.

2. CONFEDERATE STATES.—Different portraits, in circular disk, in square frame, with *Confederate States* above, and value beneath. I. *one cents,* Colquhon, red. II. *five cents,* Jefferson Davis, blue.

3. BRAZILS.—I. Small oblong angles concave, number of value in Italic, black ink on white paper: 10, 20, 30, 60, 90, 180, 300, 600. II. Like former, but with angle complete, number of value in Roman, black ink, on white paper: 10, 20, 30, 60, 90, 180, 300, 600, 800, 1200. III. Like latter, but in blue ink, on blueish paper: 10, 20, 30, 60, 90, 180, 800, 1200. IV. Like latter, but in red ink, on white blueish payer, 280, 430. V. Square, with large Roman number with curls of value in an oval: 30, 60, 90.

4. GRENADINA CONFEDERATION.—I. Arms on shield, in circle, in octagonal oblong erect frame, *Confed. Granadina Correos Nacionales;* 1, 5 *cents* 5, lilac; 2, 10 *cents* 10, brown; 3, 20 *cents* 20, blue. II. Similar, but with the edges and circle broader: 1, 5 *cents* 5, lilac; 2, 10 *cents* 10, brown; 3, 20 *cents* blue.

5. ARGENTINE CONFEDERATION.—Large sized; man's head above, in oval horizon, with two arms in front, holding a cap of liberty, in an oblong, erect frame, *Confe^{on}. Argentina,* coloured ink, on white paper: 1, 5 *centav*, red; 2, 10 *centav*, green; 3, 15 *centav*, blue.

6. MEXICO.—I. Portrait of President to left, in oval disk, in an oblong foursided florid frame, *Correos Mejigo,* printed in colours, on white paper: 1, ½ *Medio Real*, blue or yellow; 2, 1 *un real*, orange or green; 3, 2 *dos reales*, green or pink; 4, *cuatro reales*, red or pink; 5, 8 *ocho reales*, lilac, brown or pink. II. Similar to former, printed on coloured paper: 1, ½ *medio real*, black or brown; 2, 1 *un real*, black or green; 3, 2 *dos reales*, black or lilac; 4, 4 *cuatro reales*, red or black, or yellow; 5, 8 *ocho reales*, green or rose.

7. CHILL—Profile of Columbus in circle, in oblong, erect frame, including *Colon.* above, and Chili below. *Correos Poste Franco,* in coloured ink, on white paper: 1, 5 *centavos*, red; 2, 10 *centavos*, blue, mauve, or dark.

8. PERU.—I. Square; arms and wreath in a circle, in a square frame, inscribed, *Correos, Porte Franco, Correos;* 1, *un dinero*, blue; 2, *meso peso*, yellow; 3, *una peseta.* II. Like former, but printed in black: 1, *un denira*; 2, *una peseta;* patterns not issued. III. Arms (a ship) Printed in colours or white; 1½ oz. 1 *Real*, blue; 2, 1 oz. 2 *reales*, pale carmine. IV. Like I. the circular central shield, while in the arms embossed, the inscription and value in arched lines. 1, Un dinero.

9. BUENOS AYRES. — I. Oblong transverse profile of Liberty in a circle, enclosed in an oblong frame, inscribed *Correos Franco Buenos Aires,* printed in colours, on white paper: 1, 4, *reales*, green; 2, 1 *peso*, blue; 3, 2 *peso*, red. II. Ship in oval oblong frame, *Buenos Aires,* in colours, on white paper: 1. 1 *peso*, blue; 2, 2 *peso*, blue; 3, 4 *peso*, red; 4, 5 *peso*, blue, deep blue, or brown.

10. VENEZUELA.—Small; a horse in a shield, surmounted by two cornucopiæ, and with *Libertas* below, in an oblong erect disk, inscribed *Correos de Venezuela*, printed in colours, on white or bluish paper: 1, *medio real*, pale brown or yellow; 2, *un real*, blue; 3, *dos reales*, red.

11. MONTE VIDEO.—Sun, in a circle, *Montevideo* in an oblong erect frame, printed in coloured ink, square: 1, 60 *centissimo*, brown; 2, 80 *centissimo*, vermilion; 3, 100 *centissimo*, carmine; 4, 120 *centissimo*, blue; 5, 180 *centissimo*, green; 6, 240 *centissimo*, red.

12. NUEVA GRENADA.—*Nueva Grenada,* 5 *cents*, yellow.

13. PARAGUAY.—Arms, *Paraguay,* printed in colours, patterns only? 1, black; 1, green; 3, rose; 4, red; 5, violet; 6, brown; 7, brick red; 8, blue; 10, yellow.

14. HONOLULU OR SANDWICH ISLANDS.—I. *Honolulu,* number indicate the value, printed in colours, on white, 12 *cents*, black and blue. II. Portrait of king in disk, surrounded by oblong frame, inscribed *Postage* above, *Honolulu Hawaian Isl.* below, with value on sides and corners: 1, *Hawaian Postage,* 2*cts.*, red; *Hawaian Islands,* 5*cts.*, blue; 2, 13*cts.* ; *Hawaian,* 5 *cts.*, ; *United States,* 8 *cts.* red.

15. Oblong, transverse, steam-ship, in oval, in broad oval frame, inscribed, *Pacific Steam Navigation Company,* stamps, with *P.S.N.C.* in the corners, printed in colours; 1, ½ oz. 1 *Rl.*, red; 2, 1 oz., 2 *Rl.*, red? for letters sent between posts in Pacific.

The Paris correspondent observes:—

"The mania for collecting postage-stamps is decidedly on the increase. I have mentioned that a 'Manual' has been published; we have now special correspondents, and the collections are quoted commercially. A catalogue, drawn up by M. Potequot, fills 46 pages 8vo. This will not appear astonishing, when we cast a glance over the history of postage-stamps. They were first used in England, as you are aware, on the 10th of January, 1840, and were confined to this country for nearly ten years. France adopted them in January, 1849; the Office of Turn and Taxis introduced them into Germany in 1850; and at the present day they are used in 69 countries in Europe, 9 in Africa, 5 in Asia, 36 in America, and 10 in Australia."—*Daily Telegraph,* May 17, 1862.

THE YOUNG NATURALIST.

CHAPTER VI.

MORE STORIES ABOUT INSTINCT.

AFTER the conversation which they had with their father about the instinct of animals, which is alluded to in Chap. IV. the children became much interested in that subject. They watched the movements of all the creatures which they saw, to ascertain if they did not exhibit something like reason. If the cow whisked her tail, to brush away the flies; if the horse, when being harnessed, bent down his head to receive the collar; if the cat went to the door, and mewed to have it opened; if the chickens came running to the house when the tablecloth was shaken; they would have a little discussion in their way, whether there was not something more than mere instinct in it—something like reason.

When Mr. Rogers saw the interest which his children took in this subject, he was much pleased, and in order to continue and increase it, he related to them other facts for their consideration. "Have you ever heard the story of Dr. Franklin and the ants?" said he to them one evening, when they were all collected in the parlour. They replied in the negative. "I will tell it, then, as I have no doubt that it will afford you pleasure, besides furnishing you with materials for profitable conversation.

"Dr. Franklin, on one occasion, discovered a number of ants regaling themselves upon some molasses in one of his cupboards. Not being at all disposed to give such unwelcome visitors their board, he speedily put them to flight. In order to prevent them from finding access to this tempting bait in future, he took the pot, which contained the molasses, and suspended it from the ceiling by a string. Unfortunately, all of the ants were not put to flight; one re-

mained with the molasses; and after the doctor had hung the pot where he supposed it would be perfectly safe from these marauders, this single ant was seen to ascend the string, cross the ceiling, and return to its nest. In less than half an hour a number of ants left their nest; ascended to the ceiling; passed over to where the string was tied; followed the string down to the pot, and ate the molasses. They continued to visit it in this manner, until it was all consumed. Having related to you the anecdote, I have now a question to ask; did these ants exhibit anything more than mere instinct?"

"I think they did," said Robert.

"Why so?"

"Because I can't see how instinct alone would teach those ants where the molasses was put, after it was taken from the cupboard."

"You might as well say," replied his father, "because you cannot see *how* it is that instinct teaches a bird to build its nest, therefore instinct does not teach it; or because you cannot see *how* it is that steam makes machinery work, therefore you do not believe that steam produces that effect. I do not mean by these remarks, Robert, that your *opinion* of those ants is a wrong one; I only want to show that the *reason* which you assign for that opinion is not sound. Your *opinion* is, that those ants were not governed by mere instinct; the reason you give for your opinion is, that you *cannot see how* instinct alone will account for the facts. On the same principle, you ought not to believe that any results are produced by a certain cause, unless you can understand clearly *how* that cause operates. You ought not to believe that earth, water, and air combine to make plants and trees, because you cannot see how such a combination can take place; you ought not to believe that heat converts wood into smoke and ashes, because you cannot see *how* heat can produce such effects. Now, whether your *opinion* of the ants is correct or not, the *reason* of that opinion is not sound. We believe in many operations the precise mode of which we do not comprehend. What is your opinion of those ants, William?" said Mr. Rogers, addressing his eldest son.

"I was thinking, that perhaps the ant which left the pot after it was hung by the string from the ceiling, went and told the rest where it was."

"Ha, ha, ha!" laughed Robert, "that is the same as to say that ants can talk."

"They may not be able to talk," said Mr. Rogers, "and yet, perhaps they can, in some other way, communicate ideas to each other. It is supposed that they do it by rubbing each other's horns or feelers. It certainly is not very improbable that the ant, which left the molasses after it was put in a new place, by some means gave information of the change to its companions."

"Is it not more likely," said Robert, "that, after it went to the nest, it returned again to the molasses, and was followed by the others?"

"But why should the others follow it," asked his father, "if they did not know where it was going? and how could they have known where it was going, without being informed?"

"Perhaps they were guided by the scent of the molasses to the place of its concealment," said Mrs. Rogers, "for I have often thought that they could tell by smelling where food was placed."

"Or it may be," said her husband, "that the one which was left in the pot got some molasses on its feet, and when it returned to the nest it might have made a track; the others, by following this sweet track, would of course be led to the secreted treasure."

After some further discussion in the family on the subject, Mr. Rogers said he would mention to them another fact, almost if not quite as interesting as that of the ants. "There is a bird," said he, "called the hooded crow, which feeds on small shells. Some of the thin and tender kinds it breaks with its bill, or by beating them against the stones; but the larger and thicker shelled ones, it cannot destroy in this manner; it therefore resorts to a singular expedient to get at the meat. It seizes these large ones, and after carrying them to a considerable height in the air, it lets them fall upon the stones; this breaks the shell, and the bird is then able to devour the contents. If, in the first attempt, it is unsuccessful, that is, if the shell does not break the first time the bird lets it fall, it seizes it a second or third time, and rises into the air, and, what is very remarkable, each time it ascends higher than it did before; this increases the power of the fall, and is more likely to break the shell."

This story, like the former, was the occasion of a discussion about instinct. William thought that the bird was governed by something more than instinct. He could not see why the bird should carry the shell into the air, and then let it fall, if it had not *thought* that by so doing the shell would break.

"Besides," said he, "why should the bird ascend higher each time, if it had not *thought* that that was the way to make the shell fall more heavily, and thus be more likely to break it! I think the bird must have reasoned a little."

"And why," said Mrs. Rogers, "should it let the shell fall on the stones instead of on the sand, or in the water? It would seem as if the bird knew that neither sand nor water would break the shells, and therefore, to accomplish its object, it must let them fall on stones." The question, however, like many others which they had discussed, was left unsettled when the usual hour for retirement had arrived.

(To be continued.)

CALENDAR FOR OCTOBER.

THE fading many-colour'd woods,
Shade deep'ning over shade, the country round
Imbrown; a crowded umbrage dusk and dun,
Of every hue, from wan declining green
To sooty dark.

FIRST WEEK.—Strawberry-tree in flower—Wheat sown—Swallows last seen.

SECOND WEEK.—Redwing comes—Fieldfare returns—Gossamer fills the air.

THIRD WEEK.—Chinese Hollyock in flower—Hen Chaffinches congregate—Wood Pigeons come.

FOURTH WEEK.—Royston Crow returns—Snipe returns—Tortoise begins to bury himself—Rooks return to their nest trees.

LEPIDOPTERA TO BE LOOKED FOR IN OCTOBER.

V. Atalanta.
V. Antiopa.
V. Polychloros.
C. Nerii.
C. Celerio.
P. Plumigera.
P. Cassinea.
O. Antiqua.
N. Cassicornis.
O. Lota.
C. Vaccinii.
C. Spodicea.
D. Rubiginea.
X. Ferruginea.
D. Templi.
P. Meticulosa.
P. Empyrea.
C. Vetusta.
P. Gamma.
H. Pennaria.
E. Alniaria.
H. Defoliaria.
C. Brumata.
C. Boreata.
O. Dilutata.
P. Ferruguna.
T. Candella.

Apple.
L. Clerckella.
N. Pomella.
N. Atricollis.

Beech.
E. Dolobraria.
N. Tityrella, in the yellow leaves.

Heath.
A. Porphyræa.
N. Neglecta.
A. Myrtilli.
E. Nanata.

Poplar.
L. Dictea.
C. Curtula.

Willow.
C. Reclusa.
C. Ligniperda, in the wood.

Oak.
O. Gonostigma.
B. Rhomboiraria.
T. Complanella.
L. Lantella.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

THE LONG-EARED OWL.

THE SHORT-EARED OWL.

[NOTE.—In last Number insert Chapter XVII., at line 25 from the bottom, page 139—the two cuts on the 137th page are cuts of the Ash-coloured Harrier.]

CHAPTER XVIII.—THE OWLS.

THERE is no probability that even the youngest student of Natural History will be unable to distinguish a hawk from an owl; the Harriers, in their conspicuous ruff round the eye, and the Buzzards in the looseness of their feathers, exhibit obvious similarities to the owls, and the Hawk-owls in many particulars resemble hawks, as their name implies; but yet there is always an unmistakable difference between hawks and owls. In the first place, owls fly by night and hawks by day; and in the second place, there is a difference in structure: owls have very large heads and very short tails: they have very large eyes placed in the middle of flat cheeks, the feathers on which are slender, hair-like, and radiate from the eye as a centre; the beak is very much hooked, and almost hidden by the bristly feathers; and there is no naked skin round the eye or at the base of the beak; the margins of the wing-feathers are not united as in other birds, but loose, the filaments being separate from each other, so they do not offer the same resistance to the air as in other birds: on this account the flight of owls is neither powerful nor rapid, it may be characterized as slow, floating, and dreamy, and, what is essential to the success of these feathered nocturnal mousers, it is perfectly noiseless; the owl steals on its mischievous prey in absolute silence. With the exception of those birds which constitute the food of man, Owls are beyond all comparison the most useful, and, alas! that it should be said, the most persecuted. I mean, of course, in England; on the continent of Europe, where Natural History and the habits of living animals are made a study, a regular part of education, the value of the owl is well known, and it is protected accordingly; and to his honour be it written, there is one landed proprietor even in Britain, and he the best of all our naturalists, Charles Waterton, of Walton Hall, who will not let an owl be molested on all his wide domains. This gentleman, moreover, employs his pen in defence of owls, and all other useful creatures, and writes so pleasantly, and so much to the point, that he convinces his readers he is right; and many is the country gentleman who, having read "Waterton's Essays," goes to the keepers and tells them not to shoot the owls. But, alas! keepers are of all men the most ignorant of Natural History, and resolutely refuse to learn. From their very childhood they have destroyed owls as vermin, and when grown to man's estate they have pursued the same course, and would rather throw themselves out of employ than not destroy the useful owl or the harmless hedgehog.

Owls may be divided into two groups; those which have two tufts of feathers sticking up from the head, and are called Eared or Horned Owls, and those which are without this singular ornament. In the British islands we have two of each group, and as many as eight other European or North American Owls have been shot here at different times. I will describe the British Owls in full, and give a list and a few particulars of the foreign ones.

THE LONG-EARED OWL.—(*Strix otus.*)

THIS very beautiful and very shy bird frequents our largest and thickest woods, especially where there are old trees clothed with ivy, or aged holly trees, or umbrageous spruce firs, in the deep recesses of which it delights to conceal itself; and there is no doubt that it destroys numbers of the sparrows and other small birds that seek the protection of the ivy and holly as a roosting-place. Its favourite food, however, is the field mouse, the animal that is so destructive to our peas and beans; and owls in general seem to have a special mission to hold this mischievous little animal in check.

The Long-eared Owl builds no nest of its own, but avails itself of the nest of the squirrel, jay, magpie, and carrion

THE SCREECH-OWL, OR BARN OWL.

THE TAWNY OWL.

crow, as a place where to lay its eggs and rear its young. The eggs are four or five in number, and perfectly white. I have never found its eggs or young, but I know that it yearly brings up a family on the Hampton Court estate in Herefordshire, the beautiful wooded district of Dinmore Hill providing ample shelter, and the trees on which all useful birds are crucified, bears evidence to its abundance. Mr. Selby tells us that when first hatched the young birds are covered with a fine and closely-set white down; and that they remain in the nest for more than a month before they are able to fly. If disturbed or handled they hiss violently, strike with their talons, and at the same time make a snapping noise with their beaks. When they quit the nest the young take up their abode in some neighbouring tree, and for many subsequent days, indeed for weeks, may be heard after sunset uttering a plaintive but loud call for food, the parent birds all the while being diligently employed in hunting for mice and moles on which to feed them.

The Long-eared Owl stays with us all the year round, and is, perhaps, the most strictly nocturnal of all our owls, remaining in the most silent seclusion during the day, a peculiarity that protects it from the destructive gamekeepers, and greatly increases its usefulness.

The beak of the Long-eared Owl is black, the eyes orange; the hair-like feathers that cover the beak are white, with black shafts; the cheeks are of a pale reddish colour; over each eye is a tuft of feathers which the bird can erect at pleasure, then standing up erect like ears or horns; these horns are composed of six feathers, which gradually increase in length from the first to the last, which last is an inch and a half long, black and bordered with dull yellow; the circle round the face is white, speckled with black and red-brown. The back is of an orange-brown colour, streaked lengthwise with black brown, and most delicately and beautifully powdered with black, white, and pearly-grey dots. The tail is greyish orange, barred and speckled with black; it is short, straight, and square at the end. The breast and belly are pale yellow, passing into white, and adorned with arrow-shaped streaks and spots. The legs and toes are covered with pale yellowish feathers, the last two scales on each toe being naked. The claws are long, black, sharp, and curved; the claw on the middle toe is grooved beneath, and has very sharp, cutting edges; that on the inner toe is slightly grooved, but the edges are blunt; and those on the outer and hind toes are rounded.

CHAP. XIX.—THE SHORT-EARED OWL.—(*Strix brachyotos.*)

THIS is also a very beautiful bird, but certainly yields the palm to the preceding; it differs also from the Long-eared Owl in being a bird of regular passage, arriving and departing with the woodcock, and, from this circumstance, called by sportsmen the Woodcock Owl. In the south of England it is only found in the winter months, that is, from October to April; and is sometimes so abundant that twenty-eight have been found in one turnip-field when drawing for partridges. In some parts of North America it is called the Mouse Owl, being there considered the best mouser of all the owls: in England we give the palm in this respect to the White or Barn Owl. It has the habit of sitting perfectly still on a clod of earth, or on a stone amidst the stubble, and in this position watching for mice; when disturbed it flies but a short distance, perching again almost immediately, and resuming its watch as before. This owl is much more commonly seen by day than any other; in fact, it has a smaller head, smaller eyes, and a more graceful and slender form than other owls, and from this circumstance has been called the Hawk Owl, in addition to its numerous other names. The ears, or tuft of feathers over the eyes, are only to be seen when the bird is perfectly at rest and unexcited: when it is killed these ears are not to be found without some difficulty. Colonel Montagu, the great ornithologist I have so often quoted, made many observations on one of these birds which he kept alive: it was

caught in a lark-net, having pounced, in the open day, on a decoy bird fastened by the leg. In a short time it became very tame, and when hungry, took its food from the hand: it would eat any raw meat, but preferred mice and small birds to other diet. It always took the food in its beak, but almost immediately transferred it to its foot, and there grasping it firmly devoured it piecemeal. The ears, or erectile feathers of the head, are no doubt connected with the sense of hearing, serving to conduct sound to the ear: this is shown not only by the situation of these external ears, but by the fact of the bird always keeping them erect when listening for the rustling of a mouse among the stubble, and also when asleep. From repeated observations made on this bird in confinement, it has been found to have the most delicate sense of hearing, either waking or sleeping, and its auditory faculties are ever on the alert. Mr. Anstice, of Bridgewater, a close and excellent observer of nature, informed Colonel Montagu that one year the mice, being in such prodigious numbers near that town as to destroy a large portion of the vegetation, the Short-eared Owls resorted to the place in large numbers on purpose to prey on them.

It is curious, and at variance with the habits of birds of prey, that the Short-eared Owl is never seen perching on a tree. Even their nests are formed, or rather their eggs are laid, on the bare ground in the open moors: the eggs are three in number, smooth, and perfectly white. Sir William Jardine, in a note on this owl in his edition of Wilson's "American Ornithology," observes, "On the extensive moors at the head of Dryfe, a small rivulet in Kincardineshire, I have, for many years past, met with one or two pairs of these birds, and the accidental discovery of their young first turned my attention to the range of their breeding; for, previous to this, I held the opinion that they had commenced their migration southward. The young were discovered by one of my dogs pointing it; and in the following year, by searching at the proper season, two nests were found with four eggs. They were found upon the ground among the heath, the bottom of the nest scraped out until the fresh earth appeared, on which the eggs were placed, without any lining or other accessory covering. When approaching the nest or young, the old birds fly and hover round, uttering a shrill cry, and snapping with their beaks. They will then alight at a short distance, survey the aggressor, and again resume their flight and cries. The young are barely able to fly by the 12th of August, and appear to leave the nest some time before they are able to rise from the ground. I have taken them, on that great day to sportsmen, squatted on the heath, like young black game, at no great distance from each other, and always attended by the parent birds. Last year (1831) I found them in their old haunts, to which they appear to return very regularly, and the female with a young bird was procured; the young could only fly for sixty or seventy yards."

The beak of the Short-eared Owl is blue-brown; the eyes bright yellow; the feathers close round the eye are black, those about the beak white; the radiating feathers covering the cheeks are exquisitely mottled with pale red-brown, black and white; the short tufts on the head called ears or horns rise just over the eyes, and are composed of four or five feathers rather longer than the rest: the head, neck, back, and feathers covering the wings are dusky, bordered with light red-brown; the breast and belly are almost white, streaked with brown; the legs and toes are covered with down of a yellowish-white colour without spots or streaks, the feathers on the toes being finely divided, and having the appearance of fine silky hair; the claws are almost black, curved and very sharp; the middle claw is grooved beneath, and has sharp cutting edges; the others are rounded.

Notwithstanding this bird is a regular migrant, it bears confinement very well, and becomes tolerably tame; care must be taken that it does not escape on the approach of spring, nor injure itself in attempts to do so.

ZOSTERA MARINA, OR, COMMON GRASS-WRACK;

THE PROPOSED SUBSTITUTE FOR COTTON.

In the month of August last, Mr. Henry Harben of Oxford Villa, Haverstock Hill, in the suburbs of London, was staying at Dovercourt, near Harwich, in Essex, taking, with his family, "a sea-side holiday." The cotton-famine by that time had pinched many a face in the north, and had caused no small anxiety among the patriots and philanthropists of England.

"While walking with his children along the shore," and thinking of "the scarcity of material for paper-making," his attention was drawn to the "quantity of sea-weed lying idle and waste;" and "it occurred to him" to try what could be done towards supplying the lack. The *Times* newspaper had offered £1000 for the discovery of any substance that could be used for that purpose.

"He made certain experiments with different kinds of sea-weed, such as bladder wrack, notched wrack, and found that they produced a small quantity of fibre. But on coming to examine the grass wrack he found it to contain fibre to an extent that surprised him. He immediately collected a quantity, and, separating the filament, submitted it to a powerful microscope. It was then only that the resemblance of what he saw to cotton first suggested the idea that here was something which might turn out useful as a substitute for that material. He at once made experiments, which satisfied him of the value of the discovery, and his conviction of its importance was so strong as to induce him to note down on the spot the time and place—Dovercourt, near Harwich, August 6, 1862." *

The new fibre was submitted to competent judges, and great expectations were formed that it really would form a good substitute for cotton—on which Mr. Harben was offered immense pecuniary advantages—but as the adoption of the plans to secure these would have involved months of delay, while thousands of his fellow-creatures were starving, he generously determined to reject them all, and make known his discovery without loss of time, so that it might be immediately used; and made up his mind to leave the award of honour and *honorarium* to the goodwill of his country. A truly Christian, high-minded, and patriotic resolve.

He then sought a Committee of Inquiry of cotton manufacturers, and submitted the facts and material for their inspection and opinion: that Committee met on Saturday, the 20th of September, and have delivered the following report:—

"A meeting was held in the rooms of the Chamber of Commerce, Manchester, on Saturday Sept. 20, at the request of Mr. Harben, the discoverer of a new fibre. Mr. H. Ashworth, president of the chamber, in the chair. The following gentlemen were present:—Messrs. T. Bazly, M. P., R. R. Jackson, J. Leese, H. Mason, J. Burton, jun., H. J. Leppoc, H. Nicholls, S. Hollins, and M. Ross.

"Mr. Harben, on being introduced, stated that he was not an inventor, but a discoverer. He then, first, showed fibres on paper—a few threads only: second, small specimens in the gray state, as picked by hand, with a small specimen dyed; third, dried specimens of the plant, exhibiting the natural and fibrous state. The discoverer stated in confidence the name of the plant which furnished the fibres exhibited, and then exhibited specimens of the plant in its natural state. Mr. Harben suggested that the unemployed should at once be occupied in collecting the material. He stated in reply to an inquiry, that he had not gone into particular calculations of expense; nor had he made any experiments as to the mode of rendering the fibre available for cotton-spinning machinery, his wish being that on recommendation of the committee, chemists, spinners, and others may further investigate the properties, with a view to public good.

* Narrative in the *Times*, Sept. 22, 1862.

"Mr. Harben then retired, when, after deliberation, the following resolution was adopted:—

"Moved by Mr. BAZLEY, M.P.; seconded by Mr. MALCOLM ROSS—

"'That this committee has heard with much interest the statement of Mr. Harben, and have examined the samples and specimens of plants and fibres submitted. This committee, not having been asked for any decision on the merits of this discovery, do not express any opinion in its favour or otherwise, and Mr. Harben having expressed his wish, without reference to any pecuniary advantage to himself, that the discovery should be given to the world with a view to chemists, manufacturers, and machinists seeking out the best mode of making it available for the general interests of the trade, this committee acknowledges the disinterested conduct and candour with which Mr. Harben has communicated his discovery and views.'

"The resolution having been read to Mr. Harben, that gentleman, with the view to giving full effect to his intention, desires now to state, for the information of the public, that his discovery is the applicability of the fibres of the marine plant known as *Zostera Marina*, or common grass-wrack, for manufacturing or other purposes."

The discovery is now open to the botanists, chemists, manufacturers, and we suppose to the landowners, labourers, and boatmen of our coasts, and shall we say to the Government by a protective law, to make the most of this remarkable discovery. A discovery, which, like all great discoveries, consists in just seeing the simplest fact—to see which, if the fact have a fixed relation to great laws, either of a moral, political, or physical nature, makes a man's name immortal. Let us from this time call it the Harben fibre. It now remains to be tested. Meanwhile we will give our readers a *resumé* of what has been said by the botanists and observers of nature on this now distinguished plant. We jot down all that we have at hand, as our humble contribution on this deeply-interesting subject.

Ray classes it in his *Synoptica* among the *Gramina* (Grasses), calling it a Dog-grass, and mentions an instance of its being found in some ditches near Colchester, not far from Dovercourt.

Old Gerard's description, page 1568, is as follows: *Alga*, Grasse Wracke. This, which Lobel calleth *Alga-Marina*, hath pointed, branched, creeping roots, of the thicknesse of one's finger, which end, as it were, in divers eares, or hairy awnes, composed of whitish hairy threds, somewhat resembling spikenard: from the tops of these eares come forth leaves, long, narrow, soft and grass-like, first greene, *but white when they are dry*.

"It grows in the sea, as the former (Jagged Sea Wracke). They use it in Italy, and other hot countries, to packe up glasses with to keep them from breaking."

Wm. Withering, M.D., subsequent to Gerard, in his botanical arrangement of vegetables, describes it as "leaves growing under water and floating with the tide." He describes three varieties, and says: "This plant is thrown upon the sea-shore in great plenty. *Exposure to the weather bleaches it white.* It is of great use as a manure. *Buildings are thatched with it, and it endures a long time.* Horses and swine eat it, cows are not fond of it."

In the Linnean System, Zostera, Grass-Wrack, stands in Class I. Monandria, Order I. Monogynia, Genus III. Zostera, and is thus described in Smith's "English Botany," with figures by Sowerby. General characteristics.—*Flowers* upon one side of a flat, elongated spadix, which is sheathed by the base of a leaf; *Corolla* and *Calyx*, none. *Anther*, sessile. *Stigmas* 2, linear. Capsule with one seed.

The flowers of Zostera are protected from the water, under which they grow, by the sheathing base of the leaf, which closely enfolds them until they are fertilized. Their structure is so peculiar, that botanists differ about their class in the Linnean System. The anther of each flower is sessile, oblong, a little curved, composed of only one lobe; by its side is affixed an oblong germen with a short style, bearing two long linear pointed stigmas; these organs are arranged along the spadix in an alternate manner.

The distinct species in question is *Zostera Marina*, or common Grass-Wrack, and is thus described:—

Leaves entire, obscurely three ribbed. Stem slightly compressed. Common in salt-water ditches; flowering in August and September. The leaves do not readily decay, and when dry are tough and flexible, so that they are used for filling beds and cushions, or for packing glass and earthenware. In London they are sold by the name of *Alva Marina*, a corruption of *Alga* or *Ulva*.

A cut of the plant is given in Tab. 4 (Sowerby's Smith) of the root, stem, leaves, flowers, and seed, &c.

In the NATURAL ARRANGEMENT (Loudon's "Encyc.," Plants, vol. ii. p. 1090), Zostera is found under Order 177, denominated Fluviales, and it is said with these the Vasculares and Monocotyledones terminate: it has long been apparent that we have been descending in the scale of vegetation, and hence the last order exhibited a structure the most simple of all vascular plants. In the present order, Zostera and Ruppia are so closely allied to Algæ, that they may be mistaken for them. Strange that so humble a plant should be raised to so distinguished a place in England's economy.

In another edition, Loudon's "Encyclopædia of Plants," vol. i. page 24, Zostera is described as deriving its name from the Greek ζωστηρ, a riband; the leaves of *Z. oceanica* are a foot long and an inch broad, resembling a riband. Zostera Marina abounds on the coast of Yarmouth, where it is thrown on shore in such abundance, that mounds are made with it to enclose the encroachments of the sea. It is also used as thatch, and said to endure for upwards of a century; by exposure it bleaches white. In Sweden and Holland it is used as a manure, and is preferred to hay for stuffing beds. Horses and swine eat it, but cows are not fond of it. The rush-like envelopes of Italian liquor flasks are prepared from this plant.

In Lindley's "Vegetable Kingdom," third edition, Order XII. Zosteraceæ — Sea-Wracks — they are spoken of as "marine plants resembling sea-weeds, and living among them." It is added: "The bottom of the ocean is the locality of these plants, which occur from the North Sea to the Mediterranean, the Indian Ocean and the coasts of Arabia." They can scarcely be said to form any part of the vegetation subdued by man, except in the case of the Sea-Wrack, *Zostera Marina*, which is a common material for packing, and for stuffing cottagers' cushions, and has also been used for tumours, owing apparently to the iodine of the sea-weeds that are gathered with it.

The Rev. J. G. Wood, M.A., in his *Common Objects of the Sea-Shore*, says:—

"A plant has been mentioned which does not belong to the seaweeds, although from its residence at the bottom of the sea it is often thought to be of that family; this is the *Zostera Marina*, for a drawing of which see plate J., fig. 2, a true flowering plant, growing with a real root at the bottom of the sea. Its entire character is so completely terrestrial, that it can at once be distinguished from the alga."—(Chap. iv.)

The Rev. J. A. Johns describes it as a submersed marine aquatic, with long cord-like *stems*, and bright green grass-like *leaves*, some of which serve as *sheaths* to the bead-like rows of small simple flowers. The dried leaves and stems are used in beds, and are also employed for packing glass. Flowers in July and August. Perennial.

Mr. Gosse notices the Zostera in his book, the Aquarium: p. 15, he says:—"Along the line of high water" [in Belmont Bay, Weymouth] "there is here a broad bank of black sea-grass (Zostera), the accumulation of years, perhaps ages, rotting into mould, and forming an admirable manure. It is, indeed, used for this purpose, being carted away by the farmers when it is sufficiently abundant and sufficiently accessible. In the vicinity of Torquay and of Ilfracombe, I had not met with this substance in any appreciable quantity; but in Poole Harbour, the scene of my early life, I had been familiar enough with it, as its dirty, littering banks, like a continuous dunghill, fringe the shores, the refuse of *hundreds of acres of the grass* that grows on the muddy flats of that land-locked harbour." If the fibre be strong, this discovery will be the making of Poole and Weymouth, where there are 8000 acres covered with it; it also abounds in the Orwell, near Ipswich and the Fen country. Think of grass fibre 6d. a pound! Why, it is equal to £56 a ton!!!

SHIPS.—No. VI.

HERE is a first-rate man-of-war. Here you see the sort of vessels with which our greatest naval victories have been won, and most probably in the "tug" of a naval fight, if it were to come off just now, we should have to rely upon them again in company, with the Ironsides. They cannot be disabled as steamers can, and it must be by dint of hard firing and fighting that they could be overcome.

Reviews.

The Horse Book; or, Simple Rules showing how to keep and use a Horse to Advantage in the Stable and on a Journey, together with other useful Information on the Horse and his Work. Pp. 68. E. King, Lymington; Hamilton, Adams, and Co., London.

THIS is the best book in the English language on the management of the horse. Everybody who keeps a horse should have this book, and follow its most excellent advice. The rules are beyond praise, and for each of which a good reason is given: we know not the estimable writer, but he must have a wise head and a kind heart. The book ought to be sown broadcast among carters, cabmen, ostlers, grooms, jockeys, and, above all, our "gents" (we do not say gentlemen), who ride, or drive, out of London, on the Saturday half-holiday—"gents," who going "a twelve-mile journey," ride six, and, feeling uncomfortable, ride back again to have the stirrups altered. Ye inferior bipeds, who have less sense than the quadrupeds you drive—get this book and be wise as to horses! The members of the Society for the Prevention of Cruelty to Animals, ought to fill their pockets with it—of course we mean the pockets of their carriages—and give it away right and left; we should have said "on the near side and the off." This is a just tribute too long delayed to a really good book.

Our Moral Relation to the Animal Kingdom. Pp. 16. Price 3d. Morgan and Chase, 3, Amen Corner.

WE cordially recommend this little work. The writer cites a number of passages of Scripture in which the lower animals appear to be associated with man in the blessings, judgments, &c., dispensed by the Creator. The dependence of the inferior creatures on man, thus indicated, is shown to be a reason for kindness in the treatment of animals. The instances of the special interposition of the Divine law on behalf of different animals are also pointed out, as teaching the lesson of humanity and consideration towards the creatures that are placed in our power. We are glad to see the tract has obtained a large circulation, and wish it much success in pleading for those that cannot plead for themselves.

Amusements.

"Fair play is a jewel." What you are in your play that you will most likely be in other things. Even in your play, therefore, be truthful, just, kind, and good-tempered. If any dispute arise, "Let not the sun go down upon your wrath."

LEAP FROG.

Don't play at this indoors. Not more than six should engage in it at the same time, and these should be about the same size and strength. Let one boy take his place, with a good "back." Arms doubled up or with the hands resting upon the legs just above the knees. Head with the chin resting upon the chest. One foot a little before the other. The five others will then, *one at a time*, vault over the boy who gives the "back." Every one on going over taking his place about six yards in advance of the last boy. This may go on till you are tired.

You had better not try the plan of giving a "back" by presenting your *side* to the boy who is about to jump. His knee will be most likely to strike your head, and most probably both of you will go down together.

Another variety of this game is for one boy to stand leaning with his hands against a wall or tree, and for a string of three or four "backs," every boy placing his hands upon the hips of the one before him, and then for the leaping "frog," after a pretty long "run" to clear as many of the backs as he can. This generally leads to *injury*, and had better, on that account, be omitted.

ANSWERS TO PICTURE RIDDLES IN OUR LAST.

Answer to Riddle No. 1. of *July*.

Table Turning.—To turn a round table. See that the surface of the feet touching the floor is smooth; let the surface of the table be well varnished, and polished; let six or seven lads and lasses full of fun, sit round it, with pulses beating at the rate of from 75 to 90, and wish to turn the table from right to left. In a short time the hands of the sitters will have moistened themselves into the polish, and the minds acting upon the hands of the sitters sincerely wishing to witness the phenomenon, will produce from them say 500 pulsations or beats of power per minute in the direction wished. In a short time the smooth surface of the feet will overcome the roughness of the carpet, and away will go the table, faster and yet faster still, till the giddied heads of the runners compel them to desist, and wonder how it was done, each one being sure "I did not do it." The foregoing is a simple explanation of the phenomenon. John Jones, 7, Caroline Place, W.C.—P.S. Of course I do not revile or sneer at those persons who believe in "spirit manifestations," such as, tables rising off the ground several feet in the air without visible support; accordions playing favourite airs exquisitely, while simply held in one hand by the white rim, and other phenomena of a kindred character in the quiet of domestic life; because they have been attested to by men and women of blameless character, and because I and several of my personal friends have at our own homes, seen *our* heavy tables so rise in the air, and *our* accordions so played in our own hands. J. J., September, 1862.

1.
A Skylark.

2.
Fig—Ure—Figure.

3.
Brill—Rill—Ill.

4.
Amiable—am—I—able.

5.
Seven—even—Eve.

6.
Medallion—medal—lion.

7.
Scream—cream—ream.

8.
Ear—wig.

9.
Blackbird—black—bird.

10.
Manage—man—age.

11.
Doctor—M.D.

12.
Wind.

13.

Marigold.

M aca W
A llo O
R icard O
I lia D
G ru B
O u I
L incol N
D issociat E

Woodbine.

14.
Noise—nose.

15.

Surname.	*Christian name.*
K—night.	Knave—K—nave.
KNIGHT.	EVAN.

31, *Age.*
2×15+1.
3×10+1.
5× 6+1.
6× 5+1.

Evan Knight, aged 31 years, 3rd July.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

2.

H. Griffin sends—

My first is a domestic animal;
My second a letter in the alphabet;
My third a useful article used by laundresses;
My whole, one who figured in Roman history.

3.

The initials of the following will give the name of a celebrated poet.

1. A celebrated navigator.
2. A noted battle.
3. A great general.
4. A battle fought between the Scotch and English.
5. One of the Lord Chief Justices of George III.
6. A great peer of the present day.

4.

My first, a blessing sent to earth,
Of plants and flowers to aid the birth;
My second surely was design'd
To hurl destruction on mankind;
My whole, a pledge from pardoning Heaven,
Of wrath appeased, and crimes forgiven.

Isaac Wells sends another, but without the answer. We have determined to insert no more riddles which are not accompanied by the answers. M. A. P. of Dawlish (Riddle 4, in the June Number) has never sent the answer to this day, although the riddle was inserted at her special request.

5.

T. W. Redgewell sends—

When whole, I've arms, and legs, and back,
And yet a head and tail I lack;
Behead me, you'll see, without more aid,
A part of what I'm sometimes made;
Behead again, and it will give
What man and beast must breathe to live.

6.

My first is a slumber—short, 'tis true,
And often been had by me and you;
My next, if right in recollection,
Will bring to you an interjection:
And now, for my third please look in Spain,
A province you have, and again,
The three combined, a monarch is known
By the way in which he reach'd his throne.

7.

R. B. Schomberg sends—

My first is all, so is my second, and also my whole.

8.

J. Reynolds, of Burley, sends—

What town is that, in Norfolk, which, when you approach it, disappears?

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Polishing Stones.—Sir,—I should like some one of your readers to inform me of the manner of polishing stones, and where the materials for polishing them are to be procured.—E. A. R.

Remarkable Attachment between a Cow and an Ass's Colt.—Sir,—In the town of Frome, in Somersetshire, a friend of mine (H. Burry) purchased an ass's colt, very young, and reared it carefully, and it was a practice of Mr. B.'s father, bieng a poor man, to take his cow and his son's ass round the lanes in the neighbourhood to graze, and one evening, by some mishap, the ass got lamed, and the cow, having by this time formed a great attachment to it, placed her horns under its belly and carried it part of the way home; this was repeated upon several occasions, until the friction of the cow's horns wore a bare place in the ass's skin.—W. S. Collins, 21, Exmouth Street, Clerkenwell.

The Great Green Grasshopper.—The capture of a locust at Brighton has caused me to remember having several times seen specimens of a large species of green grasshopper, nearly two inches long. I have found it amongst clover growing in stubble fields, but one was high on an apple tree. I climbed up and found it amongst the leaves; at the time it was making a chirping kind of sound by rubbing its hind legs against the sides of its body; it was on that tree for more than a week, chirping for hours together; both day and night the sound was very penetrating, and could be heard at evening more than a hundred yards off. If it was not a locust, perhaps you can insert the name of the insect under this (our correspondent is quite right in calling the insect a grasshopper, it is the great green grasshopper, *Gryllus viridissimus*); and also the scientific name of the common moth that breeds so abundantly on gooseberry and red currant bushes (*Abraxas grossulariata*).—O. S. Rounds, Northamptonshire.

T. Suter should ask his Bookseller.

Death's Head Moth.—K. B. Williams should get the Moth Numbers.—The Caterpillar is found in August, and the perfect Insect in October. The Caterpillar may be found in the deadly nightshade and on the potato. The Moth is fond of honey, and creeps into hives if it can.

Captures.—The following are the principal captures that I have made during this season, near Dulwich:—Vanessa Cardui (several), Stilpnotia Salicis (1), Diaphora Mendica (1), Sphinx Ligustri (1), Leiocampa Dictæa (2), Zeuzera Æsculi (1), Lophopteryx Camelina (common), Dasychira Pudibunda (1), Cilix Spinula (several), Bryophila Perla (abundant), Caradlina Morpheus (1), Venilia Maculata (common), Metrocampa Margaritata (1), Ennomos Angularia (1), Hemerophila Abruptaria (common), Hemithea Thymialia (2), Asthena Luteala (very common), Asthena Candidata (very common), Acidalia Scutalata (3), Acidalia Remutata (1), Acidalia Emarginata (1), Eupithesia Centaureata (1), Eupithesia Vulgata (abundant), Melanthia Albicillata (1), Melanippe Unangulata (common), Colemia Unidentalia (common), Pelurga Comitata (2), Pyralis Costalis (very local). Nearly all the specimens I captured were beaten from one *elm-tree*, on which tree, I fancy, the larva must live. I took about thirty or forty fine specimens, P. Glaucinalis (1), Nola Cuculatella (abundant), &c., &c., besides many other species too common to mention. I have a great many duplicates of many of the above for exchange; also, C. Edusa, H. Dispar, N. Zonaria, F. Piniatia, H. Hyperanthus, X. Selene, A. Euphrosyne, A. Lonicera, M. Persicariæ, &c.; all in the *best possible condition*.—Henry P. Cox, West Dulwich.

Removing Pins from Lepidoptera.—Can any of the readers of the Young England inform me which is the best way of removing the pins out of the Moths and Butterflies after they are stiff?—E. E. K.

To clean Shells.—To J. H.—I have found boiling them in hot water is a very good remedy.—E. K.

Aquarium.—How much is a small aquarium glass?—G. F. R. B. D.

Nature Printing.—A subscriber would be obliged if any one can inform him of a method of printing from ferns, leaves, &c.

Microscope.—Also of a combination of lenses to make a cheap microscope.

A White Swallow.—Mr. R. W. Clarke has forwarded from *The Birmingham Journal*, July 19th, 1862, the following:—"As a party of gentlemen from this town were attending the recent Archery Meeting, at Salisbury, they beguiled away a portion of the day upon the river. While rowing along a very strange-looking bird was seen to fly past and lodge upon the willows. The boat was guided nearer the spot, to obtain a better view, and determine to what family the stranger in question belonged, when, upon closer inspection, it was found to be a very beautiful variety of the 'sand martin,' *Hirundo riparia*, having a snowy white plumage throughout, and pink eyes. By dint of cautious approach the little stranger was captured by Mr. Elliott, who duly forwarded it, through the post, to Mr. Franklin, of this town, for preservation."

Exchange of Shells.—I have a quantity of duplicate larva and freshwater shells of this locality, which I should be glad to exchange for any local species.—Alfred Willis, Heath, near Wakefield.

Exchange of Eggs.—T. V. Coker, "The Bridge," Taunton, Somerset, has many specimens of British Birds' Eggs which he will be happy to exchange for other varieties.

Autographs.—Sir,—I collect Autographs of eminent distinguished and public men of the present day, and would be very glad to exchange some duplicates I possess with any party

collecting. I could also give Lepidoptera in exchange if preferred.—JAMES HUME WEBSTER, Montrose.

DAMAGED LEPIDOPTERA.—Sir,—I have taken this year in Cornwall a great many specimens of the Cynthia Cardui. Every day I went out I was sure to meet with some of them, but I only took about a dozen. I have also taken P. Linea and a great many T. Quercus; chiefly on a small birch tree. Notwithstanding that I caught a great many of these insects there was not a specimen but was imperfect in some way. This was also the case with all the A. Paphia that I caught; and almost all of the P. Napi, L. Egeria, H. Hyperanthus, V. Urticæ, &c., were in like manner bad specimens. Some had lost nearly the whole of the hind wings. I think this fact must have struck other collectors this year. Perhaps it is owing to the rain and bad weather; at all events, I have never before caught so many worthless specimens. Most of the Vanessas that I caught were in fine preservation. I have for exchange several C. Cardui in good preservation, which I should be glad to exchange for fair specimens of good moths or butterflies.

CLEANING SHELLS.—Your correspondent J. H. could clean shells of animal matter by putting them over an ants' hill for a few days; or by putting the shells in a solution of chloride of lime, though this should be done with caution, and the solution should be weak, for fear of injuring specimens.

THE COURAGE OF THE COMMON HEN.—I know of a still greater instance of courage in a hen than Leo's. A hen with a brood of chickens seized by the neck a sparrow hawk which appeared in the poultry-yard and held it for some time till the hawk with a desperate effort succeeded in making its escape and flying away, leaving some of its feathers in the hen's mouth, without having succeeded in its marauding expedition. Probably, unless the hen had had chickens, it would not have had the courage to attack so fierce a bird as the sparrow-hawk.—J. M. D., 3, Gunnersbury Villas, Harder's Road, Peckham, S. E.

FOSSILS.—Sir,—Will you please to send me the address of the correspondent signed "Oryctology," as I shall be glad to make an exchange of fossils with him?—J. WOOD, 23, New Union Street, Moorfields, E.C. Will "Oryctology" reply?

EXCHANGE OF SHELLS.—E. C. O. would be glad to exchange specimens of the following shells for Cyprea europa,—Nun Cowry; Voluta oliva, Olive Volute; Buccinum subulatum, Tiger Spire; Trochus zizyphinus, Livid Top Shell; Patella nodosa, Knotted Limpet; Dentalium dentalis, Dog's Tooth; Solen radiatus, Radiated Solen; Arca undata, Lettered Ark; Cyprea arabica, Nutmeg Cowry; and several others, Foreign and British, for Buccinum harpa, Harp Shell; Buccinum flameum, Triangular Helmet; Murex ramosus, Branched Murex; Turbo scalaris, Wentle Trap; Haliotus tuberculata, Common Sea Ear; Patella ungarica, Hungarian Bonnet; Nautilus pompilius, Large Chambered Nautilus; Argonauta argo, Paper Nautilus; Venus dysera, Ribbed Venus; Chama hippopus, Bear's Paw Clam. Any one desiring to make this exchange is requested to communicate by post with E. C. O., Salehurst Vicarage, Hurst Green, Sussex, stating the specimens wanted, and also the shells to be given in exchange.

POSTAGE-STAMPS.—In reply to the inquiry of Philip Wright, Osmaston Manor, Derby, I beg to say that I think the stamp belongs to Italy. A description of it is given in the July Number of YOUNG ENGLAND, page 102, Italy, No. VI. "Four-sided, erect, central embossed ornamental figure of value, on a white oval disk, frame white, with black inscription, Giornala Franco Bollo Stampe 1 cente uno."—M. W.

Another correspondent says: Philip Wright's stamp is a Sardinian Newspaper stamp.

F. R. Upcott will see, by this month's YOUNG ENGLAND, there are many persons wishing to sell and exchange postage-stamps.

I shall buy, exchange, or sell foreign postage-stamps with any other collector, by addressing me.—JAMES MCCLERCY, Linen Hall, Belfast.

I will be happy to buy, sell, or exchange with any of your readers, on receipt of a stamped envelope.—Address to W. WRIGHT, J. Russell, Esq., Trinity College, Dublin.

Persons desirous of making or completing a collection of foreign postage stamps, either by buying, selling, or exchanging, have an opportunity of procuring some of the most choice and rare stamps, on reasonable terms, by writing to Geo. A. Rewell, care of Henry Briggs, Lannard and Co., Kingston Chambers, Hull. N.B. Almost any can be obtained if required.

W. M., 35, Irongate, Derby, would be glad to exchange lists of duplicates with any one desirous of doing so. Address as above, enclosing list, and a postage stamp for a reply, *which will be returned if any business is transacted.*

Y. X. Z., Russell House, Hampstead Heath, wishes to part with a nicely-arranged collection of 235 foreign postage stamps. Any person willing to purchase it can write to the above address, enclosing Post-Office Order for the amount—£1 10s. Letters containing offers must be prepaid.

I have a large stock of foreign postage stamps, and am willing to buy, sell, or exchange. Address E. A. Smith, 8, Park Place, Kennington Cross, S.

We shall be most happy to supply any of your numerous readers with the above, if they will send a list of those they require to G. and E., care of West, Stationer, London Wall, E.C., with the prices they will give affixed.

J. E. Marshall has on hand a quantity of foreign postage-stamps for sale at moderate prices.—Address, No. 1, Chester Place, Kennington Road, S.

The letters mentioning omissions of particular stamps, in our articles, are sent to Dr. Gray, who, probably, will notice them in our next Number.

THE MOTH NUMBERS are in course of publication. No. 4 is now ready, and No. 5 will be ready in a few days. No. 1 (January) of YOUNG ENGLAND has been reprinted, and is now on sale.

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"This is a life-story, illustrative of the baneful effects of the drinking customs of society. The first chapter presents Carine Steinburgh as a bride, in the last week of the honeymoon, anxiously awaiting the return of her husband, whose intemperance has kept him from his home for the first time. The book is calculated to do great good amongst a very numerous body of people, whose objections to the safe road of total abstinence can be better refuted by a minute detail of every-day circumstances and their influence on personal character than by mere anecdotes, or a string of logical deductions. It is devoid of affectation, and is true to life. Unvarnished it may be, but it is cleverly written, and answers well its purpose."—*South London Chronicle.*

"Some pages will require thought and reflection, being the production of a mind well informed and extensively read; but still, running through the entire volume, there is a chain of narrative at once captivating, instructive, and connected, and the work will become a valuable acquisition to the Temperance literature of the present day."—*Derbyshire Advertiser.*

"A thrilling exhibition of how the use of intoxicants corrupts the finest natures, and mars the fairest human prospects of domestic happiness."—*Edinburgh Journal.*

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YOUNG ENGLAND.

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THE HONOURABLE LORD STANLEY, M.P.

SOME men are illustrious by courtesy, while other men are distinguished by their character and their deeds. A man may inherit the noblest name, and yet lack those virtues without which such a name is but an empty possession. A name is great only as it expresses greater deeds. Life is not a fiction, but a reality. Yet few men live. They exist; but existence is not life; for life is worthy of the name only when it reveals itself in wise and fitting action,—in the practice of those virtues and in the performance of those duties on which not only others can look with favour and commendation, but which we ourselves can con-

LORD STANLEY.

template with feelings of ever-deepening satisfaction. No mere outward symbols of honour can add to the praise of him whose praise is, that he has lived and acted here as a man should act and live. His deeds are his name; and in his deeds he lives. He who can lay claim to no higher distinction than that he has come into the world in the form of a human being, and who leaves the world without any fitting deed to perpetuate his name, may erect some outward visible symbol on which shall be inscribed attributes and virtues which he never possessed; but posthumous fame, if it have any reality at all, must be founded on

those merits which belonged to the man while he lived and acted in this lower sphere. If in life a man win for himself a name and a reputation, it is very certain that these honours will not be denied him in death. They will be hung thick on his bier, and be strewed upon his grave, and his name will be handed down to latest years as one who lived and laboured to make this, our common world, wiser, and better, and happier.

LORD STANLEY inherits a distinguished name; but whatever may be the lustre which that name reflects upon the man, he has, by the manifold attributes and excellences of his character, given to that name additional distinction and dignity. Few noblemen have, at his age, exhibited such a rare combination of intellectual and moral power; and in comparatively few is the character so prophetic of the future man. He has entered upon a career which cannot fail to lead him to the highest eminence, and to insure for him no common empire over the minds and the movements of his fellow-men. He is treading in the footsteps of those mightiest souls—

> "Who labour'd like gods among men; and have gone,
> Like great bursts of sunlight, in the dark way before us;"

and is making himself to be felt as an influence in the land—in the world. If to fill up the sphere in which God has placed us, with its duties and obligations, is most nobly to live, he is in a fair way to win for himself such distinction and glory. His life is neither show nor sham; and his virtues are no false or hollow pretence. He is not acting a character, but living a life; and the fruits of that life will be reaped and enjoyed for generations to come.

The Honourable Edward Henry Stanley, now better known as Lord Stanley, is the eldest son of the present Earl of Derby, and was born at Knowsley Park, Lancashire, July 21, 1826, so that he is now in the thirty-seventh year of his age. He received his early education at Rugby, partly under the late lamented Dr. Arnold, who was the prince of teachers, and partly under Dr. Tait, who now holds the episcopal see of London. On leaving Rugby he entered Trinity College, Cambridge, where he greatly distinguished himself by his application and acquirements, where he obtained some of the higher honours, and of which he is a graduate.

At the early age of twenty-two he came forward as a candidate for the borough of Lancaster, but lost the election. Afterwards, and while travelling in Canada, he was chosen to represent the town of Lynn, and on entering the House of the People, applied himself with unwearied interest and energy to his parliamentary duties. In 1851 he left his native land for India, where he might have made himself conspicuous, and have reaped laurels of imperishable fame; but he had not been there long when he was appointed Under-Secretary for Foreign Affairs, which necessitated his return to England. He was quite equal to the duties of this office, and gave promise of no common administrative power.

On the death of Sir William Molesworth he was offered the post of Colonial Secretary by Lord Palmerston, which he declined to accept; but on the return of the Derby Administration to the seat of power, he undertook the duties and responsibilities of this very same office, and resigned the post in 1858 for other and not less arduous labours.

But Lord Stanley is not to be judged only by his parliamentary duties and official relations. He has in him all the truer and all the higher elements of a wide and devoted philanthropy. His sympathies are, to a large extent, with the people, and for the well-being of the people he is willing to labour. In everything affecting their physical and intellectual improvement, their social and political advantage, he takes a lively interest. He is a most active and efficient member of the Association for the Promotion of Social Science, is the enlightened friend and advocate of popular education; throws his talents and his energies into the scale of Mechanics' Institutes, and is always found on the side of progress and improvement.

Nor let it be forgotten that he brings to anything to which he applies his mind or puts his hand, the weight and influence of high moral character. It is this which gives dignity to nobility, inspiration to talent, and energy to effort. A man may be born to rank, and wealth, and a noble name, and yet the purple in which he is clothed may conceal more incapacity and vice than the coarsest fustian ever worn by the coarsest rustic. Virtue is bright and beautiful everywhere; but when found in connection with noble descent and rank, it lends to earthly distinctions and grandeur what nothing else can give. In this respect, a happy change has come over the spirit and life of our nobility. Many of them are living examples of all that is pure and lofty in principle, and of all that is good and generous in character. And from them the influence is descended to the lower classes of society. The work of regeneration is advancing among all ranks. And if the future of our country depends on YOUNG ENGLAND, let it be seen, and known, and felt, that YOUNG ENGLAND is imbued with the spirit of purity and power, and to latest years our British Isle will stand firm and unmoved, like rock in ocean's depth.

THE SIMPLE FAITH OF A CHILD.—"In one of the narrow streets near the Marché St. Honoré," says the *Union*, "resides a poor working family who have been lately labouring under great distress. The wife has been for some time ill, and the husband has just met with an accident which has prevented him from following his usual occupation, so that his family of five children often suffered from hunger. Among the children was a little intelligent girl, who every day attended the charity school, but who has been lately obliged to stop at home to attend as best she could to her little brothers. She had been taught at school that those in distress ought to address themselves to God and the idea entered her mind that if she sent a letter to God, relief would follow. She, therefore, got pen, ink, and paper, and wrote the letter asking for health for her parents and bread for herself and brothers. Thinking that the poor box which she had seen in the church of Saint Roch was the letter-box of God, she took an opportunity of stealing quietly out of the room and running off to the church. While looking round to see that no one was near, an elderly lady noticed her movements, and thinking she was at some mischief stopped her and inquired what she was doing. After some hesitation, the child confessed the object of her visit to the church and showed the letter. The lady took it and promised the child that she would take care that it should reach its destination, asking at the same time to what address the answer must be sent, which the child gave and returned home with a light heart. On the following morning, on opening the door of the room, she found a large basket filled with different articles of wearing apparel, sugar, money, &c., the whole packed up with a direction card, on which was written '*Reponse du bon Dieu.*' Some hours after a medical man also came to give advice."

LONDON, NOVEMBER 1st, 1862.

THIS is the month of fog and gloom, in which the sun veils his face, and leaves our earth cold and dreary. But let us comfort ourselves with the thought that the WINTER, which sets in with this chill month, is not only essential to this life and the loveliness of the future spring, but brings with it its own peculiar sources of enjoyment. "Delightful and interesting as is the aspect of nature under the warmth and splendour and genial influence of a summer's sun," who has not been conscious, amid the falling leaf or drifting snow, of that mysterious influence which "draws closer the family circle, and ushers in that social and intellectual intercourse which constitutes the dearest charm, and, next to religion, the highest privilege of human existence." The attractions and the pleasures connected with an English fireside on a winter's night have challenged the pencil of the painter and the genius of the poet. Happiness sits enthroned on an English hearth, and there's nought to be compared to an English fireside, where purity and peace have taken up their abode, and virtue has reared her altar, and heart meets heart with mutual love, and every face is lit up with a purer joy. Let us, then, forget the cold and the storms without amid the lights, and the loves, and the tranquil joys of our English homes.

Our still sorrowing Queen has returned to her dominions, after her painful and trying visit to the land and the relations of her late illustrious Consort. Nor can we but hope that these recent changes of scene and society may contribute to the health and tranquillity of her Majesty; and that, coming forth from her solitude and her sorrow, she may be equal to the duties and responsibilities of her imperial position. Intense interest is felt in the approaching marriage of the Prince of Wales; nor is there a single member of the Royal Family around which the affections of the people are not entwined.

The International Exhibition is now closed. For six months it has been the great object of attraction; and hundreds of thousands have had the opportunity of deriving from it lessons of permanent practical importance. Nor can we but hope that our æsthetic taste, as a people, has been improved by its rich and rare display of painting and sculpture.

The Association for the Promotion of Social Science have had their meetings at Cambridge, under the shadow of its famous University. The proceedings were of the most interesting character. Papers on a great variety of subjects were read, and some of them of no common merit, while the discussions were carried on with more or less vigour according to the nature of the question involved. The existence of the Association is now an accomplished fact, and every year it will make itself felt with increased power and effect.

The distress in the north of England is daily taking on a more serious type; and as the winter sets in, with its cold and its privation, it is impossible to conceive to what sufferings our fellow-countrymen will be reduced. We admire their power of endurance, and we feel confident that the heart and the hand of all England will be open to succour and relieve them.

GARIBALDI is no longer a prisoner. The marriage of Victor Emmanuel's daughter brought with it an amnesty, in whose merciful provisions this devoted patriot was included. This act of grace and royal favour lost much of its worth by being so long delayed. If Garibaldi erred, his error was on the side of patriotism, and he ought to have been at once pardoned and set free. Nor can we but hope that the future of his life will tend to the salvation and the unity of his beloved Italy.

The KING of PRUSSIA has put himself in direct antagonism with his people on the subject of constitutional rights. He has ventured to set aside the principle which is part of the constitution as well of Prussia as of our own favoured country, that the representatives of the people have a right to control the expenditure, and to determine the limits of the military force which is entrusted to the hands of the sovereign, and is resolved to take the government of the country wholly upon himself. As the *Times* justly said:—"Since the day when Charles the Tenth published the proclamation which led to his downfall, no more summary invasion of constitutional liberty has been seen in the larger States of Europe;" and, therefore, the people "must make up their minds to a long and difficult struggle with power."

In our ever-changing climate, the weather is, on the whole, propitious, and the public health is good. The sea-side visitors, except the nobility from Brighton, are returning home, and London is again filling up. Fires blaze in hall and hut, around which the family circle groups with smiling faces and joyous hearts.

Have we not borne long enough with the "outdacious" impudence of the "gamins" of the day?—the mere boys who are old enough for mischief and too young to curb it. Is it wise for the Mayor of Dover (a most estimable man, as we know) to fine a gentleman twenty shillings for dropping one of these urchins into the rising tide, to the astonishment and grief of his affectionate "parient," who loudly protested against this unwonted correction of one of her dearest "offsprings." Will not "the poor dear boy" be much more impudent and "sarsy" in the future to other visitors, covered by the respectable wing of the chief functionary of one of the ancient Cinque ports? Are our magistrates quite sure that a little wholesome punishment—instant severe discipline, such as flogging,—would not do these outrageously impudent young rogues good, and save the "parients" themselves from much after sorrow?

AN OBSTINATE ORGAN.—In a small church at a little village near Brighton, where the congregation could not afford to pay an organist, they recently bought a self-acting organ, a compact instrument, well suited to the purpose, and constructed to play forty different tunes. The sexton had instructions how to set it going, and how to stop it, but, unfortunately, he forgot the latter part of his business, and after singing the first four verses of a hymn before the sermon, the organ could not be stopped, and it continued playing two verses more; then, just as the clergymen completed the words, "Let us pray," the organ clicked and started a fresh tune. The minister sat it out patiently, and then renewed his introductory words, "Let us pray;" when click went the organ again and started off on another tune. The sexton and others continued their exertions to find out the spring, but no man could put a stop to it; so they got four of the strongest men in the church to shoulder the perverse instrument, and they carried it down the centre aisle of the church, playing away, into the churchyard, where it continued clicking and playing away.

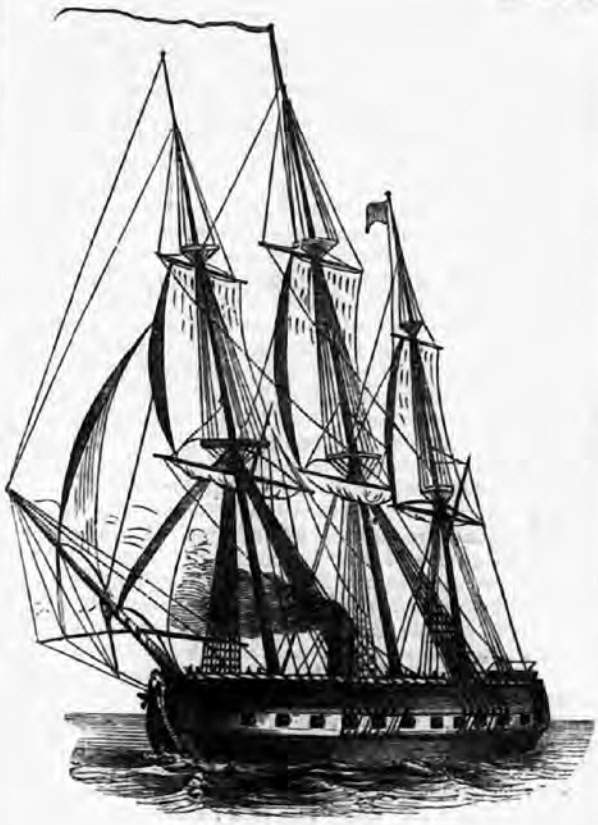
NEW GERMAN CHURCH, ISLINGTON.

We present our readers with an engraving of the German Church, Halton Street, Islington. It is considered, by those who have seen it, one of the prettiest little things in its way in London. It is a marvel of cheapness, having cost but £1700. For this reason, and the exquisite taste shown in its construction, it reflects great honour upon the architect, Mr. Thomas W. Constantine.

Influence of Females.—It is better for you to pass an evening once or twice a week in a lady's drawing-room, even though the conversation is slow, and you know the girl's song by heart, than in a club, tavern, or the pit of a theatre. All amusements of youth to which virtuous women are not admitted, rely on it, are deleterious in their nature. All men who avoid female society have dull preceptions and are stupid, or have gross tastes, and revolt against what is pure. Your club swaggerers, who are sucking the butts of billiard cues all night, call female society insipid. Poetry is uninspiring to a yokel; beauty has no charms to a blind man; music does not please a poor beast who does not know one tune from another; but, as a true epicure is hardly ever tired of water, and brown bread and butter, I protest I can sit for a whole night talking to a well-regulated, kindly woman about her girl Fanny, or her boy Frank, and like the evening's entertainment. One of the great benefits a man may derive from a woman's society is that he is bound to be respectful to her. The habit is of great good to your moral men, depend upon it. Our education makes of us the most eminently selfish men in the world. We fight for ourselves, we push for ourselves, we light our pipes and say that we won't go out, we prefer ourselves and our ease; and the greatest good that comes to a man from a woman's society is, that he has to think of somebody to whom he is bound to be constantly attentive and respectful.—*Thackeray.*

Nouns of Multitude.—A little girl was looking at the picture of a number of ships, when she exclaimed, "See what a *flock* of ships." We corrected her by saying that a flock of ships was called a *fleet*, and a fleet of sheep was called a *flock*. And here we may add, for the benefit of the foreigner who is mastering the intricacies of our language in respect to nouns of multitude, that a flock of girls is called a *bevy*, and a bevy of wolves is called a *pack*, and a pack of thieves is called a *gang*, and a gang of angels is called a *host*, and a host of porpoises is called a *shoal*, and a shoal of buffaloes is called a *herd*, and a herd of children is called a *troop*, and a troop of partridges is called a *covey*, and a covey of beauties is called a *galaxy*, and a galaxy of ruffians is called a *horde*, and a horde of rubbish is called a *heap*, and a heap of oxen is called a *drove*, and a drove of blackguards is called a *mob*, and a mob of whales is called a *school*, and a school of worshippers is called a *congregation*, and a congregation of engineers is called a *corps*, and a corps of robbers is called a *band*, and a band of locusts is called a *swarm*, and a swarm of people is called a *crowd*, and a crowd of gentlefolk is called the *élite*, and the elite of the city's thieves and rascals are called the *roughs*, and a miscellaneous crowd of city folks is called the *community* or the *public*, according as they are spoken of by the religious *community* or the secular *public*.

SHIPS.—No. VII.



STEAM FRIGATE.

THE steam frigate is of recent introduction to the navy, carrying heavy metal which would tell with tremendous effect upon an opponent. Sailors did lay great stress upon this class of vessels: they are sufficiently small to be manageable, and quite big enough to be effective. There is no doubt that, a few years ago, in a war they would have played a very brave and determined part. What they would do now, since the introduction of iron-plated vessels, it is difficult to say.

IRON GUN-BOAT.

The newly invented iron gun-boat was the most mischievous craft in the British service: it could "go anywhere, and do anything." If anything had gone wrong with France, these would have *swarmed* round our coasts, and perhaps on the opposite ones. We believe there are two or three hundred of them within call; they have not very amiable names, for instance, *Bulldog, Bittern, Boxer,* *Biter, Snap, Vixen,* &c. We believe these boats must now be greatly modified, or they will be entirely superseded by a new class of handy vessels at present under construction.

RAVENS FORMERLY BELONGING TO CHARLES DICKENS, ESQ.—"The Raven in this story, *Barnaby Rudge*, is a compound of two great originals, of whom I have been, at different times, the proud possessor. The first was in the bloom of his youth, when he was discovered in a modest retirement in London, by a friend of mine, and given to me. He had from the first, as Sir Hugh Evans says of Anne Page, 'good gifts,' which he improved by study and attention in a most exemplary manner. He slept in a stable—generally on horseback—and so terrified a Newfoundland dog by his preternatural sagacity, that he has been known, by the mere superiority of his genius, to walk off unmolested with the dog's dinner, from before his face. He was rapidly rising in acquirements and virtues, when, in an evil hour, his stable was newly painted. He observed the workmen closely, saw that they were careful of the paint, and immediately burned to possess it. On their going to dinner, he ate up all they had left behind, consisting of a pound or two of white lead; and this youthful indiscretion terminated in death. While I was yet inconsolable for his loss, another friend of mine in Yorkshire discovered an older and more gifted raven at a village public-house, which he prevailed upon the landlord to part with for a consideration, and sent up to me. The first act of this sage was, to administer to the effects of his predecessor, by disinterring all the cheese and halfpence he had buried in the garden—a work of immense labour and research, to which he devoted all the energies of his mind. When he had achieved this task, he applied himself to the acquisition of stable language, in which he soon became such an adept, that he would perch outside my window and drive imaginary horses with great skill all day. Perhaps even I never saw him at his best, for his former master sent his duty with him, 'and if I wished the bird to come out very strong, would I be so good as to show him a drunken man'—which I never did, having (unfortunately) none but sober people at hand. But I could hardly have respected him more, whatever the stimulating influences of this sight might have been. He had not the least respect, I am sorry to say, for me in return, or for anybody but the cook; to whom he was attached—but only, I fear, as a policeman might have been. Once I met him unexpectedly, about half-a-mile off, walking down the middle of a public street, attended by a pretty large crowd, and spontaneously exhibiting the whole of his accomplishments. His gravity under those trying circumstances, I never can forget, nor the extraordinary gallantry with which, refusing to be brought home, he defended himself behind a pump, until overpowered by numbers. It may have been that he was too bright a genius to live long, or it may have been that he took some pernicious substance into his bill, and thence into his maw—which is not improbable, seeing that he new-pointed the greater part of the garden-wall by digging out the mortar, broke countless squares of glass by scraping away the putty all round the frames, and tore up and swallowed, in splinters, the greater part of a wooden staircase of six steps and a landing—but after some three years he was taken ill, and died before the kitchen fire. He kept his eye to the last upon the meat as it roasted, and suddenly turned over on his back with a sepulchral cry of 'Cuckoo!' Since then I have been ravenless."

FRIENDSHIP.—True and brave friendships are between worthy persons; and there is in mankind no degree of worthiness, but is also a degree of usefulness; and by everything by which a man is excellent, I may be profited. And because those are the truest friends which can best serve the ends of friendships, either we must suppose that friendships are not the greatest comforts in the world, or else we must say, 'He chooses his friend best, that chooses such an one by whom he can receive the greatest comfort and assistances.'—*Jeremy Taylor.*

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

NOTE.—Transpose the names of the Long-eared Owl and the Screech Owl in the last Number, pp. 152, 153.

CHAPTER XX.

THE SCREECH OWL OR BARN OWL.—(*Strix flammea.*)

THE Screech Owl is the most familiar of British owls, and the most useful of British birds. Its numerous names show very clearly how universally it is known. I will give a few of them: Barn Owl, Gillihowter, Gillihowlet, Howlet, Madge-howlet, Madge Owl, Church Owl, Hissing Owl, Screech Owl, White Owl, Yellow Owl. These names are not obtained by ransacking the country, and asking country people what they call the bird: all the names, except the last, occur in the works of Montagu and Selby, and the last is from Bewick. The best history of this owl is from the pen of Rusticus of Godalming, who has paid more attention to the habits of our commoner birds than any other writer except White of Selborne, Colonel Montagu, and Mr. Selby. I extract the history from No. 327 of Chambers's Edinburgh Journal, published in April, 1850.

While the Windhover is hovering over the stubble, the owl is dozing away the daylight hours in a hollow tree, a cock-loft, a barn, or the belfry of some old weather-beaten church; and while the Windhover is slumbering on her perch, the owl is beating the fields on noiseless pinions. It is beautiful to watch the owl thus occupied. With what perseverance, with what method, with what untiring industry, does he seek his prey! Sometimes taking the direction of the furrows, sometimes taking the lands transversely. With what unerring skill does he seize the marauding mouse! With what a triumphant scream does he proclaim, now and then, that he is bearing food to his distant progeny!

A pair of Screech Owls once nested in our old barn, and they seemed to have young ones to feed from early spring to quite late in the autumn. I used to watch the old ones go forth to their hunting grounds, and watch also for their return. I observed that before entering the barn they invariably settled on the corner of an old out-house close by the barn; it was but for a second, yet I knew something was done here, and I determined to know what. So one day I boarded up the front of this shed, and stuck a short pole out at the corner, thus kindly offering the owls a more convenient perch than they had before, and so situated that I could see from within the shed what use they made of it. When evening came, I went out to the garden-gate as heretofore to watch proceedings. The owls passed and repassed eyeing the shed and pole with distrust, and never perching on either, in fact, they went out of their way purposely to avoid the pole, or perhaps merely to convince me how entirely they disapproved of the new arrangement. But their dislike to the change wore off with its novelty, and at the end of a week I saw one of them using the pole as a perching place, just as he formerly had used the corner of the shed. Next day I shut myself up in the outhouse, while it was still broad daylight, and there, a voluntary prisoner, I patiently awaited for dusk.

I saw both the owls pass within a yard of me on the way to the hunting grounds, but full twenty minutes elapsed before their return. I kept my eye constantly at a wide crack that opened towards the field, by which I knew they would return. Presently one of them topped the hedge at the bottom of the field, and came directly towards me; he held something in his foot, certainly a mouse, head and tail hanging down. He alighted on his new perch, stooped his big round head, took the mouse in his beak, turned his broad face and great glaring eyes full on the crevice I was looking through, and silently floated through the open window of the barn. I saw this again and again, and when both my friends were far away on their hunting grounds, I left my hiding-place, and went in to supper well pleased with the success of my experiment. My visits to the shed were often repeated, sometimes alone, sometimes with companions, always with the same result. Generally the owls returned silently to their perch, but sometimes, especially before rain, they announced their return by a loud scream.

Screech Owls never hoot; they have four notes, or, more correctly speaking, they make four noises: the first is a kind of hiss, the second a kind of snore, the third a plaintive and very deceiving call-note, much like the pewit, and the fourth is that loud scream always uttered on the wing, which I suppose constitutes the bird's claim to the title of Screech Owl. A word more about the pair in our barn; one of my visitors, delighted with watching them from the shed, determined on a visit to the owl-cot, as we called the corner of the barn they had selected for their eyrie. He mounted a ladder, wishing to make an inspection of their family arrangements, and well-nigh paid a severe penalty for peeping; as soon as he was within reach of the nest, both the old birds flew out, and it was only by pulling his hat hastily over his eyes that he saved his physiognomy from a clawing that might have disfigured him for life.

I have said that the Screech Owls have young ones to feed throughout the summer and autumn. I will explain how this happens, and how I came to find it out. In the first place, Screech Owls are hatched in a very helpless state and almost naked, and are almost twice as long as any other birds before they can shift for themselves; in the second place, the female lays eggs in pairs, and she lays the second pair after the first pair is hatched. The young ones soon become covered with white down, and look much like powder-puffs; and the warmth of their bodies keeps the eggs warm—warm enough, as I imagine, to hatch them without any regular sitting on by the mother. I cannot say positively that she does not sit at all on any eggs but the first pair; most likely she does; but this I know, she does not sit regularly, being generally away half the night mousing for her first-born. When the second pair of eggs is hatched, these new twins want feeding too. I suppose the big pair are fed with big field mice, and the small pair with small harvest mice; but mind, I don't lay this down as a fact, I merely give the old owls credit for so clever an arrangement. We know that in ancient mythology, Minerva, the goddess of wisdom, is said to have adopted the owl as her badge, and as her constant companion; hence, though we don't believe in Minerva now, we may conclude that the ancients considered the owl the wisest of all birds. However, by this constant succession of eggs a constant succession of young ones is kept up. Now I believe it is well known that nestling birds eat double or treble as much as old ones. This is certainly a fact, and the quickness of their growth in a great measure explains it. A young bird on leaving the nest is almost as big as his father or mother; and, as this commonly happens in a few weeks, the rate of growth is prodigious, and certainly the supply of food is bountiful in proportion. Now, it is very obvious to me that the prolonged season of feeding, in the instance of the Screech Owl, compels that bird to do the greatest possible amount of good, to kill the greatest possible number of mice to supply the ravenous cravings of their prolonged infancy. It seems to me as though these persecuted birds were directed by instinct, or rather were commanded by their Creator, to serve mankind to the uttermost. But to my tale:—

One day in October, 1822, I was sauntering along a lane between Munstead and Hascomb, when, just as I passed a great pollard oak, I saw a Screech Owl come out of a hole from which once issued a tolerably large branch. I tapped the trunk with the butt-end of my gun, and immediately afterwards heard a response from within, the noise that I call snoring. Of course I laid down my gun and climbed the tree, one of the toughest tasks I ever undertook; there was scarcely a twig to hold on by, and the trunk was uncomfortably large. I think the top of this tree must have

been snapped off by the wind, or perhaps struck by lightning at some remote period; for a lot of short, thick, worm-eaten splinters stuck up amidst vigorous boughs, giving the tree a very odd appearance. There is something curious in the way in which life and death contend for mastery in a decrepid tree; life is continually supplying young branches, aye, and vigorous ones too, new wood and new bark, which gradually creeps on, and at last hides old decayed spots or wounds. Death works his silent way from the centre, day by day reconverting particles of solid wood into their kindred dust, thus compelling the tree to reunite itself to that earth whence it originally sprang.

To proceed: The treat of inspecting the interior of the tree was not to be obtained, so I put on a thick glove, and thrust one arm up to the shoulder into the hole whence Mr. Gillihowlet had just made his exit. The produce of the first grasp was an owlet of very respectable size, quite three-quarters grown, and too well feathered to be trusted alone, so I buttoned him in the pocket of my shooting-jacket, and tried my luck again. This time an owlet came to light less than half the size of the first, and apparently youthful in proportion to his littleness. He also was consigned to the pocket, and then a third exactly like the second. After a good deal of groping about I felt pretty sure there were no more owls or owlets to be found, but there was something very like eggs, so I ventured to feel with an ungloved hand, and brought out three eggs, one at a time. They were very warm, and seemed half buried in something very much like highly-dried pulverised mice, a substance, or rather a powder, which I presume to have been produced by long trampling on the pellets cast up by the old owls. Having carefully deposited one egg in each waistcoat-pocket, and the third in my mouth, and having screwed up in paper some of the dust, I commenced the descent, and, landing in safety, proceeded to examine my treasures. The old female owl returned in the meantime, and perching on a bough at a little distance, strove to look as philosophical as possible under her loss. Determined to understand as much as possible of this happy family, I proceeded to pierce the eggs. One was addled; the other two had been sat on too long to be blown; the young were very near being hatched. I was sorry I had destroyed the eggs, but made what amends I could by again climbing that difficult tree and replacing the young ones where I had found them.

This history leaves me little to add. We have seen that the Screech Owl feeds almost entirely on mice, which the old birds appear frequently to swallow whole, casting up from their stomachs pellets which are composed of the fur and hair. They make scarcely any nest, laying their eggs in hollow trees, barns, &c., two at a time; the eggs are quite white, and almost round, but not glossy. The Screech Owl never migrates; it stays with us all the year, and is equally common in summer and winter. If I were a despotic monarch I would make severe laws to protect this most useful bird against the gamekeeper, the farmer, and the gardener, to all of whom it does incalculable service, by destroying rats and mice, which devour the eggs of game-birds, as well as all kinds of corn and almost every description of garden produce. I have often had living Screech Owls and never saw one drink; they will eat all kinds of raw meat, but prefer a mouse to every other diet.

The beak of the Screech Owl is dusky-brown and the eyes brown; the feathers round the eyes yellowish, the circle round the face white; the feathers on all the upper parts are pale dingy yellow, the tip of each feather having the most delicate zigzag lines and also black and white spots; the feathers on the under surface are white, with the slightest possible tinge of yellow, and having also minute brown specks: legs and toes clothed with short white downy feathers, each feather ending in a hair; claws whitish horn colour, the middle one having its inner edge notched or saw-like; all of them are a little grooved beneath.

The Screech Owl, like many others, when angry or alarmed, has the habit of striking the upper and lower mandible of its beak together, making a snapping noise. This habit has only been noticed when the bird is in captivity, and was first recorded by Colonel Montagu. In captivity they become extremely tame, and if brought up from the nest, and plentifully supplied with food, can hardly be induced to leave the tool-shed, or other outhouse, where they have been kept: even though at full liberty, and taking long flights of an evening, they are sure to be found on their old familiar perch when daylight dawns, unless murdered by the ruthless hand of some ignorant gunner, who is too stupid to be aware of the evil deed he is committing.

CHAP. XXI.—The Tawny Owl.—(*Strix aluco.*)

Latham and Pennant make two species out of one in the instance of this owl, calling them respectively the Brown Owl and the Tawny Owl. There is, in fact, a slight difference in the shade of colour: some have thought this sexual, indeed the brown specimens are almost invariably females, but this difference does not hold good as a rule. Colonel Montagu shot both varieties off one nest, and although in his great work the name Brown Owl occurs, accompanied with a description, it is only apparently for the sake of expressing his firm conviction that the two varieties constitute but a single species.

In all parts of England the Tawny Owl is very common, frequenting woods, especially those abounding in firs, which kind of tree seems particularly agreeable to the whole family of owls. It has a great fear, or perhaps more properly dislike, of light and sunshine; and is very rarely seen abroad in the daytime: indeed, when disturbed and forced to leave its haunts, it sees so imperfectly as scarcely to know in what direction it is flying: on such occasions it is soon spied out by sparrows and other birds, which mob it, peck it, and annoy it in every possible manner; and also by boys, who generally succeed in killing it outright or in consigning it to a captivity which, under their control, is scarcely preferable to death.

The usual breeding place of the Tawny Owl is a hollow tree, laying its eggs on the decayed wood, which in the course of years accumulates in great quantities. Like the Screech Owl it also builds in barns and granaries, for the sake of the enormous quantities of mice which infest such places, and I once knew a farmer so sensible as to forbid his people to molest this useful bird, on pain of instant dismissal. An ivy bush is also sometimes selected as a breeding place; and in this case the deserted nest of some other bird is appropriated. I have never known an instance in which the Tawny Owl has been seen in the act of carrying materials for the fabrication of a nest. The female lays four or five white eggs, which are not shining, and are of an elliptical form.

Besides its ordinary diet of mice, the Tawny Owl indulges in several rather amusing epicurean eccentricities. The Rev. W. T. Bree, a very able and observant naturalist, relates, in Loudon's Magazine of Natural History, an instance of its feeding on fishes; and Mr. Carr has just published in the "Transactions of the Tyne-side Naturalists' Field-Club," an instance of the Tawny Owl regaling its offspring with magpies, both old and young. The magpie-eating propensity is so interesting that I feel no hesitation in extracting the passage entire. "This bird," says Mr. Carr, "does not seem to be known as a bold and rapacious robber of the nests of some of our stronger birds, at the time when it is feeding its own young. In 1844, a pair of Tawny Owls reared and ushered into the world three hopeful young ones, having fed them assiduously upon the trees for many weeks after they had left the nest. The food must have often consisted in great part of worms, snails, and slugs; for the old birds brought it every minute from the ground in the immediate vicinity of the trees where the young were perched. This, however, might only be considered as a whet to their appetites before dinner; for the parents made repeated and persevering attacks upon three or four magpie nests, sometimes during half-an-hour

at a time. As the defence was spirited and gallant, they were often repulsed, but finally I found the remains of young magpies under the favourite perch of the young owls, and one morning the head and feathers of an old magpie. This, then, I thought must have taken place when roosting. In 1845, the old owls alone were seen, and they passed the summer in a state of sedate retirement, and seemed to rest from the labours of propagation; neither did they molest the magpies. But in 1846 they began to be very active in the spring, and by the beginning of May again had their young owlets out upon the branches. Walking out one evening about nine o'clock, I heard a pertinacious attack going on against a pair of magpies that had their nest on the top of a very tall sycamore. At last, instead of the, frantic chattering of the poor magpies, one of them began to shriek in agony like a hare when caught in a noose, and it was evident that the owl was endeavouring to drag the magpie by the head out of the entrance hole of the nest. I ran down to the spot to prevent the perpetration of another murder and arrived in time to separate the combatants by striking against the stem of the tree with a stick. Before the next morning the young of our only pair of rooks had disappeared from the nest, in a situation where nothing but the owls could have injured them."

THE EAGLE OWL.

The following anecdote of the Tawny Owl is told by Mr. Jenyns, copied at p. 1905 of the "Zoologist:" "A Tawny Owl had long been in the occupation of a convenient hole in a hollow tree; and in it for several years had rejoiced over its progeny, with hope of the pleasure to be enjoyed in excursions of hunting in their company; but through the persecutions of some persons on the farm who had watched the bird's proceedings, this hope had been repeatedly disappointed by the plundering of the nest at the time when the young ones were ready for flight. On the last occasion an individual was ascending to their retreat, to repeat the robbery, when the parent bird, aware of the danger, grasped her only young one in her claws, and bore it away; she never more placed the nest in the same situation."

A very curious fact of this owl having laid after being in confinement for twenty years, is related in the "Zoologist" for 1853, at p. 4761.

The head and especially the eyes of the Tawny Owl are very large, the latter are black with a blueish tinge; the face is grey, surrounded with a dark-brown ring; the feathers on the crown of the head and all the upper parts of the body are greyish, shaded with brown of two distinct tints; there are also two rows of white spots on each side of the back, the first on the feathers covering the wing, the second on the wing itself; when the wings are closed they are much shorter than the tail; the throat, breast, and belly are pale, much paler than the back, and streaked and dotted with brown of two shades; the legs and toes are covered with grey downy feathers; the claws are whitish at the base, black at the tip; they are long, curved, and very sharp.

Like the Screech Owl, this bird is very easily tamed, and, if abundantly fed, submits to confinement with the most perfect indifference, showing no inclination whatever to escape, and often returning to its prison when carried to a considerable distance and purposely set at liberty.

I venture to indulge a hope that some of the readers of YOUNG ENGLAND will be induced, by reading these remarks on the British owls, to protect these useful and most innocent birds. If such be the case, I shall feel that I have not written in vain.

[CHAP. XXII.*

THE EAGLE OWL.—*Strix Bubo.*

THE Eagle Owl is the monarch of the tribe to which he belongs: he inhabits all the northern countries of Europe in some abundance, as well as the Alpine regions of Switzerland, Spain, Italy, Belgium, and Sicily; and is especially abundant on Mount Etna. Like all continental birds of prey, the Eagle Owl occasionally visits this country of its own accord, but the greater part of those which have been killed in England have escaped from confinement. On account of its great size, beauty, and majestic appearance, it is a prime favourite in aviaries and zoological gardens; it soon becomes extremely tame and quiet, and seems only to require to be well fed, and to be allowed to doze its days away in peace. Great numbers are imported annually from Sweden and Norway: they are taken young, and brought up by hand. Not only do these docile birds live and thrive in confinement, but breed and bring up their young. In Arundel Castle there has been for sixty years a colony of these grand owls, which are tended with the utmost care, and form a valuable appendage to the donjon keep of that ancient edifice. Many private gentlemen also keep this owl, and Mr. Gurney, M.P. for King's Lynn, has recorded in the "Zoologist" the success attending an experiment of this kind made by Mr. Fountaine, at Easton, near Norwich. "The hen bird," says Mr. Gurney, "is now (May 1, 1849) incubating three eggs on a nest formed of straw, on the ground in the further corner of the cage; both the birds have become unusually bold and savage since this operation has been in progress" (Zool. for 1849, p. 2452). On the 23rd July Mr. Gurney adds the following information, at p. 2566 of the same volume. "I have now the additional pleasure of stating that the eggs have been hatched, and the young birds safely reared; the following particulars, which were kindly furnished me by Mr. Fountaine, will, I have no doubt, be acceptable to the readers of the 'Zoologist.' The first egg was observed on the 13th of April, and two others about a week afterwards. Two young ones were found to be hatched on the 19th of of May, and the third on the 22nd. They were entirely covered with white down when first hatched. When about three weeks old, they began to exchange the first or white down for the second down, which was of a brownish grey colour. At the age of about five weeks the feathers began to appear, and the young owls are now (23rd July) able to fly up to their perches, and are nearly as large as their parents; in fact, much in the same stage as the specimens usually imported from Norway, at this time of the year, by the London bird-dealers." In the year following, Mr. Fountaine's owls bred again. "Three eggs," says Mr. Gurney, "were laid this time, being the same number as last year. One egg was addled, but the other two have produced a pair of fine healthy birds. The first egg was laid this year on the 10th of March, being thirty-four days earlier than last year. The period of incubation has been in both cases thirty-six days."

These captives occasionally escape, and maintain them-

* Here follow the Owls which are not British.

selves for weeks or even months, by raids on rats, mice, and moles, until some gunner puts an end to their existence. Colonel Montagu says that specimens have occurred in Sussex, Yorkshire, and Scotland. Mr. Selby says that he had been informed on very good authority, that a specimen was killed in the county of Durham. In the "Zoologist" for 1846, we find that Mr. Hall, a bird-stuffer in the City Road, had a specimen of this owl brought to him to be preserved for Mr. Burgess, of Temple House, Hampstead: "It was caught, after much trouble, in a hedge near the house, and was kept alive for some time; it was fierce during its captivity, and had been severely wounded in the wing by shot, previously to its capture." In the volume of the same periodical for 1849, Mr. Briggs, of Melbourne, in Derbyshire, states that *several* have been killed in that neighbourhood. The Eagle Owl has never been killed in Ireland.

THE SNOWY OWL.

CHAP. XXIII.—The Snowy Owl.—*Strix nyctæa.*

This owl, remarkable for its size, and the extreme delicacy and beauty of its plumage, is an inhabitant of the northern regions of both continents, and only visits the northern parts of Great Britain on rare occasions and when driven by violent winds. It is extremely fond of rabbits in its European abodes, and in America, Sir John Richardson gives the following sketch of its habits:—

"It hunts in the day; and indeed, unless it could do so, it would be unfit to pass the summer within the Arctic Circle. When seen on the barren grounds it was generally squatting on the earth, and if put up, it alighted again after a short flight; but was always so wary as to be approached with great difficulty. In the wooded districts it shows less caution; and according to Hearne, has been known to watch the grouse shooters a whole day, for the purpose of sharing in the spoil. On such occasions, it perches on a high tree, and when a bird is shot, skims downs and carries it off before the sportsman can get near it. It preys on lemmings, hares, and game birds, particularly the willow grouse and ptarmigan. Mr. Hutchins says that it eats carrion. I have seen it pursue an American hare on the wing, making repeated strokes at the animal with its foot. It makes its nest on the ground, and lays three or four white eggs, of which only two in general are hatched."

Mr. Wilson, in his "American Ornithology," says, "The usual food of this species is hares, grouse, rabbits, ducks, mice, and even carrion. Unlike most of his tribe he hunts by day as well as by twilight, and is particularly fond of frequenting the shores and banks of shallow rivers, over the surface of which he slowly sails, or sits on a rock a little raised above the water, watching for fish. These he seizes with a sudden and instantaneous stroke of the foot, seldom missing his aim." Wilson has also some excellent observations on the manner in which nature has fitted this bird to endure the cold of those Arctic regions where its life is mostly passed. "Nature," says the observant author, "has so effectually secured this bird from the attacks of cold that not even a point is left exposed. The beak is almost completely hidden among a mass of feathers that cover the face; the legs are clothed with such an exuberance of long, thick, hair-like plumage, as to appear nearly as large as those of a middle-size dog, nothing being visible but the claws, which are large, black, much hooked, and extremely sharp. The whole plumage below the surface is of the most exquisitely soft, warm, and elastic kind, and so closely matted together as to make it difficult to penetrate to the skin."

The cries of this beautiful owl are said to be most dismal, and Pennant adds that they resemble those of a human being in deep distress, and add horror even to a Greenland winter.

Mr. Edward, of Banff, sent me a paper for insertion in the "Zoologist" for 1856, in which he relates the remarkable fact of this owl having been known to breed in a narrow chasm called "Dickie Hare," at Loggie Head, a few miles west of Portsoy, on the Banffshire coast. "In this chasm," says Mr. Edward, "a pair of these owls bred in 1845. Unluckily, however, for them, a party of fishermen belonging to Cullen, returning one morning in the summer of the year just mentioned from their vocation rather earlier than usual, discovered their retreat by observing one of the birds go in. This was too much to lose sight of, so up the dangerous and jagged precipice scrambled one of the crew, and managed to reach the aperture, where the bird had disappeared, but instead of only one, as he expected, he was not a little surprised to find that he had four to deal with, two old and two young ones well fledged; and the apartment was so narrow that only one person could enter at a time, so that help was out of the question, and his ambition grasped the whole. What was he to do; or what could he do? Turn, and then the birds would have flown. Oh, no! but just as I would have done had I been in his place; he set upon them all, and after a prolonged and pretty severe battle, in which he got himself a good deal lacerated and his clothes torn by the claws of the birds, he succeeded in capturing them all alive except one of the young ones, which fell a sacrifice to the struggle. The state of excitement which the little town was in as the man landed with his prizes and the news of his morning's achievement spread, may in some measure be imagined, but it can hardly be described. They were sold, I believe, a few days afterwards, to a doctor, but what became of them afterwards I could never learn."

I must confess that I have always entertained a suspicion that in this instance there was some mistake in the species of owl. My readers will perhaps observe that Mr. Edward attributes the discovery to the fishermen having passed the spot earlier than usual, as though the owl had been out hunting all night like other owls, and was returning home for the day. Now the Snowy Owl hunts by day, and as it was feeding young ones, the marauding excursions of two enormous white owls must have been observed by every one for miles round. Then, again, the Snowy Owl never makes its nest in the crevices of rocks, but on flat open moors, quite on the ground. The fisherman who told the story to Mr. Edward may, I think, have seen and captured the common Screech Owl, which is an excessively rare bird in Banffshire, four only having been seen in twenty-four years. To these fishermen the occurrence of the Screech Owl would have been a perfect marvel.

(To be continued.)

CALENDAR FOR NOVEMBER.

LEPIDOPTERA TO BE LOOKED FOR IN NOVEMBER.

Insects.

C. Vaccini.
C. Spadica,
P. Populi,
H. Croceago,
D. Templi.
H. Defoliaria.
O. Scabraria.
P. Tristana.
E. Gelatella.
L. Messaniella.

Caterpillars.

H. Hispida, on grasses, &c.
O. Sambucaria, on oak, ivy, &c.
E. Subnotata, on chenopodium.
G. Inopella, on flower heads of henbane.

THE YOUNG NATURALIST.

CHAPTER VII.

A STRANGE DISCOVERY.

"HURRAH! hurrah!" shouted Robert, as he rushed from the school-house one Wednesday noon: "hurrah! a whole afternoon and no lessons. Farewell Mr. Arithmetic, good-bye Mr. Grammar, till to-morrow morning!"

"You appear to be in high glee," said Emily, as she followed him from the school-house door; "how do you intend to pass this afternoon, that the thoughts of it make you so happy?"

"Come with me, little pet, and you shall know; I shall want company."

"I guess you are going to take pa's advice, and see if you can't learn something without books."

"It won't be the first time if I do. I have learned many things which I never should have known, if pa had not told us so often to keep our eyes open and observe things. I call myself a pretty good observer, Emmy."

"I know you sometimes come home with a great many questions," replied his sister, "about what you have seen or heard, and when our dear father answers them, it makes the evening pass away very pleasantly."

"And profitably too, you might have added; for he not only answers the questions I ask, but tells us many other things about the subject, and some of them are very curious."

After dinner, Robert and Emily obtained leave to go into the woods. They crossed one or two fields, and then took a path which had been made by the cart when going to and fro after wood, and which led a long distance into the forest. The two children were in high spirits. They would run along rapidly for a few minutes as if racing, then stop, look at a flower or bug which might attract their attention, then take each other by the hand and proceed more slowly to recover breath. If a bird or squirrel made its appearance, they would pause a while, watch its movements, and then throw at it a small stick or stone, to see its manœuvres when frightened.

They had now gone a considerable distance into the forest. The tall trees reared their branches high over their heads, and almost shut out the light of the sun. The children began to feel weary.

"I don't know how you feel, but I am tired," said Robert, as he seated himself upon the trunk of a tree which had been blown down and was partly decayed.

"So am I," replied Emily, as she took a seat by the side of her brother.

They had not been sitting there long, before they espied a number of ants creeping about in different directions.

"How busy these ants are," said Emily.

"Yes," said Robert, "they appear to be working as if they had no time to lose."

"Here is one that is travelling in great haste; let us watch it and see where it goes."

"I guess he is a runaway," said Robert, "or perhaps he is carrying some important message."

The children carefully watched the straggler that had attracted their attention, and were amused to see how it would sometimes creep over and sometimes under the sticks and leaves which were in its way. It allowed nothing to stop its progress. If it came to an object which it could neither go over nor under, it would pass round it. Presently it reached a small bush or shrub, and began to climb up the trunk.

"Where is it going now?" asked Emily.

"We'll see," said Robert. The ant ascended the main trunk of the bush until it came to one of the largest branches; it then took that branch and followed it along to a cluster of leaves which were growing near its end. Here it paused. "What now!" said Robert; "has it met an enemy?"

Emily, who a moment before had left her seat that she might watch the wanderer more carefully, suddenly cried out,

"O Robert, Robert! here is a whole bunch of insects on these leaves, and I think the ant has come to kill them."

"Then we shall have a battle," said her brother. The children saw the ant go close up to one of the insects and touch it carefully with its feelers, or horns, upon the back. After waiting a moment, it began to strike it more rapidly, and then the ant put its head close to the side of the little creature, as if to bite it. This it repeated a number of times, and then went away. A number of the others did the same thing.

On another part of the bush, Robert noticed that some of these insects made a convulsive or jerking motion, by which a small drop of something was thrown from their bodies, which an ant immediately ran to, and eat.

When the children returned home they related the story of the ants, one supplying in the narrative what the other omitted. After they had finished, their father told them that he could explain it all, and that the explanation was very interesting.

"Ants," said he, "are very curious creatures. They are remarkable for their industry, their ingenuity, their courage, and their affection for their young. Many strange facts are related of them concerning each of these particulars. But as it would occupy too much time for me to relate all that I know about them, I will confine myself to the singular habits which you observed to-day.

"The little insects to which the ants appeared to be so attentive, are called aphides, or plant-lice. They live upon the branches or leaves of plants. They are very social in their habits, that is, they live together like a society or family."

"That was the case with those that we saw," said Robert. "I should think there were as many as fifty in one group."

"These little insects," continued their father, "are furnished with very small suckers, which they insert into the bark of the tree or plant on which they live, and through which they are almost constantly drawing the sap. On each side of their body towards their back is a small tube or hole, and after the sap which they have eaten has passed through certain changes, it is discharged from these tubes. It is then very sweet and agreeable. This substance, whether it is milk or honey, ants are very fond of. Whenever they see a drop of it oozing from the sides of their little favourites, they eat it off. On this account the aphides have been called ants' cows. What is most singular of all is, that when the ants are hungry, and none of this honeyed milk is to be seen upon their little cows, they know how to make them discharge it. In other words, they can milk their cows. It was this process which you saw this afternoon. It is done in this manner. The ants, with their long feelers or horns, at first gently touch the aphides upon their sides and back, as if caressing them. If the little insects do not take the hint and discharge some sweet milk, the ants then pat them very rapidly, first on one side, then on the other. In a short time the aphides raise their hind limbs, and from the tubes on their sides a drop of the precious fluid oozes out, which the ants immediately consume. They then repeat the process till they can get no more. If one of these little cows does not satisfy their

appetite, they go to another and treat that in the same way."

"How strange!" said Robert. "But you have not told us what those were doing which made the spasmodic motion I spoke of."

"When there are no ants near," continued their father, "or when they are not disposed to milk their cows, the aphides, by a sort of jerking motion, eject the fluid from them. Those which you saw were attended by an ant which immediately feasted upon the delicious nectar.

"Some species of ants carry the eggs of the aphides to their own nests, and there rear the young ones, that they may always have them at hand to supply their wants. Ants' nests have been discovered containing aphides walking about as much at home as our cows are in the pasture. When any danger threatened them, the ants would take them up and carry them away as carefully as a nurse would a child. They knew their value, and therefore were unwilling to have them destroyed."

"I shall always like the ants the more for that," said Emily.

"I don't know that you ought to," replied Robert; "for it is all selfishness in them. They take good care of these insects simply because they get their living from them."

"At any rate," said William, who had been holding his head down for some minutes, thinking, "it shows the wisdom and goodness of the Creator, that one insect can live almost wholly upon another, without killing them."

"What do they feed their little cows upon when they have carried them to their nest?" asked Emily.

"Upon the roots of trees and plants," answered her father. "The ants select a place where there are such roots, and then build their nests in such a manner that the roots are inclosed within the nest, so that the aphides have as much as they can eat without going abroad."

"How ingenious!" said William; "they seem to be almost able to reason."

"Yes, my son, there are many things in the conduct of irrational animals which seem to approach very near to the reasoning faculty. Even we might learn from them some profitable lessons. Let me remind you of what Solomon says: 'Go to the ant, thou sluggard; consider her ways and be wise, which having no guide, overseer or ruler, provideth her meat in the summer, and gathereth her food in the harvest.' It ought to be very humiliating to the sluggard," continued Mr. Rogers, "to be sent to so small a creature as the ant, for instruction. Yet the ant is a good teacher, for she teaches by example, and example is better than precept. The lesson taught by the ant is industry. I hope, my children, that you will learn this lesson. Ever be industrious. Hate idleness. An idler is despised. The industrious are respected. 'Seest thou a man diligent in his business,' says Solomon, 'he shall stand before kings; he shall not stand before mean men.' Indolence never accomplished anything; but all the great works ever performed by man, are so many monuments of industry."

BALLOONS;

OR, AN ESCAPE FROM AN ESCAPE BY AN ESCAPE.

THE extraordinary height attained recently, by Messrs. Coxwell and Glaisher in the monster balloon, demands a few words from us.

We are reminded of the first ascent in this country nearly a century ago. The first person who went up in a balloon in England was Vincent Lunardi, a native of Italy.

On the 15th of September, 1784, at a very early hour in the morning, about 150,000 spectators, composed of all ranks of people, assembled together; forming themselves, perhaps, one of the grandest spectacles ever seen—there being, amongst the higher circles, the Prince of Wales (afterwards George IV.), Mr. Fox, Lord North, Mr. Burke, Sheridan, and other persons of distinction.

About one o'clock, Lunardi and Mr. Biggin, who intended to have accompanied him, came upon the spot.

Upon firing the first gun, all was silent, and in anxious expectation; but in a few minutes the impatience of the people threatened to overleap the bounds of discretion. A rumour spread through the crowd that the balloon had burst. In every quarter murmuring increased to a height indicating a disposition to riot, but quickly subsided upon the second signal being given about two o'clock. The supporters then withdrew, and the machine mounted with slow and gradual majesty into the air. When it had risen about the height of one hundred feet, it descended again very low, and was so near the houses that the most anxious fears were entertained; but Lunardi threw out a large quantity of ballast, and he again rose, with the most beautiful and even progress, to the skies. Lunardi was accompanied by a couple of pigeons, a cat, and a favourite lap-dog.

Nothing could equal the surprise of the astonished multitude. The loudest acclamations rent the air; some cried through excess of joy, some wept for his safety, others clasped their hands together in the most fervent prayer.

When the balloon appeared floating in the air, and the car containing the aërial navigator was seen depending from it, astonishment seized the multitude, and an awful silence reigned around, which immediately after was broken by the most impassioned bursts of applause from the greatest assemblage of people that a public spectacle had ever occasioned in this country.

The balloon was visible from various parts of London till near five o'clock, appearing then not larger than a tennis ball; soon after which it became invisible, leaving an impression of anxiety in the minds of all for the safety of the adventurer.

When Lunardi had gained the utmost altitude of his ascension, he felt so strong a propensity for sleeping, that it was with the utmost difficulty he could keep himself awake; the cold too at this time became so intense as to render Lunardi's situation almost insupportable, and his continuing in it not prudent. The cat was so benumbed as to be rendered motionless; and had not Lunardi's regard for his dog led him to afford it the warmth of his bosom the animal would have inevitably perished.

After he had been in the air about one hour and a half, the thermometer stood at thirty-five degrees, and the atmosphere was so cold that icicles were upon his clothes, and he was fearful his balloon would burst. In passing over some villages, he called with his speaking-trumpet to the people, who heard him and answered. At Northaw, in Hertfordshire, he descended so low as to be able to converse with a villager who was digging. Here he threw out the cat, which was taken up alive by an inhabitant.

He descended about five o'clock in the evening at a place called Collier's End, four miles from Ware.

An old ballad of the time deals very curtly with the balloon people:—

"It was once the rule when a wit play'd the fool
To give him a cap with a bell;
When philosophers wise on air-bubbles rise,
It surely would fit them as well.
Toll de toll," &c.

As a sort of intermediate notice between the first ascent and the last highest, we cannot refrain from introducing Mr. Mayhew's graphic description of "going up," from an eye-witness. We detest bad puns, or we should have written high witness.

"Being offered a seat in the car of the royal Nassau balloon, we determined upon accompanying Mr. Green into the clouds, on his five hundredth ascent. It was late in the evening, a fine autumn one, when the gun was fired: that was the signal. Immediately the buoyant machine bounded like a big ball into the air, or rather let us say *the earth seemed to sink suddenly down.*

"The moment after this, the balloon vaulted over the trees, and we saw the roadway stuck all over with mobs of little black Lilliputian people, while the hubbub of the

voices below, and the cries of "Ah, *bal*-loon!" from the boys, rose to the ear like the sound of a distant school let loose to play.

"Far beneath lay the suburban fields. The roadways striping the land were like narrow brown ribbons. The bridges of the Thames were like planks. The long black barges seemed no bigger than summer insects on the water. The largest meadows were about the size of green baize table covers. The gas lamps along the lines of roads were like little illumination lamps, such as are hung on Christmas trees. The little mites of men crossing the bridges, seemed to have no more motion in them than the animalcules in cheese—while the streets appeared more like cracks in the soil than highways.

"Indeed it was a most wonderful sight to behold London all blended into one immense black spot—to look upon the whole as the birds of the air look upon it—to take, as it were, an angel's view of that large town where, perhaps, there is more virtue and more iniquity, more wealth and more want, brought together into one dense focus than in any other part of the earth."

But the triumph of ballooning has been lately achieved. Would you like to know how persons feel who go up over six miles "sky high"?

Mr. Glaisher says—"I felt that I was losing all power, and endeavoured to speak, but could not. That was when they had ascended five miles and three-quarters. "I attempted to look at the barometer again; my head fell on one side; I raised it—it fell on the other, and finally fell backwards. I saw Mr. Coxwell dimly in the ring; it became more misty and finally dark, and I sank unconsciously as in sleep. I then heard Mr. Coxwell say, 'What is the temperature? Take an observation. Now, try.' I shortly afterwards opened my eyes, saw the instruments and Mr. Coxwell very dimly, and soon saw clearly, and said to Mr. Coxwell, 'I have been insensible;' and he replied, 'You have, and I nearly.'"

It appears that Mr. Coxwell had a narrow escape of getting out of the ring, from which he returned as he could, having lost the use of his hands. But what he kept with singular fidelity was his presence of mind, for when his hands were powerless he seized the line with his teeth, and pulled the valve open until the balloon took a turn downwards. Mr. Coxwell and Mr. Glaisher concluded from what they dimly saw of the instruments in their half insensibility, that the ultimate height they reached was six miles and a half. Of several pigeons they took, one, on being turned loose, perched upon the balloon; one they brought down dead.

Where would they have gone if they *had* escaped from us? Was it not a narrow escape that they did not? They escaped from their escape by an escape of gas. Another minute, and it might have been too late!

HALF AN HOUR'S QUIET.—In one of the crowded alleys of our over-crowded London, there lived alone an old man of seventy-four, who feeling within himself that life was fast ebbing away, was very desirous of spending his few remaining days in serious thought and holy quiet. But the boys of the alley and its neighbourhood were careering about, while their shouts and noises sadly tried and disturbed the poor dying man. He managed to leave his bed and crawl to the door, that he might hail a policeman who was passing:—"Can you get me," he said, "half an hour's quiet? I am dying, and I want to pray." "Hush, boys!" said the policeman, turning to them, "death is come into the court." They crowded round like bees, with a mingled feeling of awe and wonder, and saw the aged, death-stricken figure in the doorway. "Yes, boys," the dying man gathered breath to say, "death is come into the court; but death to me is only stepping out of one room into another." A solemn stillness fell upon those young spirits, and an hour of unwonted silence was obtained, during which the old man breathed out his soul into the hands of his Father in heaven.—*Bickersteth's Sayings of the King.*

A GOOSE CLUB.

"Birds of a feather flock together."

THIS is just the time that Goose Clubs are in full flight in London. We wish to show that it is a very goosey affair altogether; with one exception,—the fox that hides behind the "bar."

The renter of some inferior public-house gives an order to a poulterer or farmer in the country to supply him with so many geese. These he "sells" to the members of the club at a lower rate than they can buy them at the market. Of course the purchasers think they have a great bargain in getting their geese much cheaper than at the market rate. The members of the club pay for the geese *at the public-house*, in weekly or monthly subscriptions. Poor geese! how much more do they pay for the drink, and for the time and strength which they waste, and for the want and misery of their families? It is just past ten by the clock in the picture, but these goose clubs seldom separate at so early an hour. Very often after drinking they quarrel, and then what are they good for the next morning? See, one of the men is going to smash the head of another with a pot; and may think himself fortunate if he is not marched off to the police-station, "brought up" the next morning before the magistrate, and fined twenty shillings or imprisoned fourteen days for the assault.

Many a child is kept without clothing and schooling to pay the subscription and *for the drink* at these goose clubs. It is not saying too much, to affirm that the Christmas goose of many a poor man in this way costs him as much as one, two, or three pounds, besides an untold amount of suffering in the family. Dear geese, these!—none but geese would buy them at such a price. Would it not be better for the husbands to give the money, usually spent at the public-house in *goose subscriptions* and drink, to their wives to keep? Many a wife would feel proud to keep the money against Christmas, and would preserve every farthing as a sacred trust. Or pay it into some penny bank or Post-Office savings-bank, whence it might be had at the right time, with a small addition to it in the shape of interest or bonus. Then let husband and wife go to the market together, and choose a goose for themselves; they would have enough money left to purchase a first-rate Christmas pudding, and hard cash jingling in their pockets after all. In this way Christmas would be a much happier festival than on the other plan. Put our recommendation to the vote in your family and try it.

Amusements.

ARCHERY.

ARCHERY has been practised from the earliest times. It is mentioned in the account of the wars recorded in the Bible, as also in the wars of the Greeks and the Romans.

The English armies gained many battles in the olden times by their superior strength in drawing the long bow. Their castles were considered impregnable places. Both castles and archers have given place to the modern art of warfare. The introduction of gunpowder has effected a complete revolution. We have now the wrought-iron gun which will carry a shot between four and five miles, and the Minié rifle, which will hit and kill a man at more than the distance of a mile.

Archery is now a mere amusement, practised for the most part by young ladies; its chief value consists in affording healthful exercise in the open air. Those who practise archery are advised to keep the heels a few inches apart—to curve the neck slightly, so as to bring the head a very little downward; the left arm must be held out quite straight to the wrist, which should be bent inward. The bow is to be held easy in the hand; and the arrow when drawn should be close to the ear. The right hand should begin to draw the string as the left draws the bow. When the arrow is three parts drawn, take your aim, and keep your eye steadily fixed upon it. The *point of the arrow should appear to the right of the mark you aim at;* the arrow is then drawn to the head, and let fly.

ANSWERS TO RIDDLES IN OUR LAST.

1.
A Woodlark.

2.
Cataline.

3.
C olumbus
O udenarde
W olfe
P inkie
E llenborough
R ussell
COWPER.

4.
Rainbow.

5.
Chair—hair—air.

6.
Napoleon.

7.
Also.

8.
Diss.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

Three places in England.

2.

Double Acrostic Enigma.

M. P. sends the following:—

1. The principal of the bishops.
2. The young Greek who was drowned in the Hellespont.
3. A distinguished Florentine sculptor.
4. The first abode of man.
5. The sculptor who executed the statue of George III. in Golden Square, London.
6. A large island on the western coast of Africa.
7. The king of the Visigoths who warred against the Romans, but became their ally against Attila.
8. The mistress of Leander.
9. A follower of Epicurus.
10. The extensive icefields among the Alps.
11. One of the United States which has a river of the same name.
12. A German river which forms a large maritime lake.
13. The king of France who subdued the Saxons, Gascons, and Britons.

The *initials* and *finals* of these will name a royal person whom Britain deeply mourns.

3.

When you go out a-shopping, sir,
You're sure to ask for me;
Behead me, then, and now you'll find
I come across the sea;
Behead again, and now I know
I'm cold as cold can be,
Brought from the Transatlantic lakes
To feed men's luxury!

4.

A word of nine letters pray find
That will name a bloody deed done
Then take away one, and you'll find;
That it leaves the result of fun.

5.

My first a perfect metal is;
My next doth metals use;
My whole a man of learning names,
Who did invoke the muse.

6.

My first in London doth abound;
My next in Greenland sure is found;
My whole is but a fancied thing,
Yet oft in youth great fear doth bring.

7.

My first is a pronoun;
A noun is my second;
My whole is a number,
And great may be reckon'd.

8.

What interjection, transposed, names a living author?

9.

No. 4 of our correspondent M. P. reminds us of the charade by the late Lord Macaulay—found among his papers after his death:—

COME, let's look to it; 'tis a very ugly word,
One that should make us shudder whenever it is heard;
It mayn't be always wicked, but it must be always bad,
And speaks of sin and suffering enough to make one sad.
Folk tell us 'tis a compound word, and that is very true;
And then they discompose it, which of course they're free to do;
But why of the twelve letters should they cut off the first three,
And leave the nine remaining ones as sad as they can be?
For though they seem to make it less, in fact they make it more,
And let the brute creation in, which was left out before.
Let's try if we can't mend it, 'tis possible we may,
If only we divide it in some new-fashion'd way.
Suppose, instead of three and nine, we make it four and eight,
You say 'twill make a difference at least not very great;
But only see the consequence—that's all that need be done
To change the mass of misery to unmitigated fun!
It clears off swords and pistols, proscriptions, bowie-knives,
And all the horrid weapons by which men lose their lives;
It calls up nature's voice, and oh, how joyfully is heard
The native sound of merriment compress'd into one word!
Yes, four and eight, may that, my friends, be yours and mine,
Though all the host of demons rejoice in three and nine!

10.

Fanchow, of Sussex, has sent a choir of musical composers:—

1. An entanglement, and two letters.
2. An appendage to a door.
3. The early part of a day, and a weight.
4. A receptacle for money, and a measure.
5. To summon, and a small house.
6. An Italian river, and two consonants.
7. Little, and a combustible.
8. An abbreviation of a man's Christian name, and his child.
9. A place of worship.
10. A monarch.
11. A prelate.
12. A town in Scotland.
13. A Scottish hero.
14. A work of fiction, and an interjection.
15. A vegetable, a letter, and something in a bakehouse.
16. Another word for a mountain, to depart, and gay.

CORRESPONDENCE.

All Letters to be addressed, by the 15th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

The answer to the menagerie riddle must be sent before the riddle can be inserted.

SHELLS, ACCRINGTON.—A list of land and fresh-water shells found in the neighbourhood of Accrington.—Ancylus fluviatilis—Anodonta cygnea—Azeca tridens—Bithinea tentaculata—Bulimus obscurus—Cyclas rivicola—Cyclas cornea—Cyclas caliculata—Cyclas pallida—Clausilia luminata—Clausilia nigricans—Carychium minimum—Driessena polymorpha—Helix aspersia—Helix arbustorum—Helix nemoralis—Helix nemoralis, *var.* hortensis—Helix nemoralis, *var.* hybrida—Helix rufescens—Helix hispida—Helix hispida, *var.* concinna—Helix sericea—Helix fulva—Helix fusca—Helix rotundata—Helix umbilicata—Limnaeus periger—Limnaeus auricularius—Limnaeus stagnalis—Limnaeus truncatulus—Limnaeus glaber—Limnaeus palustris—Limnaeus periger, *var.* lacustris—Limnaeus periger, *var.* ovulis—Pisidium nitidium—Pisidium amnicum—Physa fontanalis—Physa hypnorum—Physa acuta—Planorbis nautilens—Planorbis vortex—Planorbis spirorbis—Planorbis nitidus—Planorbis albus—Pupa umbilicata—Succinea gracilis—Succinea Pfeifferii—Unio pictorum—Valvata piscinalis—Vitrina pellucida—Zonites cellarius—Zonites allarius—Zonites nitidulus—Zonites excavatus—Zonites crystalinus—Zonites radiatulus—Zua lubrica.—Sent by ABRAHAM HEYS, Bond's Court, Accrington.

REMOVING PINS FROM LEPIDOPTERA.—Sir,—In answer to E. E. K. on the above subject, I may state that it sometimes is a very difficult operation to perform, and often you are obliged to leave the unsightly pin in the thorax of the insect. I take the insect and place it on a piece of cork, forcing the pin into the cork farther through the thorax of the insect, and decidedly if you move the pin you can easily withdraw it. If I find the pin will not move, I relax the insect and then try. If I cannot remove it then, I get a pair of cutting pliers and divide the pin close to the thorax, inserting the pin (on which I intend to "set" the insect) just behind the one cut off; this plan will do, but the pin which is cut off appears very plain. This is the plan which I have pursued for some time, but probably there are several which, perhaps, claim a great precedence.—G. B. C.

ON RELAXING MOTHS.—Sir,—In answer to a question in YOUNG ENGLAND, for the manner in which moths are relaxed, I have much pleasure in informing you I have adopted for some ten years as follows, which is the most general, I believe, with scientific entomologists:—Procure the tops of young laurel leaves, bruise them, and put into a suitable tin box with shifting bottom perforated with holes, and a piece of cork glued to the lid. Pin the insect upon the cork on lid, shutting it down close; and, as a matter of course, the time given for relaxing must depend upon the size of the insect under consideration: such, for instance, as S. Ligustri, two or three days; and less time in smaller species. I also adopt the damp-sand principle, as under:—Take a common tin box of any dimensions, placing sand, previously damped with clean water, upon the bottom about two inches deep; then make a furrow in the damp sand deep enough to admit the body of the insect, after which place the body in the furrow, taking care to press the sand up to the pinions of each wing—a little experience will soon make proficient. Any other information I am able to give I shall be happy, or to any of your friends.—S. P. SAVILLE, 5, Jesus Terrace, Cambridge.

Sir,—I have never found any difficulty in relaxing them by the steam of hot water. Get two basins large enough to cover the moth or butterfly without touching any part of it. Pour boiling water into one of the basins. Place a square wire net on the top of the basin, and the specimen upon the net; then cover with the other basin. This will generally make them pliable; if not, the boiling water must be renewed.—WM. DRANE, Guestwick.

Sir,—For the best mode of relaxing moths I send you a plan which I have adopted and always found to answer admirably. It is simply to pin the moth on to a cork fixed by means of a piece of wood to the bottom of a jam-pot, and invert it into a basin of boiling water, keeping it in its place with weights. I then, in three or four minutes, pour off the cool water, and add more boiling water, repeating this several times; the moth is then perfectly relaxed and ready for the setting-board, upon which I place it at once, and, in the case of a moth that has been preserved several years, I keep it braced out some weeks, but a much shorter time answers for such as have been killed only a few days or weeks.—W. P. B., Stoke Newington, N.

Sir,—Allow me to mention one way of relaxing the legs and wings of moths. Fix the insect on a piece of cork—say a bung, and let it float on the top of boiling water. The steam will then soon relax the dried-up parts. It is better to put a tight covering over the mug, or whatever the water is in, so as to let none of the steam escape.—H. M., Sydenham.

W. WEBB.—The spider was duly received, with many thanks.

W. H. B. will probably find an answer in the preface to the first volume of YOUNG ENGLAND, which will be issued with the next number.

POLISHING STONES.—Sir,—In reply to the inquiry of E. A. R. respecting the polishing of stones, I send the following, which I have tried with great success:—Having rubbed your specimen perfectly smooth on a common paving-stone, rub them over with the 1st, 2nd, and 3rd grits (the first is of a white colour like freestone; the second a bluish grey; the third called snake-stone spotted), which may be obtained at any sculptor's or marble yard for sixpence. Obtain a piece of thick flannel or drugget, and some putty powder (1*d.*); place the putty powder on the flannel; wet it, then rub the stone on the flannel, which must be nailed on a board. Would E. A. R. communicate with the writer?—A. J. RIDDLE, Queen's Parade, Bristol.—P.S. Water is indispensable in each process.

NATURE PRINTING.—Over common writing-paper, spread with a brush, 20 grs. bichromate of potash, 10 grs. sulphate of copper, 1 oz. distilled water; let the paper dry, then place your leaf on the prepared side; place a piece of plate-glass over it, and expose to the sun. In about half-an-hour a faint copy will be produced in yellow; this must be washed over with a solution of 20 grs. nitrate of silver, 1 oz. distilled water; fix by washing in pure water.—A. J. RIDDLE.

NATURE PRINTING.—Make a dabber of cotton wool, tied tightly in fine soft muslin, and with a little oil colour (sap green or burnt sienna), dab the fern or leaf gently all over on both sides, being careful to leave no part untouched; then place it on one side of an open sheet of writing paper, securing it in the position you wish by a stitch or two with very fine cotton; close the paper, and holding it firmly on the table with one hand, rub it all over repeatedly and evenly with a clean dabber. Open the paper and remove the fern, and you will find it indelibly printed.—DIANA.

FERNS.—A. B. wishes to know if any of your readers are fern collectors. If so, he would be glad to exchange dried specimens, either British or Exotic.—If the person who answers the above would give his or her address, A. B. would commence a private correspondence on the subject.

SILK-WORMS' EGGS.—Written, with some silk-worms' eggs, to a friend, who had been much interested in an infant school in Sussex, and wanted some silk-worms, as specimens, for her children to see.

Believe, what true pleasure it gives me to send
Some dozens of fresh eggs, to you, my kind friend.
I'd no need to sweet Covent-Garden to hie,
These eggs, for your dear infant scholars to buy:
My young entomologist, soon furnish'd me
With quite an abundance, as now you will see.
May each egg have its worm; each worm spin its silk,
Some, yellow as gold; some, white as pure milk.
No lady, though clever; nor gentleman wise,
These poor, little creatures should ever despise;
For their exquisite art,—though lowly their birth,—
Can baffle the ablest of men upon earth.
The pinna and spider *might try* to compete
With these tiny "artistes;" but seldom we meet
With their handy-works; although I have seen 'em,
(The pinna's that is), in the British Museum:
Where one pair of gloves, or *one glove* might be seen,
Whilst silk-worms spin hundreds and hundreds I ween,
And help to make dresses, quite fit for our Queen:
And curtains, and bonnets, and ribbons, and hosen,
And mantles, and shawls, which so gladly are chosen,
By beautiful ladies; and laces and shoes,
And thousands and thousands of things that we use:
But never *one* glove, or narrow or wider,
Delighted mine eyes, as the work of a spider!
Oh, may we for ever adore that Great Power
Who, on millions of weak worms bestow'd the strange dow'r
To spin, without man's aid, their delicate thread,
Which measures a *very great* length, it is said.
Farewell! and believe me again, as of yore,
Thy truly sincere and attached, HARRIET ——
Remember, what pleasure 'twould give me to meet,
And chat once more with thee, at 12, E—— Street.

EXCHANGE OF EGGS.—I would be glad to exchange nice well-blown specimens of the following eggs for either bird-skins, shells, or Lepidoptera:—Goshawk, Rough-legged Buzzard, Little Owl, Great Grey Shrike, Thrush Nightingale, Crested Tit, Black Redstart, Firecrest, Goldcrest, Purple Heron, Little Bittern, &c. Any persons wishing to make exchange for the above, are requested to write to J. Aspdin, Richmond, Yorkshire.

POSTAGE STAMPS.—George Swaysland, Jun., 4, Queen's Road, Brighton, has about 350 stamps for sale or exchange, some old and rare. Catalogues on receipt of a postage-stamp. F. Booty's new Illustrated Catalogue, with 200 fac-simile drawings, post free for 36 stamps.

FOREIGN POSTAGE STAMPS BOUGHT OR SOLD.—Gentlemen wishing to complete their collections, and sending a list of their wants to H. H., 2, Lahore Terrace, Shrubland Road, Dalston, shall have the price marked against such stamps as he can supply.

NOTE.—We have received *many* letters containing announcements of *sale* of postage-stamps, but as the above were volunteered as advertisements, it would be unjust to insert the others.

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YOUNG ENGLAND.

VOL. I.—No. 12.] DECEMBER 1, 1862. [PRICE ONE PENNY.

THE RIGHT HONOURABLE THE EARL OF DERBY.

THE House of Stanley, though not the most ancient, is yet not the least distinguished in English History. We might refer to the gallant and heroic part which it performed, both on the field of battle and on the scaffold, in favour of the House of Stuart. We might dwell on their position and conduct under James the Second; and we might trace their history down to the present illustrious representative of that House; but this would demand far more space than we can command; and lead us into portions of our National History with which YOUNG ENGLAND must be already familiar. We have, in these hasty sketches, to do with the present, and not with the past—not with the dead, but with the living.

EARL DERBY.

The distinguished Peer who now bears the name of EARL DERBY, was born in the year 1799, and after finishing his earlier education, entered as a student, Christchurch College, Oxford,—a college, which, according to Old Fuller, is remarkable for the production of poets—where he obtained the Latin Verse prize, in 1819. Some few years afterwards, he entered the House of Commons as Lord Stanley, and there found a theatre in which to exhibit all the energies of his mind, and all the power of his eloquence in debate. His talent commanded the attention of the House; and the House soon acceded to him that place and influence to which his rank and his endowments entitled him.

In June, 1836, there was a very animated discussion on what was called the Irish Tithe Bill, in which all the leading members on both sides of the House took part, and in which Lord Stanley led the Opposition, and

endeavoured, by an amendment whose object was to preserve the revenues of the Irish Episcopal Church undiminished, to defeat the then existing Ministry; who proposed to appropriate a certain portion of these revenues to educational and other purposes involved in the interests of the people. Lord Stanley was unsuccessful. The majority of the House was against him; but still there was not the shadow of a doubt as to his ability, or of the position which he was destined to fill in the councils and the destinies of his country.

Again, in 1850, the whole subject of the ministerial policy in regard to Greece having been heard before both Houses, and the Lords having condemned that policy by a decided majority, Lord Stanley, in a strain of terrible invective and of great eloquence, pronounced it a series of selfish blunders; and again placed the Ministry of the day in danger; only the Commons did not largely sympathize with his Lordship, and therefore were not prepared to vote in his favour.

Still his star was rising; and the day was not distant when he must take the lead in the councils of his Sovereign. In 1832, Lord John Russell, then at the head of Her Majesty's Government, brought in a Bill on the subject of our National Defences, some of the provisions of which were far from being acceptable either to the House or the country. The Prime Minister had staked his office on this Bill—he had resolved to stand or fall with it. A division was taken: and the Government were defeated. They resigned; but where is the man to whom the Sovereign may commit the serious business of forming a new administration? There was but one such man; and Lord Stanley—by this time EARL OF DERBY—was intrusted with this difficult task. But difficult as it was, he succeeded. It belongs to all true greatness to smile at difficulties, and to trample on impossibilities.

In meeting Parliament, charged with all the solemn duties and responsibilities of his new office as Premier, he avowed himself in favour of universal peace, without denying or underrating the necessity of our national defences,—in favour of allowing every country to adopt its form of government without any foreign interference; but with regard to his principles in commerce and finance, he maintained a cautious reserve; leaving it to time and circumstances to evolve what might be the course to be preferred. His Lordship was not long left in doubt as to the course he must pursue, or give up the reins of government. His Budget had to be brought forward, in which he could no longer maintain either his reserve or his silence. It was introduced into the House of Commons early in December, 1852, by Mr. Disraeli, who had devoted himself, heart and soul, to his financial scheme; but as it in part effected nothing, it pleased no one; and the result was, that LORD DERBY was compelled to resign the seals of office.

A few years afterwards—in 1858—on the downfall of the first Palmerston Cabinet, in connection with the future government of our East India possessions, LORD DERBY again came into power, at the head of a new administration. But his policy was too timid and too hesitating to inspire confidence. He lacked that dash of the bold, the startling, the daring, that all followers look for in a leader, from the school-boy on the form, up to the soldier in the field, or the minister in the Cabinet. His Lordship was too often content to take the measures which had originated with the Opposition, rather than create anythin new or original for himself. For the third time his power was of short duration; and again the government of the country passed into other hands.

LORD DERBY is great in debate, but he lacks administrative power. He is no common man to have in Opposition, but in office he disappoints the most sanguine expectations. In speech his invective is terrible, and his eloquence most effective; but in rule we discover not that energy of will, and that fixedness of purpose, which are essential to every man who would guide and govern his fellows, or undertake the management of a nation's affairs.

As to the private character of LORD DERBY, it is far above all suspicion. His is an unsullied virtue, and his manifold excellences give dignity to the name, better than any name, however noble, and any rank, however exalted. He is a man of high, yet generous bearing, whose sympathies with universal humanity none may doubt, and whose love of country none may dispute.

The estimation in which he is held even by his Sovereign, has been brought out in the fact, that he was named by the Queen herself as one of a select committee to carry out and give embodiment to the idea of a grand national memorial to His late Royal Highness the Prince Consort. This bespeaks him to be not only a man of character, but also a man of taste. His accomplishments are varied, and his virtues are manifold. It is on the brow of such a man that a coronet sits well. The coronet adds nothing to the dignity of his character; but the dignity of his character lends lustre to the coronet, and gives to it a glory which dims and darkens the most brilliant gems.

Nor this only:—in reading these short notices of our English nobles, there is one fact which YOUNG ENGLAND should never overlook or forget. It is this; that any man of education and character may rise to the peerage of England. We could name not a few who have thus forced their way up to that high elevation. The same path is open now. But whether it be given us to wear a coronet or not, we all may enjoy the patent of a higher and yet truer nobility. He is the truest man—and the noblest—who most resembles God. All earthly distinctions will fade and die away before the enduring character of Christian excellence. There is such a personality as a Christian scholar, a Christian gentleman, a Christian noble. Why should we not have a Christian YOUNG ENGLAND?

LONDON, DECEMBER 1ST, 1862.

THE PRINCE OF WALES has just entered on his manhood; but never in the history of our country did the Heir to the Throne come to his majority in such a perfect absence of all national festivity and joy. From profound reverence for a beloved father's memory, but too recently taken from him and from us, and from an equal regard to the feelings of his still sorrowing Mother, the Prince was willing to forego all the usual demonstrations of popular rejoicing, and spent even the day of his majority under another sky, and in the midst of another people. Still, many and earnest have been the prayers which have gone up from the hearths and the altars of our land to Heaven in his behalf. May his life long be spared; and whenever he comes to the throne may he be found pre-eminently endued with the spirit of wisdom and power; and, as the head and ruler of a mighty nation, live in the affections of a loyal and devoted people!

THE LORD MAYOR'S SHOW drew thousands on thousands from their homes and their business to gaze on this empty pageant. Surely, it is time, in this the nineteenth century of Christian enlightenment, that

this truly grotesque and ridiculous scene disappeared from the streets of this Metropolis? Or can it be that London is still in its childhood.

THE DISTRESS IN LANCASHIRE continues to take in a still more aggravated type. To want is now to be added disease; and death is reaping a harvest of life. Nor can we see where or when the calamity is to end. It is computed that to tide over the winter, with its severities, no less a sum than 60,000*l.* per week will be required: and judging from the stream of benevolence which is flowing from all parts of England to the seat of distress, this amount will perhaps be nearly realized. All parties, all classes, and all ages, must unite in this effort, and be prepared to make even some sacrifice on behalf of our suffering brethren. Why should not YOUNG ENGLAND take its part in such a noble work? If our young friends will send their contributions to us, we will see to their faithful appropriation. Let us have a YOUNG ENGLAND FUND!

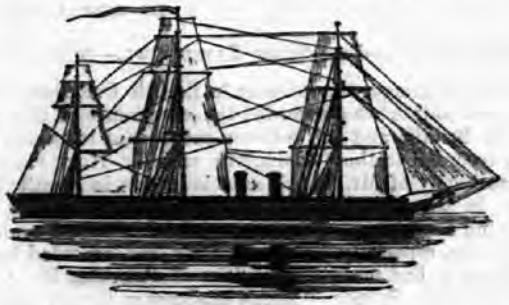
France has proposed to England and Russia the expediency of intervention, to the extent of demanding a cessation of hostilities for six months, with the removal of the blockade and the opening of the ports. But though both England and Russia have declined to entertain the proposition, and though it is not likely that France will act alone, yet the mere fact that the subject has engaged the thoughts of the three greatest European Powers cannot fail to impress the better portion of the press and people of America.

Greece has lost her sovereign, who took his flight from before the advancing genius of Liberty. The days of despotic power are numbered; and if princes will set up their imperial will to the will of humanity, that humanity will, sooner or later, assert its rights, wrest the sceptre from their hands, and trample their thrones in the dust. Blessed be God, there is no country under the sun where humanity can breathe more freely than in our own loved land!

INSTINCT IN THE BEE.—Huber tells us that he placed in front of a comb which the bees were constructing, a slip of glass; that they were immediately aware that they could not attach their comb to so slippery a surface, and therefore *bent it at a right angle,* and fixed it to a part of the woodwork beyond the glass; but that this having thrown the symmetry of the comb all wrong, the resources of their instinct were quite adequate to the emergency—that they made the cells on the *convex* of the bent part of the comb much *larger,* and those on the *concave* side much smaller than usual. This was not all. As the bottoms of the small and large cells, were, as usual, common to both, the cells were not regular prisms, but the small ones considerably wider at the bottom than at the top; and conversely in the larger ones. With this fact before us, we may well ask—"What is Instinct?"

BRUISES AND CUTS.—Boys are often getting bruised by blows or falls. One of the best remedies to remove the blackness, swelling, stiffness, and soreness, consequent on such blows or falls, is the TINCTURE OF ARNICA, in the form of a lotion, made by putting twenty drops of the tincture in a tea-cup half-full of water, and then bathing the parts, or applying rags dipped in the lotion. STRAINS AND SPRAINS may be treated in the same manner; or put twenty drops of the tincture to an ounce of olive oil, and rub the swollen part gently for about ten minutes at a time. What Arnica is to bruises and sprains, CALENDULA is to wounds and cuts. It is in fact deemed a specific for such injuries. A lotion is made by one part of the tincture to ten of cold water, and then applied to the wound three or four times a day. This tincture can be had of any Homœopathic Chemist.

SHIPS.—No. VIII.—THE IRONSIDES.



THE WARRIOR.

THIS is the name given to the new sort of war steam-ship; because they are not only built of iron, but their *sides are plated* with thick pieces of iron to defend them from the shot of the enemy. A very formidable class of vessels they are. We give "likenesses" of the two first. The smaller one is the French ship, *La Gloire,* which was launched first; the other is the English vessel, *The Warrior.* The *Warrior's* speed is greater, by two knots an hour, than that of *La Gloire,* her guns are also heavier. Neither vessel could do the other much harm if firing at long range. But if the Warrior were to close upon the French vessel, her heavier metal would instantly declare her superiority. She is made to run faster, on purpose that the English sailors may have the opportunity of "boarding" the other, that is, jumping on board of her with cutlasses and pistols, and thereby to capture. *Punch* has an excellent bit of wisdom on the new contest between France and England in ship-building, by which both nations are put to the enormous expense of newly constructing their navies. War, and preparation for war, are at this moment, beggaring the world.

"BEGGAR MY NEIGHBOUR."

An International Duet.

LOUIS.

Come, Mr. Bull, your purse is full,
Let's have a friendly game:
See! here I play you my *La Gloire,*
Now what's the card you name?

JOHN.

I'll play my *Warrior*—a good card,
And one I'll freely back;
Then follow suit with my *Black Prince,*
The king of all the pack.

And so for every card you play,
You'll find that I'll play two;
My purse is heavy, as you say—
Who'll tire first, I or you?

Your little game, my foreign friend,
Is one that two can play;
And he will be most sure to win
Who can the longest pay.

But is it wise to waste our time—
(Nor is that loss the chief)—
In games that can do neither good,
And may bring both to grief?

Throw up your cards, I'll throw up mine,
And cease this fruitless labour:
There's better work for each to do,
Than beggaring his neighbour.

LA GLOIRE.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

CHAP. XXIV.—THE SCOPS EARED OWL.—*Strix Scops.*

COLONEL Montagu, our pioneer in British Ornithology, was the first author who recorded the occurrence of this little owl in Britain, and half-a-dozen subsequent instances have been recorded in the "Zoologist"; and Mr. Hogg states, on the authority of Mr. Winch, that it breeds in Castle Eden Dene, in the county of Durham; but this I cannot help thinking a mistake. It is common in the warmer countries of Europe, especially Italy, where my late lamented friend, Mr. Spence, had many opportuities of observing it. "This owl," says Mr. Spence, "which in summer is very common in Italy, is remarkable for the constancy and regularity with which it utters its peculiar note or cry. It does not merely 'to the moon complain' occasionally, but keeps repeating its plaintive and monotonous cry of 'Kew, kew,'—whence it derives its Florentine name of 'Chiu,' pronounced almost exactly like the English letter Q,—at regular intervals of about two seconds, the livelong night; and until one is used to it, nothing can well be more wearisome. Towards the end of April, last year (1830), one of these owls established itself in the *Jardin Anglais*, behind the house in which we resided at Florence: and, until our departure from Switzerland in the beginning of June, I recollect but one or two instances in which it was not constantly to be heard, as if in spite of the nightingales which abounded there, from nightfall to midnight, and probably much later, whenever I chanced to be in the back part of the house, or took our friends to listen to it, and always with precisely the same unwearied cry: and the intervals between each as regular as the ticking of a pendulum. This, according to Professor Savi, is the only species of owl that migrates, passing the winter in Africa and Southern Asia, and the summer in the south of Europe. It feeds wholly upon beetles, grasshoppers, and other insects."

This interesting passage contains all that is known of the Scops Eared Owl, except that it nests in the fissures of rocks, laying four or five round white eggs.

CHAP. XXV.—THE MOTTLED OWL.—*Strix Asio.*

A SINGLE specimen of this North-American Owl is said by Mr. Yarrell to have been shot in Hawksworth Cever, near Kirkstall Abbey, about four miles from Leeds, in 1852, by Joseph Owen. The specimen does not seem to have been examined by any naturalist, and I fancy there is a probability of a mistake; moreover, Mr. Yarrell combines the names of two species, *Strix Asio*, according to Wilson, being the Red Owl, while he calls the Mottled Owl *Strix nævia*.

The Mottled Owl of America is a most extraordinary looking bird—more like a caricature of a bird than one that really lives and breathes. Mr. Wilson says, "On contemplating the grave and antiquated figure of this night wanderer—so destitute of everything like gracefulness of shape—I can scarcely refrain from smiling at the conceit of the ludicrous appearance this bird must have made, had nature bestowed on it the power of song, and given it the power of warbling out sprightly airs while clothed in such solemn exterior." Mr. Wilson seems to have had a great liking for this very odd bird, and thus describes one which he kept in confinement:—

"The bird which I am about to describe was presented to me by a friend. I kept it in the room beside me for some time: its eyelids were generally kept either half-shut, or slowly and alternately opening and shutting, as if suffering from the glare of day; but no sooner was the sun set, than its whole appearance became lively and animated; its full and globular eyes shone like those of a cat; and it often lowered its head, in the manner of a cock when preparing to fight, moving it from side to side, and also vertically, as if reconnoitring you with great sharpness. If flying through the room, it shifted from place to place with the silence of a spirit, if I may be allowed the expression, the plumage of its wings being so extremely soft and fine as to occasion little or no friction with the air; a wise provision of nature, bestowed on the whole genus to enable them, without giving alarm, to seize their prey in the night. For an hour or two in the evening, and again at break of day, it flew about with great activity. When angry it snapped its beak repeatedly with violence, and so loud as to be heard in the adjoining room, swelling out its eyes to their full dimensions, and lowering its head as before described. It swallowed its food hastily in large mouthfuls, and never was observed to drink."

Of the nest, eggs, and young of this owl nothing whatever is known.

CHAP. XXVI.—THE HAWK OWL.—*Strix Ulula.*

THE only instance of this owl having been obtained on British ground is recorded in the "Zoologist" for 1851, page 3029, by Mr. Higgins, of Bristol. It was shot on the 25th of August, 1847, about two o'clock in the afternoon, the sun shining bright at the time, and the bird was hawking for prey on Backwell Hill, near the Yatton station on the Bristol and Exeter Railway.

The Hawk Owl inhabits the Arctic regions of both Continents; and notwithstanding its occurrence at Yatton, and that of a second specimen which is said to have flown on board a collier at sea, off Cornwall, it has no claim whatever to be considered a British bird.

"This owl," says Mr. Wilson, in his "American Ornithology," "which is an inhabitant of both Continents, is a kind of equivocal species, or rather a connecting link between the hawk and owl tribes, resembling the latter in the feet and in the radiating feathers round the eye and beak; but approaching nearer to the former in the smallness of its head, narrowness of its face, and in the length of its tail. In fact, it seems just such a figure as one expects to see generated between a hawk and an owl of the same size, were it possible for them to produce, and yet it is as distinct, independent, and original a species as any other. It has also another trait of the hawk tribe, in flying and preying by day, contrary to the general habit of owls. It is characterized as a bold and active species, following the fowler and carrying off his game as soon as it is shot. It is said to prey on partridges and other birds, and is very common at Hudson's Bay, where it is called by the Indians Caparacock."

It is worthy of remark that in all owls that fly by night the exterior edges and sides of the wing quills are slightly recurved, and end in fine hairs or points, by means of which the bird is enabled to pass through the air with the greatest silence, a provision necessary for enabling it the better to surprise its prey. In the Hawk Owl, which flies by day, and to which this beautiful and wonderful instance of design would be of no kind of use, it is dispensed with, and the structure of these feathers are like those of other day-flying birds.

Sir John Richardson, in his great work on the Natural History of Arctic North America, contributes the following particulars to the history of the Hawk Owl:—"It is a common species throughout the fur countries, from Hudson's Bay to the Pacific, and is more frequently killed than any other by the hunters, which may be partly attributed to its boldness and its habit of flying about by day. In the summer season it feeds principally on mice and insects; but in the snow-clad regions, which it frequents in the winter, neither of them can be procured, and it then preys mostly on ptarmigan. It is a constant attendant on the flocks of ptarmigan in their spring migrations to the northward. It builds its nest on a tree, of sticks, grass, and feathers, and lays two white eggs." It has a curious habit, also recorded by Sir John Richardson, of hovering round the fires made by the Indians at night.

The late lamented Mr. Wolley has given, in the "Zoologist" for 1854, a still more interesting description of the

Hawk Owl, as observed by himself in Lapland. "The Hawk Owl," says Mr Wolley, "is not uncommon here. It flies much in the daytime, and with its long tail, short wings, and quick flight, has a very hawk-like appearance in the air, when its large square head is not seen. Its cry near its nest is also similar to a hawk's; and it often sits on the bare top of a dead fir-tree to watch intruders, and then it seems to have no idea it can be in danger. It carries itself much after the fashion of the more regular owls, but whilst all the feathers at the back give a great breadth to its full face, there is quite a table at the top of its head. It casts its bright yellow eye downwards with the true air of half-puzzled wisdom, or turns its head round for a leisurely survey in another direction; to glance backwards is out of the question, and to look at anyone with a single eye much beneath its dignity. I have seen it from my window fly down from its stand, and take the mouse it caught back to the tree before it began to eat it; but it shifted its place several times before it found it convenient to finish its meal. I do not know whether it is in the habit of hunting on the wing, but this year mice are so abundant that such exertion would be superfluous. When disabled from flight, it at once squares itself for defence, putting on its most formidable countenance, guarding its back, and presenting its front to its enemy; silently and calmly, it maintains its ground, or springs from a short distance on its foe.

THE LITTLE OWL.

"One day I heard a low noise in the woods which surprised me. I thought it must be the whine of a dog that was very eager after some animal it could not get at: I even guessed it might be a wolf. After a careful stalk, I came upon a family of Hawk Owls, one of which dropped a mouse as I fired. It was in the daytime; they were very little alarmed, and I could have shot them all. I am told that they breed in 'tyllyrs,' by which name are known in Lapland those nest-boxes set up by the Lapps and other inhabitants of the far North for the accommodation of the Golden Eye, a species of duck, which regularly avails itself of these artificial nesting-places, and is as regularly robbed of its eggs by the proprietor of the tyllyr. Linnæus relates that he saw two young owls of this species hung up before one of these tyllyrs as a wholesome warning to other Hawk Owls not to appropriate this nesting accommodation to their own purposes."

CHAP. XXVII.—TENGMALM'S OWL.—*Strix Tengmalmi.*

ANOTHER occasional straggler in England, but not a native; it is abundant in North America, and not uncommon in the north of Europe, where it nests in the hollows of trees and in the "tyllyrs" provided for the Golden Eye. "When once established," says Mr. Wolley, "it cannot be easily made to leave its quarters, and it is said it can keep possession of one of these egg-boxes against a much larger bird."—*See* "Zoologist" for 1848.

Sir John Richardson has the following observations on this diminutive owl, as observed by him in North America: "It is strictly nocturnal in its habits, and is so much dazzled by the light of the sun, when it accidentally wanders abroad in the day, as to become stupid; and it may then be easily caught by the hand. Its cry in the night is a single, melancholy note, repeated at intervals of a minute or two; and it is one of the superstitious practices of the Indians to whistle when they hear it. If the bird is silent when thus challenged, the speedy death of the inquirer is augured; hence its Indian appellation of "Death-bird."

CHAP. XXVIII.—THE LITTLE OWL.—*Strix passerina.*

A SMALL and not uncommon European owl, the history of which is cleverly given by Beckstein, in his amusing work entitled "Cage Birds." Beckstein informs us that "it may be kept in good health in confinement if fed on dried mutton; the skin, fat, and bones must be removed, and the meat left to soak in water for two days before it is eaten. Three-quarters of an ounce a-day of this meat dried will be sufficient, particularly if now and then some mice or small birds be given it, which it swallows, feathers and all: it can devour as many as five mice at a meal. It begins to wake up about two in the afternoon, and then becomes very lively and wants food. If great care be not taken sometimes to give it mice and birds, the fur and feathers of which cleanse the stomach, it will soon die of decline. It is easily captured, when the place of its retreat during the day is discovered, by placing a net in the form of a bag over the mouth of the hole, for the bird will by this means entrap itself upon endeavouring to come out for the evening."

Mr. Gurney, of Easton, had a pair of these Little Owls bred in confinement, as related in the "Zoologist," for 1851, at p. 3207. The female laid four eggs, two of which were accidentally broken, and the other two hatched.

Mr. Wolley gives, in the "Zoologist," the following account of a bird of the species: "It may be worth recording that the Little Owl which was stated to have been captured near Derby in an early number of the "Zoologist," has lived in confinement ever since, until it was killed by a cat a few days ago. Shortly after I obtained it, it refused its food, and I was afraid it would die, but it was suggested that it wanted water, and so it proved, for it drank eagerly what was given it, and with a constant supply of water it has ever since remained in good health. It has been fed with raw meats, and only occasionally a mouse or bird has been given it. Though placed in a cage, in a passage where people are constantly passing, it never got over its natural wildness, but it knew the persons who were in the habit of feeding it, and made a plaintive noise when they were present. Now and then, at night, it raised its sharp cries. Its winking, curtseying, and snapping, made it appear singularly grotesque. The edges of the eyelids being averted, gave a remarkable appearance to its large white eyes."

There are a great many records in the "Zoologist," of the Little Owl having been shot in Britain, but these visitors are not properly to be considered British specimens.

CHAP. XXIX.—THE SPARROW OWL.—*Strix acadica.*

WE are indebted to Sir William Milner for a record of the only specimen of this pretty little owl that has yet been either killed or noticed in Britain. The communication, which appeared in the "Zoologist" so late as July, 1860, is of that importance and interesting nature that I consider it an imperative duty to extract it word for word: "I do not recollect," says Sir William, "ever mentioning to you for insertion in the 'Zoologist' an account of my having received from a young clergyman, a son of Mr. Bury, who has the

(*Continued on page* 184.)

1066 to 1087.
THIS is William the Conqueror, known full well
By his Doomsday-book and curfew-bell.

1087 to 1100.
This is William Rufus, with no right to reign,
Who was by an arrow when hunting slain:
Son of William the Conqueror, known full well, &c.

1100 to 1135.
This is Henry the First, for his valour famed,
And because he was learned, Beauclerc surnamed;
Brother of William, with no right to reign, &c.

1135 to 1154.
This is King Stephen, who seized the throne
Instead of Matilda and Henry her son;
Nephew of Henry, for his valour famed, &c.

1154 to 1189.
This is Henry Plantagenet, famed for defiance
Of Becket, and forming with Ireland alliance;
Cousin of Stephen, who seized the throne, &c.

1189 to 1199.
This is Richard the First, with the heart of a lion,
Who fought in the East to recover Mount Sion;
Son of Henry Plantagenet, famed for defiance, &c.

1199 to 1216.
This is John Lackland, the slave of the Pope;
Yet he signed Magna Charta, our liberty's scope;
Brother of Richard, with the heart of a lion, &c.

1216 to 1272.
This is Henry the Third, whose reign was long,
But most of his measures were feeble and wrong;
Son of John Lackland, slave of the Pope, &c.

1272 to 1307.
This is Edward the First, victorious afar,
And mighty in Scotland for conquest and war;
Son of Henry the Third, &c.

1307 to 1327.
This is Edward of Caernarvon, born Prince of Wales;
Of whose fate there are so many sorrowful tales;
Son of Edward the First, victorious afar, &c.

1327 to 1377.
This is Edward the Third, who victories won
In France, with the aid of the Black Prince, his son;
Son of Edward of Caernarvon, born Prince of Wales, &c.

1377 to 1399.
This is Richard the Second, and him to depose
His cousin the proud Duke of Lancaster rose;
Grandson of Edward, who victories won, &c.

1399 to 1413.
This is Henry the Fourth, lately Duke of Lancaster,
Who, instead of a subject, was raised to be master;
Cousin of Richard, and him to depose, &c.

1413 to 1422.
This is Henry the Fifth, subjugator of France,
Who died in the midst of victorious advance;
Son of Henry the Fourth, lately Duke of Lancaster, &c.

1422 to 1461.
This is Henry the Sixth, deprived of his throne,
After losing much more than his father had won;
Son of Henry the Fifth, subjugator of France, &c.

1461 to 1483.
This is Edward the Fourth, more famous for beauty
Than minding his kingdom or thinking of duty;
Cousin of Henry, deprived of his throne, &c.

1483.
This is poor little Edward, at midnight's dark hour
For treacherous purposes slain in the Tower;
Son of Edward the Fourth, more famous for beauty, &c.

KINGS AND QUEENS OF ENGLAND.

JAMES I.	EDWARD III.	HENRY VIII.	ELIZABETH.	HENRY VI.	CHARLES I	GEORGE III.	
WILLIAM II.	JAMES II.	GEORGE IV.	ANN.	VICTORIA.	MARY.	RICHARD III.	HENRY VII.	HENRY I.
STEPHEN.	WILLIAM IV.					GEORGE II.	HENRY VI.	HENRY V.
WILLIAM III.	WILLIAM I.	EDWARD II.	EDWARD IV.	HENRY II.	GEORGE I.	CHARLES II.	
JOHN.	EDWARD VI.	RICHARD I.	EDWARD V.	EDWARD I.	RICHARD II.	HENRY III.	

1483 to 1485.
This is Richard the Third, who his nephew destroy'd;
The crown, gain'd by murder, but a short time enjoy'd,
Uncle of poor Edward, who, at midnight's dark hour, &c.

1485 to 1509.
This is Henry the Seventh, whose marriage united
York and Lancaster's claims, and their bickerings righted; [&c.
After vanquishing Richard, who his nephew destroy'd,

1509 to 1547.
This is Henry the Eighth, a bold innovator;
When it suited his will, a new queen creator;
Son of Henry the Seventh, whose marriage united, &c.

1547 to 1553.
This is Edward, by whom reformation began;
But he died in the midst of his excellent plan;
Son of Henry the Eighth, a bold innovator, &c.

1553 to 1558.
This is the Queen Mary of most bigoted fame
For condemning the martyrs to torture and flame
Sister of Edward, who reformation began, &c.

1558 to 1603.
This is great Queen Elizabeth, born to command,
Who from Popery's thraldom delivered the land;
The sister of Mary, of most bigoted fame, &c.

1603 to 1625.
This is Scottish King James, who, all must remember
Was nearly blown up on the fifth of November;
Heir to Elizabeth, born to command, &c.

1625 to 1649.
This is poor Charles the First, of whom it is said
He first lost his kingdom, and then lost his head;
Son of Scottish King James, who, all must remember, &c.

1653 to 1658.
[Oliver Cromwell, of whom Macaulay says, "He was to the last honoured by all his soldiers, obeyed by the whole population of the British Islands, and dreaded by all foreign powers, and was laid among the ancient sovereigns of England with funeral pomp such as London had never before seen."]

1660 to 1685.
This is Charles the Second, preserved in an oak,
Who was all his life long fond of folly and joke;
Son of poor Charles the First, of whom it is said, &c.

1685 to 1689.
This is James the Second, obliged to abandon
His throne because Popery's ground he would stand on;
The brother of Charles preserved in the oak, &c.

1689 to 1702.
Here is William of Orange, with Mary united,
Who settled the State, and the people delighted;
Mary was daughter of James, obliged to abandon, &c.

1702 to 1714.
This is Queen Anne, for whom Marlborough fought,
And fame, wealth, and honour, a recompense got;
Sister of Mary to William united, &c.

1714 to 1727.
This is King George, who from Hanover came,
Supporting his right on a Protestant claim;
Cousin of Anne, for whom Marlborough fought, &c.

1727 to 1760.
This is George the Second, with the Whigs and the Tories,
Of whom history tells us such tiresome stories;
Son of King George, who from Hanover came, &c.

1760 to 1820.
George the Third, who reigned longer and better than any;
His failings were few, and his virtues were many;
Grandson of George, with the Whigs and the Tories, &c.

1820 to 1830.
This is George the Fourth, the pride of the nation,
Whose reign was ennobled by Emancipation; [&c.
Son of George who reigned longer and better than any,

1830 to 1837.
This is William the Fourth, the patriot king,
Of whom all the lovers of liberty sing;
Brother of George, the pride of the nation, &c.

1837.
Now, ruling by love, comes Victoria our Queen;
The best that the nation has ever yet seen;
Long,—long,—long, very long, may she reign!
Niece of William the Fourth, the patriot king, &c.

(THE SPARROW OWL, *continued from page* 181.)

church at Osbarton (my brother-in-law, Mr. Foljambe's place), who knowing I had a very fine collection of British birds, sent me a small owl, in a very curious case, which was shot in the East Riding of Yorkshire, not far from Beverley, by a keeper, a brother of Sir Thomas Whichcot's keeper, at Asworley, Lincolnshire. He sent the bird to his brother's, who gave it to Mr. Bury, from whom I received it. I found out afterwards, on looking at Audubon's Birds of America, that it was the Sparrow Owl (*Strix acadica*) which is rather common in some parts of America, but is totally unknown in Great Britain."—"Zoologist" for July, 1860, p. 7104.

Wilson, the American ornithologist, has some pleasing observations respecting this diminutive owl, which I shall transcribe: "This," says Mr. Wilson, "is one of the least of the whole genus, but, like many other little folks, makes up in neatness of general form and appearance for deficiency of size, and is perhaps the most shapely of all our owls. Nor are the colours and markings of its plumage inferior in simplicity and effect to most others. It also possesses an eye fully equal in spirit and brilliancy to the best of them. This species is a general and constant inhabitant of the middle and northern states; but is found most numerous in the neighbourhood of the sea-shore, and among woods and swamps of pine-trees. It rarely rambles much during the day; but if disturbed, flies a short way, and again takes shelter from the light; at the approach of twilight it is all life and activity, being a noted and dexterous mouse-catcher. It is found as far north as Nova Scotia, and even Hudson's Bay; builds its nest generally in pines, half way up the tree, and lays two eggs which, like those of the rest of the genus, are white. The melancholy and gloomy umbrage of these solitary evergreens forms its favourite haunt, where it sits dozing and slumbering all day, lulled by the roar of the neighbouring ocean."

Some authors think that the two last-named owls, that is, the Little Owl of Europe and the Passerine Owl of America, constitute but one species: this is a question in which the readers of YOUNG ENGLAND will take no interest; and, as such excellent ornithologists as Sir William Milner consider them distinct, I feel sure that they will abide by his judgment rather than discuss so technical a matter.

Here end my Chapters on Owls; those which are really British I have described from my own knowledge, but for the stragglers I have been obliged to copy the descriptions of others who have made them, in their native countries, an especial study.

END OF THE HISTORY OF THE BRITISH BIRDS OF PREY.

A SCHOOL OF THE OLDEN TIME.

CONTRAST the present facilities for education with what used to be, and you will see how greatly the balance is in favour of the present times. First came the Primer, so called from the Latin *Primarius*, a small prayer-book in which children were taught to read. In 1545, Henry VIII. ordered to be printed an English form of Public Prayer, entitled the *Primer*, said to be "set forth by the Kinge's Majestie and his Clergie, to be taught, lerned, and red." This was the origin of the Primer, which name was applied long after to a school-book for children, and lingers amongst us even now.

Next came the *Horn-Book*, which consisted of a sheet of paper, printed on one side, having the letters of the alphabet—with a cross before them, read criss-cross (a contraction for Christ's cross)—A, B, C, &c. This sheet of paper was placed in a wooden frame and covered with a thin sheet of horn, so that the letters could be seen through it; and being horn instead of glass, it did not break if let fall to the ground. In "Specimens of the West Country Dialect" we find the hornbook thus alluded to:—

"Commether, *Billy Chubb*, and breng tha hornen book. Gee ma the vester in tha windor, you *Pal Came!* What! be a sleepid!—I'll wake ye. Now, Billy, there's a good bway!

Ston still there, and mind what I da zâ to ye, and whaur I da point. Now, cris-cross girt A, little a—b—c—d. That's right, Billy; you'll zoon lorn the cris-cross lain—you'll zoon auvergit *Bobby Jiffry*—you'll zoon be a scholard. A's a pirty chubby bway—Lord lov'en!"

Shenstone, who was taught to read in a school such as we have pictured above, near Halesowen, in Shropshire, thus speaks of the hornbook:—

"Lo! now with state she utters her command;
Eftsoons the urchins to their tasks repair;
Their books of stature small they take in hand,
Which with pellucid horn secured are,
To save from finger wet the letters fair."

Shakespeare alludes to the hornbook when, in Richard III., he says—

"He harkens after prophecies and dreams,
And from the *cross-row* plucks the letter G."

And when he describes, in "Love's Labour Lost," Holofernes, the schoolmaster, he tells us,—

"He teaches boys the hornbook."

Ben Jonson also says,—

"The letters may be read *through the horn*
That make the story perfect."

And *Cowper*, in later days, gives a description of it:—

"Neatly secured from being soil'd or torn
Beneath a pane of thin transparent horn,
A book (to please us at a tender age—
'Tis called a book, though but a single page)."

It is said of Lord Erskine, as an illustration of his readiness at reply, when asked by a judge if a single sheet could be called a book, instantly replied, "The common hornbook, my lord."

This hornbook was imitated in gingerbread, to which *Prior* alludes a century and a half ago—

"To master John, the English maid
A hornbook gives of gingerbread;
And that the child may learn the better,
As he can name, he eats the letter."

No doubt a very great inducement to learn the alphabet.

After the hornbook came the Battle-door, so called from a flat piece of wood like a *door*, with a handle to it for *striking* or giving *battle* to a ball or shuttlecock, on the back of which was pasted the alphabet, supposing that the passage from play to learning would thereby become the easier.

The battle-door was succeeded by what we recently heard described as "Radding ma Daisy." An old woman in the Gower, who had been employed to teach the village folk, said that all the people about there had got their "larning" from one book, and that book was "Radding ma Daisy." It proved in the sequel that she meant "Reading made Easy." Then followed the various reading and spelling books, with the story of "Brown, Jones, and Robinson" (where did that come from ?), which have given place to the more enlightened improvements in the class and school books of the present day.

If any of the big boys and girls wish to teach their younger brothers and sisters the use of the alphabet, suppose they try a plan that was adopted by Locke, the author of the "Essay on the Human Understanding," of whom it is said that, "By putting the vowels and consonants on the sides of four dice, he has made this a play for his children, whereby his eldest boy in coats has played himself into spelling."

Get four pieces of chalk, or four *clay* marbles, *i. e.* imitations of *marbles* in clay; rub the round *clays* into six-sided squares or cubes. On one of these cubes write the vowels a, e, i, o, u; put upon the sixth side w and y, which are sometimes used as vowels; and upon the other three the remainder of the letters of the alphabet from a to z. Then throw them on the table, and let the child put *the letters uppermost* into some word. Anything to learn; but learn they must, some way or other. See "Things not Generally Known," a book by Mr. Timbs, from which some of the aboveparticulars are taken.

CALENDAR FOR DECEMBER.

IMAGOS.

P. Cassinea	H. Dofoliana
H. Pennnaria	O. Dilutata.

LARVÆ.

G. Affinis, on moss or old wood.
D. Sulphurella, decayed wood.

IMAGOS FOR MARCH (*Omitted in their Proper Place*).

E. Lanestris	N. Hispidaria
C. Flavicornis	A. Prodromaria
C. Ridens	A. Badiata
T. Piniperda	T. Laricria
T. Gothica	P. Crenana
T. Gracilis	H. Pauperana
T. Miniosa	A. Pygmeana
T. Munda	T. Hyemana
T. Stabilis	C. Fagella
V. Oleagina	S. Avellanella
S. Illunaria	N. Aurella, to Aug.
P. Pilosaria	E. Consortella.

The mild nights of this month: a visit should be made to the sallow blossoms, and when carefully searched with a lantern, or shaken into an umbrella, the moths may be easily boxed. Good things are sometimes taken at the sallows, such as T. Leucographa, D. Rubigines, &c.

LARVÆ TO BE LOOKED FOR IN MARCH.

H. Barbalis, on birch	C. Falsellus, on moss
C. Alsines, on chickweed	L. Impura, on sedge
T. Variata, on fir	M. Furva on aira-canescens
L. Turea, on grasses	X. Hepatica, X. Rurea, T. Orbona, and T. Interjecta, on various plants.
E. Plumbaria, on heath	
B. Perla & Glandifera, on lichens	

When visiting the sallows, a sharp look-out should be kept for larvæ: S. Olivalis seeks concealment in a white web on the under-side of ground ivy.

Amusements.

ANSWERS TO RIDDLES IN OUR LAST.

1.

Highgate, Bury, and Barking.

2.

Albert the Good.

A rchbisho P
L eande R
B andinell I
E de N
R oubillia C
T eneriff E
T heodori C
H er O
E picurea N
G lacier S
O hi O
O de R
D agober T.

Prince Consort.

3.

P—R—Ice.

4.

S—laughter.

5.

Gold—smith.

6.

Bug—bear.

7.

Thou—sand.

8.

Alas!—Sala.

9.

1. Weber (Web-e-r).
2. Handel (handle).
3. Mornington (morning-ton).
4. Purcell (purse-ell).
5. Callcott (call, cot).
6. Arnold (Arno-l-d.)
7. Small-wood.
8. Jackson.
9. Chapple (chapel).
10. King.
11. Bishop.
12. Stirling.
13. Wallace (Vincent Wallace).
14. Novello (novel-lo!)
15. Beethoven (beet-h-oven.)
16. Montgomery (mont-go-merry).

CONCLUDING RIDDLES, WITH THE ANSWERS.

1.

A RIVER of South Carolina;
A tax upon houses and land;
A city of Spain, in Valencia;
A fellow who can't understand;
The name of a borough in Wiltshire;
A band fastened tight round the head;
A town of New York, in Oneida;
A weapon that fills one with dread;
An excellent seaport of China;
A term which defined means complete;
Also one of the Lipari Islands;
And fish that are unfit to eat;
The *heads*, if read downwards correctly,
Will show that which I should pronounce
As opposed to the term circumspectly,
And persons of sense would renounce.

Solution:— Santee — Landtax— Orihuela— Thickhead— Hindon—Fillet— Utica—Lance— Ningpo— Entire—Salini —Sharks—(Slothfulness).

2.

AN animal familiar to mankind;
A piece got up to entertain the mind;
A key which opens far more locks than one;
To build; and that which signifies rough fun
The *heads* of these distinctly bring to light
A poet whose productions would excite
The most fastidious and induce them to
Peruse such works as many misconstrue,
Explain that which they did not know before
And probably cause them to read more:
But as there may be some who cannot see
The force of this Enigma, let me be
Their go-between, and by a timely word
Expound that which may seem to them absurd;

To do which I must take away the tail
Or otherwise my best attempts would fail;
This done, in me Affection's blossoms grow,
And Hope is seen to bud, and Love to blow;
And Piety, that plant of heavenly care,
Puts forth her tendrils, closely clinging where
There is a charm of which no tongue can tell
Nor Fancy picture, paint she e'er so well;
Though some men have deserted this parterre
To find they've left their choicest treasure there.

Solution:—Horse—Opera—Master-key—Extruct—Romping—(Homer).

3.

A FLOWER that offers you gratis admission;
As much as the hand can conveniently hold;
To lie at the table—an ancient position;
Five-sevenths of that which infers to unfold;
To frighten a person to death very nearly;
A passion (inverted) you'd do well to shun;
A term which defined means consented to really;
An insect familiar to every one;
An epistle from those near or very far distant;
A widow deprived of her feet and her face;
The *initials* read downwards, are most inconsistent;
The *finals* read upwards, devoid of disgrace.

Solution:—Camfrey—Handful — Accumb — Narra(te)—Yeast—Eri—Agreed — Bee — Letter—(R)elic(t)—(Changeable—Creditably).

4.

COMPLETE I am a friend to youth,
In me they always find
A pleasure—did they speak the truth—
To which to give their mind;
But when beheaded, I produce
A first-rate foreign wine,
That wealthy persons introduce
For drinking when they dine.
Replace my head and take away
The letter last but one,
A blot or stain I then display
Which honest men would shun.
Transposed, I'm welcomed with delight
And hasten with all speed
With news from friends "though lost to sight,
To memory dear indeed."
Curtailed, some thousands I have vexed
At times, although a shame.
Curtailed once more, I show—what next?
A valued river's name.

Solution:—Sport—port—spot—post—pot—Po.

5.

AN instrument all very well in its place;
A term which refers to a different case;
Three-fifths of a man who is wicked inclined;
A representation correctly designed;
The name of a painter of ancient renown;
Not level, or something that wants smoothing down;
An injury many are forced to endure;
And a passion we seldom, if ever, can cure;
The *initials* will show you a creature that creeps
Into holes in the winter, and rolls up, and sleeps
Till the summer appears, when it unwinds again,
And repairs in great haste to the meadow or plain.
The *finals* read downwards will point out as sure
The author of this and a great many more
In YOUNG ENGLAND, which, I'm sure thousands would say
Is the cheapest and best magazine of the day.

Solution:—Drum—Other—Rog(ue)—Model—Opie—Uneven—Sprain—Envy—(Dormouse.)—

6.

A TERM applied to persons unacquainted with the arts;
Another word for wonderfully excellently done;
A plaited cord or piece of work of most intricate parts;
An instrument to fasten doors, though not the only one;
An act of great severity which honest men would scorn;
To countenance, and very right; to do a great deal more
Than requisite; a burthen known to thousands who are born
To slavery, in other words, to earn their bread before
'Tis given to them. Read the *heads* of these straight down and they
Will bring to light a large vehicle very seldom seen:
The *finals* upwards read will show, or point out, I should say
The title merited by those who ride in this machine.

Solution:—Barbarous—Admirably—Lace—Lock—Oppression—Overdo—Need—(Balloon—Donkeys).

7.

COMPLETE I'm deceitful, but not at all sly,
And well known to the whole human race,
But, as soon as beheaded, correctly descry
That which you would be puzzled to trace.
In the depth of the winter, when snow decks the ground,
And the frost is intensely severe,
Behead me once more, and you'll find I expound
Something done every day in the year
By mankind. When reversed and inverted with care,
I disclose a description of drink
Ladies take when surrounded by grief and despair,
Or, when fagged, to revive them. I think
This account of myself will suffice, or I might,
Without much inconvenience, describe
A vast number of tricks which I've placed out of sight,
That are still followed up by my tribe.

Solution:—Cheat—Heat—Eat—Tea.

8.

IF you happened to meet a young lady dressed gay,
'Tis ten chances to one you would think, if not say,
She's *my first*, which implies, to a certain degree,
That her choice is approved and admired, you see;
But as soon as beheaded a great change is made,
For it then becomes that which is noted for trade,
Inasmuch as it points out a place where you may
Buy a ribbon, a bonnet, a knife, or a tray.
Then, behead it once more, and I think you'll allow
That the palace would not have been what it is now,
Had I not lent a hand in the hour of need,
And enabled the workmen employed to proceed.
Transpose me, and I shall reveal that which you
Would not like to encourage, at least very few
Care to see them survive over long, when they know
How to have them destroyed, for they ruin us so.

Solution:—Smart—Mart—Art—Rat.

9.

"DEAR Louie," cried uncle, "come here, and again
I will try to instruct you, and puzzle your brain;
And therefore you must your attention bestow,
And listen to what I intend now to show:—
Complete, I'm an article common and small,
Most useful to some, and familiar to all,
Which, if read with one letter, a notice will show;
With another, a small drinking vessel I know;
With another, an old term of honour for man;
With another a nickname, as Tom, Dick, or Fan;
With another, I'm used by the poet of fame;
With another I strengthen, or order proclaim;
With another I'm often applied to a goat;
With another I'm found in most places of note;
With another I'm seen in the hothouse I own;
With another I show you a carriage well known;
With another I'm languid and tired, therefore
You must not expect me to tell any more
That relates to myself; but I leave it to you
To disclose the solution, and bid you adieu!
Now, Louie, I want you to try and find out
What, in Nature and Art, I've been speaking about."
Well, Louie she tried, and thought a good deal,
But to you, gentle reader, is forced to appeal.

Solution:—An—Ban—Can—Dan—Fan—Gan—Man—Nan—Pan—Tan—Van—Wan.

10.

One of the greater prophets, who styles himself the son of Amos;
An island of Africa, off the coast of Angola;
A river in Germany, which rises on the slope of the Thuringerwald, in Saxony;
A town in Switzerland, which has quarries of black marble;
A seaport town of Kent.
The *initials* of these will name a heroic poem, and the *finals*, by whom written. M.P.

Ans.—Isaiah, Loando, Ilm, Aigle, Dover (Iliad—Homer).

11.

Five letters do compose my name:
My *first* remove, I'm still the same;
But if you take my *next* away,
Then only *one* behind will stay! M. P.

Ans.—A-l-one.

12.

My *first*, and my *last*, are found in the sea;
My *whole* is a fruit that grows on a tree!

Ans.—Cod-ling. M. P.

13.

One night, about five, or perhaps rather more,
I was startled by hearing a knock at the door,
And proceeded to answer the same; when, behold!
A young woman accosted me thus:—"I am told
You're in want of *my first*, and, as such, I have brought
You a fine one to look at; its price is a groat,
Which I think you'll agree is a bargain which few
Would refuse; and as no one besides me, and you,
And the party who sold it, have any idea
Of the figure, you'd better secure the one here."
"Well, I don't mind becoming a purchaser, miss,
On condition you'll bring me the fellow to this
In an hour at least, as I've asked two or three
Of my friends in the Crescent to come here to tea."
"I will do that with pleasure," the maiden replied,
As she instantly darted away from my side.
Well, I'd just closed the door, when a ring at the bell,
By a man who had scores of *my second* to sell,
Called me back, and as soon as I asked him the price,
He replied,—"They are cheap, I assure you, and nice.
They are eight for a penny; and, as such, I know
You will buy some, if only a dozen or so."
"Yes, of course," I replied: "if you'll give me your word
They are sweet, I will do so, however absurd
It may seem; but if not, it is no use for you
To profess what you've no inclination to do."
He assured me they really were sweet, and would please
The most delicate palate; and then, to appease
Him, I purchased three dozen, but when I pared one,
I discovered that I was completely done;
For they ate like *my whole*, which I do not think fit
Food at all; but in this case "the biter was bit."
In conclusion, however, I only request
That you'll send a solution condensed or compressed.

Solution—"Crab-Apple."

14.

A good old farmer sat in his barn,
At the head of a table stored
With the choicest food and the best home-brewed
That his cellar could afford.
For 'twas harvest-home, when he always gave,
To those he employed, a treat;
And all who came partook of the same
As much as they chose to eat.
They'd dispatched the meal and removed the cloth
And called for the ale and toast,
When their foreman rose, and begged to propose
The health of their worthy host.
The farmer stood up to thank them all
For the way in which 'twas done;
And said: "My men, here's another, then,—
'Success to my eldest son!'
He is not here; but he will be soon,
For the paper states to-day
The ship will arrive at half-past five,
Without unforeseen delay."
The toast was drank, when a voice exclaimed,—
"I should like to know the name
Of your eldest son, which every one
Will be proud to serve the same
As we have done you for these many years."
"Well, my man, your request is fair;
And for friendship's sake I will strive to make
A comparison somewhat rare.
To one of the birds in yonder shed
Add two-thirds of the grain which we
Have just brought home, and 'twill give you some
Idea of the name which he
Will be proud to hear from the honest lips
Of the labourers I employ
On the old estate, which has been of late
So lonely without my boy."

Solution—"Hen-ry(e)."

15.

In a beautiful garden, 'midst flowers, was growing
My first, just unfolded, and lovely to view;
In the day-time 'twas nursed by the sunbeams, then glowing,
And was foster'd at night by a fresh balmy dew.
My second beheld it one day, and unsparing
Plucked it carelessly, just to adorn the parterre,
Then left the dear spot where 'twas nurtured, uncaring,
For she thought it would thrive and look elegant there.
But, alas! it soon shrivelled when placed in the bower;
Its sleek silver leaves lost their delicate hue.
It sickened and withered in less than an hour,
For it miss'd the gay sunbeam and sparkling dew.
Why did she not leave it alone in its glory,
Where for days—e'en for weeks—it might sweetly have bloom'd
By the side of *my whole*? which, to curtail my story,
Is an emblem of constancy, highly perfumed.

Solution.—"Rose-Mary."

CORRESPONDENCE.

All Letters to be addressed, by the 10th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Exchange.—George Stedman, Lindfield, Sussex, has a few "British Birds' Eggs" left, which he will be happy to exchange either for birds' eggs or butterflies. Persons wishing to exchange will please send their list of duplicates and desiderata. N.B.—He has also a few Foreign Postage Stamps, which he will be happy to exchange for the above.

Ferns.—Sir,—In your paper of last month, "A. B." makes an inquiry about "Ferns." I must say I am a great lover of ferns and mosses, and shall be very glad to exchange dried specimens. Mine are all natives of Perthshire, Scotland, and I may say I carried two first prizes with my specimens,—one for growing plants, and the other for dried specimens,—at the Upper Strathearn Floricultural and Horticultural Society.—I am, Sir, your most obedient servant, P. Cairns.—Address, Peter Cairns, Gamekeeper, Glenturret, By Crieff, Perthshire.

Crests.—Can any of your subscribers tell me where I can buy crests?—Quæsitor.

Ferns.—Has A. B. (last number of Young England) or any of your readers well-preserved fronds of Gymnogramma leptophylla, Woodsia alpina, Cystopteris myrrhidifolium, Lastrea collina, Pseudathyrium flexile, Botrychium rutaceum, or Ophioglossum lusitanicum, to give in exchange for good specimens of any of the other British Ferns, particularly for curious varieties of the Paraley Fern?—Address, W. Roberts, Westward, Wigton, Cumberland.

Melting Iron and Tin.—Sir,—Having heard of a compound for melting tin, by which means the tin melts much quicker than by heat alone, I would feel much obliged if you would insert this in your valuable paper "Young England." I would also desire to know the compound for melting iron by same chemicals.—E. A. R.

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WILLIAM PATERSON,

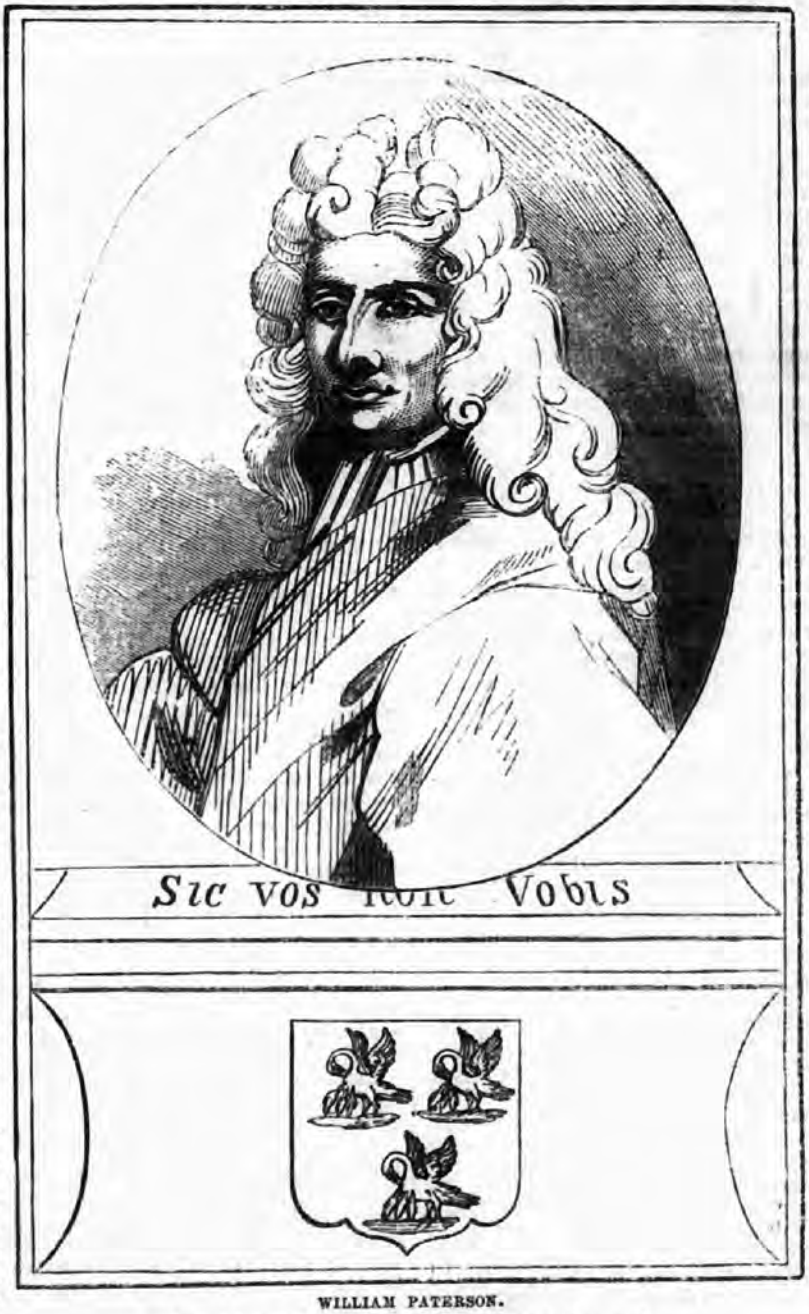
FOUNDER OF THE BANK OF ENGLAND. BORN 1655; DIED 1719.

WILLIAM PATERSON was a native of Scotland, born in Tinwald, in Dumfriesshire, where his father's house, at Skipmyre, was a few years ago pointed out to the traveller as the birth-place of "The Great Calculator." He was educated at the grammar-school of Tinwald till he was sixteen years old. His family was of the class of lesser lairds; and he is said to have been meant for the Presbyterian Ministry, but being in danger of the fearful persecutions of the time, for carrying supplies to the Covenanters in tehir hill retreats, he was compelled, in about 1673, to escape into England, where he became a trader, and prospered.

So far tradition alone tells his story. Afterwards, in 1681, in his twenty-sixth year, he was admitted, by the expensive form of *redemption*, to the Merchant Tailors' Company, and in 1689 he took up livery as an enrolled citizen of London. In 1684 and 1686 he had already entered deeply into mercantile *studies* as well as into commerce, at home and abroad — facts expressly stated in two addresses from himself to King William III. and George I.

During this period of his life, Paterson resided in the West Indies. He was well-known in Jamaica; and in the reign of James II. he took part in the settlement of New Providence, in the Bahamas. It has even been thought that he had a share in Sir W. Phipps' famous raising of silver ingots from a sunken galleon. This incident is the more probable, inasmuch as he was versed in *engineering*. His Scottish education extended to scientific elements, and his library, of which the catalogue is extant, contained good books on the subject.

His abilities in this respect, led him in 1690 to found the Hampstead Waterworks Company; and in the same year he published a valuable "*Discourse on the Necessity of Encouraging Mechanick Industry.*" In this tract he shows elaborately how all nations rise by industry, and fall by idleness. He advocates popular education in common things; in the arts of all sorts, and in whatever fits us for business. This course of training, he insists, would lessen crime, improve the people, and enrich the State.



WILLIAM PATERSON.

(*From a Pen and Ink Sketch in the British Museum.*)

In the same year, 1690, too, he contributed to another book upon the West Indies, certain passages containing germs of his views on finance, soon to be developed with splendid success.

In 1691 he first planned a system of loans to the Government for the great war then raging, and the *circulation of notes*, of which he had seen the advantage abroad. This brought him in close connection with Ministers, and especially with Charles Montague, afterwards Earl of Halifax, who was ever after his firm friend. Paterson appeared before a Committee of the House of Commons on this business, as the delegate of capitalists in the City, of whom he was himself one.

From 1691 to 1694 he persevered in preparing his finance views, which led to the formation of the Bank of England, in 1694. He was elected one of the first directors. He worked hard in the Bank all that year, but no reward was granted him as its *promoter*. Some dissatisfaction arose on this account, and for other reasons.

His views extended beyond the business done by the Bank, which was strictly limited by the directors, to loans to the Government and discount on personal security, to taking deposits, and issuing notes payable in coin on demand.

Paterson had himself formed a plan for registering titles to land, and granting loans on real estates. The Orphan Fund in the City was the basis on which this new plan was to be worked. His friends in it were opulent citizens, and its capital of £600,000 was soon raised, in 1695, by his influence.

He showed the plan to some of the Bank directors, who liked it. But the majority of his colleagues formally charged him with a breach of trust to them, by the formation of the new Bank. They refused to hear his explanation of the case; and he, with natural indignation, sold out his qualification of £2000 stock, so as to cease to be a director, or proprietor.

It has been erroneously said that he was expelled; and Lord Macaulay's remark that he was "not re-elected" is an improper reproach. He never sought to return to the Bank of England.

Next year it stopped payment from sheer bad management, which he would have prevented; and one of his most able tracts, published on that occasion, contains the very best principles on Banking ever written. He always objected to the Bank of England *monopoly*, which was obtained many years after he quitted it.

Hitherto he had carried on business extensively as a merchant resident in London, but trading with the Continent. He had kept up few relations with Scotland.

But in 1695 he was invited to take part in a new company, to be formed upon an Act of the Scottish Parliament, for trading with Africa and the Indies. Two years before, another Act was passed to encourage foreign Scottish commerce, purely on Scottish capital. Paterson readily accepted the invitation, and connected an old design of his own with the plans of his countrymen. He had brought with him from the West Indies, in 1684, much information about *Darien*, on the Spanish main. He held that region to be favourable for a free settlement that should command both seas, and so open trade with the Eastern Archipelago and China. The title of the Spaniards to Darien was denied by many Europeans, and their hold upon the country was weak. Paterson had before offered his plans to King James II., and to the Elector of Brandenburgh. He now persuaded the Scots to adopt it, and a large share of capital was to be raised from English and continental associates. It was to be a cosmopolitan settlement, and a free port.

He was altogether free from reproach in the colony; and, after 160 years, a document has just been brought to light, which fully explains the cause of the expedition to Darien being undertaken without his guidance, when he was its real founder; and when he was at that time, beyond all comparison, the most popular man in Scotland. Ballads are preserved which eulogize William Paterson as the great benefactor of his native country by this enlightened plan of colonial and commercial government—"*Patersonian* Government" the songs have it.

He was rewarded by the universal sympathy and respect with which all parties received him in Edinburgh upon his return, in 1700, from the ruined Darien enterprise.

But he was no longer in easy circumstances. Still, however, undaunted in spirit and fertile in resources, as well as more prudent, he first directed the Scottish public in Parliament to moderate counsels, when their passions were to the highest degree excited by their losses in settling Darien. He then formed a plan of industrial improvement *at home*, which prevailed extensively till the *Union*, seven years later.

He now came to London, where he lived, in James-street, Pimlico, and in Queen's-square, Westminster, except at short intervals, for eighteen years, till his own death.

The Lord High Commissioner of Scotland had, in the preceding year, warmly recommended him to the King; and two of his letters, written at Hampton Court to William, enlarged upon financial reforms with great force. The last royal messages to Parliament at this moment are almost word for word repetitions of Paterson's advice. Moreover, a powerful expedition was already sent to the West Indies against Spain and France, in exact conformity with another portion of Paterson's address to the King.

The unexpected death of King William, in the midst of this prospect so hopeful to Paterson, almost reduced him to despair. But despair was no attribute of his noble spirit.

Paterson laboured in his vocation of financial and trade reformer. In 1701 he drew the first plan we have for a Sinking Fund. In 1702 he published a tract on free trade with India, held by competent judges to be the very ablest production on the subject at that time. In 1703 he gave his own books for a public library of Trade and Finance. In 1704 he corresponded with Lord Somers in furtherance of an improved Council of Trade. In 1705 he succeeded, in a controversy with *John Law*, to lead the Parliament of Scotland to reject that brilliant gambler's plan of inconvertible paper-money.

The next year opened a bright field to Paterson. The much-desired Union of England and Scotland under one Parliament was at length effected, and a friend of his, *James Dupré*, of whom we should rejoice to hear more, piously preserved his able *Union* letters, and prefixed to them a portrait, which has served for the engraving to this article.

On the accession of King George I., Paterson, who had been a steady Whig at all times, and who had warm friends among the Tories, had granted to him, by a vote of the House of Commons, an indemnity of £18,241.

In applying for justice on this occasion, he had stated to the King that he had prepared some important financial measures for the reduction of the National Debt.

The grant enabled him to prepare his measures with vigour, and, at the end of the next year, he published a volume of Dialogues, with elaborate details on the subject.

Success again attended the effort. His work produced a law to establish a large Sinking Fund, which for many years was kept up out of *a surplus revenue*, to the extinction of many millions of the debt, and the lowering of the taxes.

The provision made by Parliament in his favour was in the form of a charge upon the *Equivalent* Fund of Scotland. The Treasury issued debentures on this fund with interest for nine months only; and did not pay them off at the end of that time. Therefore, when cash was wanted for them, they fell seriously in value—like so many deferred securities now.

Hence, trouble marked Paterson's last days. After making his will in July, 1718, he quits the house in Queen-square, in which he had passed so many years in credit. Six months afterwards he is found entreating Lord Stanhope to find one of his debentures, which that Minister had lost. He had applied to him for some remuneration in his unmerited and unexpected distress. But Lord Stanhope was one of the principal agents in John Law's system; he had no sympathy for Paterson, the clear-headed, persevering opponent of Law.

That he should sink under the double influence of personal sufferings and the nation's wrong, is not surprising. It is deeply to be regretted that, except the appeal to Earl Stanhope shortly before his death, no trace of his last days, not even that of his burial-place, can be found. His will provided for his step-children, and for his nephew and nieces; and bequeathed the munificent legacy of £1000 to his friend and executor Paul Daranda, in testimony of the generosity of that merchant-prince to himself and his family.

Paterson was twice married—but left no children. Descendants of his brother and sisters are well known in Scotland.

Of his personal habits not much is known. He was unquestionably an industrious student. His books show very extensive reading, and he was familiar with some half-dozen languages. He never indulged in the convivial excesses of the time. On the contrary, he was a water-drinker. But he made up for that defect as a boon-companion by his remarkable powers of conversation. In commerce he was a strong free-trader. In finance, he was a bullionist but eager to devise plans of safe paper credit. In general politics he was a lover of peace; although to secure it, he readily advocated war. In religion, he was a firm Presbyterian; his charity embraced the whole human race and all creeds. His ways of social progress belong to all men and to all time. His example teaches the young ever to hope, and the old and sorely-tried never to despair.

LONDON, FEBRUARY 1, 1863.

It seems that most of the Governments of Europe—of the world—are now in "a dead-lock." The Rebellion in China baffles and defies the Imperial power. The Revolution in Japan is an attempt to put a halt upon the steps of the ruling authorities in their march of progress and free intercourse. The Cabinet of Mr. Lincoln in America has been summoned to the bar of public opinion to give account of their stewardship; but the President so interposed as to save both himself and his Cabinet, by asserting that if he had a ministry composed of angels rather than of men, they could not win for him a great and decisive victory in the field of battle. The unfriendly relations between Prussia and Austria are no longer a secret, and have given rise to the gravest apprehensions and fears. The King of Prussia has not much improved his position relative to his offended people, and it still remains to be seen whether he can put his foot upon the Genius of Freedom, and trample upon the rights and the liberties of a whole nation. Poland is a sharp thorn in the side of Russia; and around the Government of the Czar there are gathering and thickening difficulties dark as a thunder-cloud and as heavily surcharged, while the social problem which the Emperor has set himself to solve will, more or less, test the stability of his Empire. Greece is still in search of a prince to accept her sceptre, and is altogether in a fix. Poor Turkey has lost her vital energy. Italy is still struggling for wider freedom and her wished-for unification. France is satisfied with the past of her Imperial rule, and promises little for the future. Spain is unsettled, and Holland uneasy. Nor is there a single State scarcely, within the circle of nations, which is not passing through a crisis. The future of these States who will predict, except to say that the recession of the wave insures, on its return, a higher and a more advanced ground? The age is prophetic, and the apocalypse is not far off. In the midst of conflicting elements and revolutions which time is disclosing, England sits in calm repose, secure on the foundation of her virtue and her faith.

THE COURT.

There is but little to record in reference to the Court, except it be the narrow escape which H.R.H. the Princess Louis of Hesse has had from a serious injury in being thrown from an open phaeton when taking a drive in the quiet neighbourhood of Osborne, and for which, in common with the whole nation, we give thanks to Him who preserveth our soul in life.

The Prince of Wales is busy in making all needful preparations for his marriage and future settlement in life. He has just been elected an honorary member of the Worshipful Company of Merchant Tailors—an honour which was conferred on his illustrious father. Nor can we doubt that, walking in the steps of that now sainted father, other laurels will be added to encircle his brow.

HOME INTELLIGENCE.

We hail with no vulgar feelings of delight, the intelligence that in the distress of the North we have seen that darkest hour which precedes the dawn. Long and dreary has been the night, but the nation has nobly done to relieve its gloom. Never was there laid on the altar of human benevolence so costly an offering. Nor can we but admire the patience and the fortitude with which the sufferers have endured their privations and distress. These sons of toil have won for themselves a character which stamps them with moral heroism, and insures for them the confidence of an admiring and applauding nation.

Sufficient of the raw material has found its way into the market to encourage some of the mill-owners to resume work, and in several places the men are being employed two or three days in the week. This they prefer to parochial or any other kind of relief; and there is about half a million of money in the hands of the Relief Committees. We cannot but hope that the functions of these Committees will soon come to a close, and that every farthing of the money subscribed will be distributed among the families of those who have suffered so long, but borne so patiently.

It is also gratifying to know that, notwithstanding the depressed state of our manufactures in the North, the revenue of the country has suffered but little during the past year. What we have lost in one department of our national industry, has been made up in another; and we have to congratulate ourselves on the prosperity of the country, and the contentment of her people.

FOREIGN NEWS.

The Emperor of the French, in opening the National Chamber or Parliament, took a very complacent view of the state of affairs during the last ten or fourteen years of his Imperial rule; and, with the exception of hinting at another proposal of mediation in the unhappy struggle now going on between the Northern and Southern States of America, left the future to unveil itself. In the present state of Europe, this was a wise and prudent policy. The industry of the Empire is suffering from the American war; and the fact that she is not in a position to follow the example of England in her benevolent effort, may prompt the Emperor to press the question of mediation on the British and other European governments.

The King of Prussia, we hope, will yet relax the iron grasp with which he seized on the liberties of his people, and learn the lesson, that it is better to depend on the affections of a loyal and devoted people, than on military genius and the power of arms.

The Federal States of America have sustained another damaging defeat in the battle of Fredericksburg, with a fearful effusion of blood and loss of men; since which, President Lincoln has issued his proclamation for the freedom of all the slaves within the Confederate States; but leaving it to the Border and other States to set the negro free or keep him in slavery, as they may deem expedient.

We did regret to find the *Times*, as the leading journal of Europe, attempting to justify slavery as an institution founded on the teachings and supported by the authority of Scripture. We abhor slavery from our inmost soul; and from the Press as from the Pulpit of England, there should go forth no uncertain sound on the subject. With the independence of the South, if that independence be reached, we predict the downfall of slavery.

CHAPTERS ON BRITISH BIRDS.

BY EDWARD NEWMAN, F.L.S., F.Z.S., ETC.

THE SHRIKES.

HAVING completed the history of the Birds of Prey, properly so called, I will next describe the Shrikes and Flycatchers. The Shrikes or Butcher-birds are remarkable for their sanguinary propensities, although they have not the appearance of Birds of Prey, nor are they furnished with the same destructive weapons. These birds are totally unlike the owls which I last described, and in the natural system are not placed near them; but it is better to follow the artificial method proposed by Mr. Vigors, because our best English work is arranged on that plan, and the List of Birds, with English and Latin names, which I have printed for the use of the readers of YOUNG ENGLAND, is also arranged on the same plan. With this list to refer to, the arrangement I shall follow will be at once understood.

THE RED-BACKED SHRIKE, MALE AND FEMALE.

There is no species of Shrike or Flycatcher that stays in England all the year round, but there is one Shrike and two Flycatchers that build and breed here, and that only leave us during the winter months.

CHAP. XXX.—THE RED-BACKED SHRIKE.—*Lanius Collurio.* THIS Bird arrives in England at the end of April or very early in May, and immediately commences the great work of nidification. I have always found the nest in high whitethorn hedges, and, as the nests are often in process of building before the whitethorn is in full leaf and are very large, they are very easy to find. The nest is made of the dead stems of hedge mustard, stinging nettle, and other herbaceous plants, and is lined with slender roots and the flowering stalks of grasses. The female generally lays five eggs, which vary a good deal in colour. The ground colour is pale or whitish, the white sometimes having a blue and sometimes a green tinge; and I have heard of, but have never seen, eggs with a delicate rosy tinge. They are always spotted with two shades of brown, particularly about the larger end.

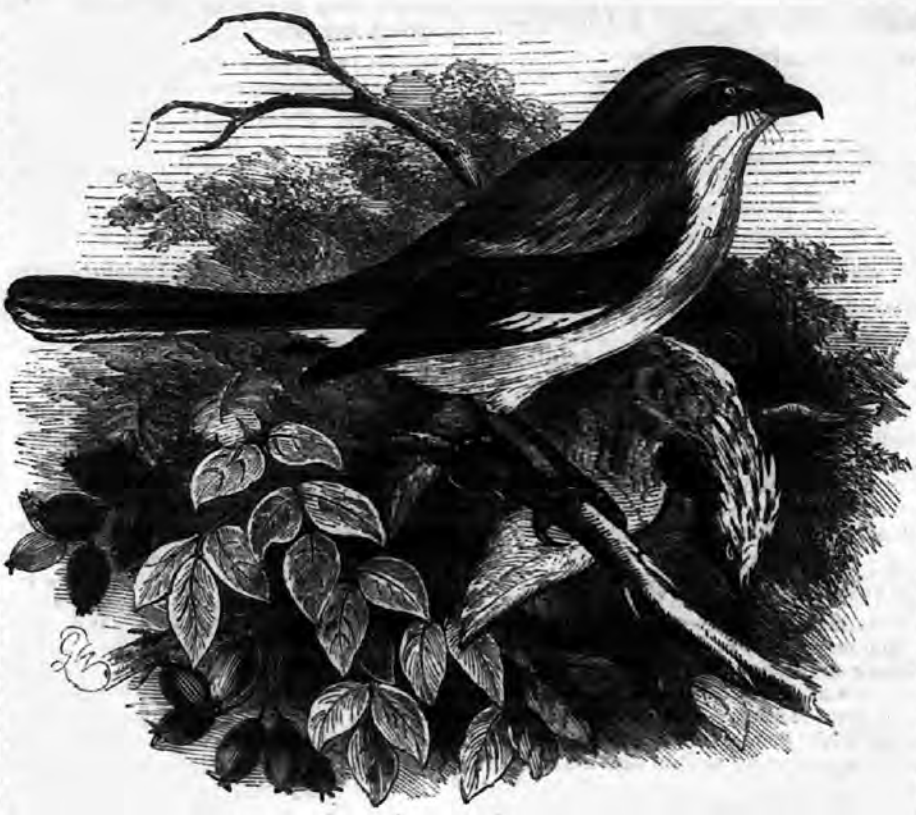
The Red-backed Shrike feeds on large beetles, large bees, and many other insects; it also not uncommonly kills young birds; and authors, copying from one another, uniformly tell us, that it also destroys mice; this, however, requires proof, for the Shrike is never on the wing after dark, and mice cannot be regarded as its common food. Having caught a bird, a cockchafer, or a humble-bee, the Shrike first impales it on a thorn and then devours it at leisure; and there is no doubt that this singular habit has gained for it the name of Butcher-bird. I have observed that, even after thus impaling its prey, it very frequently leaves a portion or even the whole. I have sometimes seen a whitethorn bush with more than a dozen humble-bees thus impaled on it, and not a portion of either of them eaten; I have also observed beetles with the soft parts of the body eaten, and the wing-cases and legs left untouched; and I have occasionally found little birds impaled by the Shrike on thorns, and the heads only missing.

The beak of this bird is black and hooked at the tip, and it has a very distinct tooth on each side of the upper mandible; the eye is surrounded with black, which extends to the base of the beak; the crown of the head and back of the neck are grey; the back and coverts of the wings chestnut brown; upper tail coverts reddish grey; feathers of the tail, black; the front half and the extreme tips, white; throat, white; white breast, and belly pale red brown.

The young bird is brown; the back plain; the breast barred with two shades of brown. The female retains this plumage for two years, and often breeds before losing it.

CHAP. XXXI.—THE GREAT GREY SHRIKE.—*Lanius Excubitor.* A RARE winter visitor of this country, and a bird that never breeds here. Two or three instances have been recorded of its occurring in England in summer, but I think them to have been erroneous, and that the last men-

tioned a bird was mistaken for the present. My friend Mr. Doubleday, of Epping, kept a bird of this species alive for more than a year; it became perfectly tame, and used to take food from his hand. I recollect going to see it in 1836. When a little bird was offered it for food, it immediately seized it with its claw, and held it some time; it then broke open its skull and ate the brains; it would then hang up the bird between the wires of its cage, and pull it to pieces. The cage was always ornamented with the remains of two or three birds gibbetted in this curious manner.



THE GREAT GREY SHRIKE.

Mr. Yarrell, so well known as the author of the "History of British Birds," said that the Great Grey Shrike is used by falconers on the Continent during spring and autumn when trapping falcons. "The Shrike is fastened to the ground, and by screaming loudly gives notice to the falconer of the approach of the hawk. It is on this account called 'Excubitor,' which means 'The Sentinel.' The signal thus given of the approach of a hawk, the falconer, from his hiding-place, a hole in the ground, withdraws the Shrike by pulling one string, and by pulling a second string exhibits a pigeon. The moment the hawk pounces upon the pigeon, a sharp pull upon a third string in an instant brings a small bow net over both hawk and pigeon." The contrivance appears a complicated and clumsy one, but success is the best test of its merit.

The nest and eggs of the Great Grey Shrike have never been found in this country. The description of both by Continental writers does not suffice for me to distinguish them from those of the Red-backed Shrike which I have just described.

The colour is much more grey than that of the Red-backed Shrike; the beak is very black and very sharply hooked, and the space between the beak and the eye, as well as a patch behind the eye, is quite black; the head, neck, and back are grey, without any tinge of red; the breast and belly are white; the wings are black, with a white bar across the middle; the four middle feathers of the tail are black; the next on each side is tipped with white; the following one has more white, and the outer one on each side is almost wholly white.

There is still a third species of Shrike recorded in the "Zoologist" as having occurred in England. This is the Woodchat Shrike (*Lanius Rutilus*)—an abundant species in Africa, where it is resident throughout the year. In the spring a few of these birds visit Europe, and have been killed in Spain, France, Belgium, Italy, Turkey, and Greece. Its migrations are made in company with the Red-backed Shrike. A curious circumstance respecting this bird has been mentioned by the French naturalist, Viellot, that it always builds its nest of sweet-scented herbs; but whether this be true, or imaginary, I will not undertake to say. I rather incline to suppose that a mere accident has been mistaken for a habit.

THE MIGHTY PRESENCE.—If we may adapt the simple but sublime saying, of Sir Isaac Newton, Sydenham, though diligent beyond most other children, in gathering his pebbles and shells on the shore of the great deep, and in winning for mankind some things of worth from the vast and formless infinite, was not unconscious of the mighty Presence beside which he was at work; he was not deaf to the strong music of that illimitable sea. He recognised, in the midst of the known, a greater, an infinite, a divine Unknown; behind everything, certain and distinct, he beheld something shadowy and unsearchable, past all finding out; and he did not, as many men of his class have too often done, and still do, rest in the mere contemplation and recognition of the τὸ θεῖον. This was to him but the shadow of the Supreme Substance, ὁ θεός. How unlike to this fervour, this reverence, and godly fear is the hard, cool, nonchalant style of many of our modern men of science, each of whom is so intent on his own little pebble, so bent upon finding in it something no one else ever found, so self-involved and self-sufficient, that his eyes and his ears are alike shut to the splendours and the voices—the brooding darkness, and the "look that threatens the profane"—of the liberal sea, from out whose abyss it has been flung, and

> "Which doth with its eternal motion make
> A sound like thunder—everlastingly."
>
> *Horæ Subsecivæ.*

MATHEMATICS FOR MISSES.—PROP. 1. Theorem. *The angles in a square may be obtuse angles and acute angles, as well as right angles.* Let A B be a square, and C D a young lady in it. Now when C D angles for a husband in the square, she may either hook E F, who makes believe that he has money, or G H who keeps his carriage, and is as rich as Crœsus. Of these two angles clearly the one is an obtuse and the other an acute angle. But if C D be herself angled for, and caught by a man who really loves her, this, we are inclined to think, is a right angle without doubt.—*Punch's Almanack.*

"POOR RICHARD; OR, THE WAY TO WEALTH."

By Benjamin Franklin.

(*Concluded from page 6.*)

Chapter III.

"So much for industry, my friends, and attention to one's own business, but to these we must add frugality, if we would make our industry more certainly successful. A man may, if he knows not how to save as he gets, 'Keep his nose, all his life, to the grindstone, and die not worth a groat at last. A fat kitchen makes a lean will;' and—

'Many estates are spent in the getting,
Since women, for tea, forsook spinning and knitting,
And men, for punch, forsook hewing and splitting.'

'If you would be wealthy think of saving as well as of getting. The Indies have not made Spain rich, because her out-goes are greater than her in-comes.'

"Away, then, with your expensive follies, and you will not then have so much cause to complain of hard times, heavy taxes, and chargeable families; for—

'Women and wine, game and deceit,
Make the wealth small and the want great.'

And further, 'What maintains one vice, would bring up two children.' You may think, perhaps, that a little tea, or a little punch now and then, diet a little more costly, and clothes a little finer, and a little entertainment now and then, can be no great matter; but remember, 'Many littles make a mickle.' Beware of little expenses: 'A small leak will sink a great ship,' as Poor Richard says; and again—

'Who dainties love,
Shall beggars prove.'

"And moreover, 'Fools make feasts, and wise men eat them.' Here you are all got together to this sale of fineries and nick-nacks. You call them goods; but if you do not take care, they will prove evils to some of you. You expect they will be sold cheap, and perhaps they may for less than they cost; but if you have no occasion for them, they must be dear to you. Remember what Poor Richard says, 'Buy what thou hast no need of, and ere long thou shalt sell thy necessaries.' And again, 'At a great pennyworth pause awhile;' he means, that perhaps the cheapness is apparent only, and not real; or the bargain, by straitening thee in thy business, may do thee more harm than good. For, in another place, he says, 'Many have been ruined by buying good pennyworths.' Again, 'It is foolish to lay out money on a purchase of repentance,' and yet this folly is practised every day at auctions, for want of minding the almanack. Many a one, for the sake of finery on the back, have gone with a hungry belly and half-starved their families; 'Silks and satins, scarlets and velvets, put out the kitchen fire,' as Poor Richard says. These are not the necessaries of life; they can scarcely be called the conveniences: and yet only because they look pretty, how many want to have them? By these and other extravagances the genteel are reduced to poverty, and forced to borrow of those whom they formerly despised, but who, through industry and frugality, have maintained their standing: in which case, it appears plainly, that 'A ploughman on his legs is higher than a gentleman on his knees,' as Poor Richard says. Perhaps they have had a small estate left them which they knew not the getting of, they think, 'It is day and will never be night,' that a little to be spent out of so much, is not worth minding; but, 'Always taking out of the meal-tub, and never putting in, soon comes to the bottom,' as Poor Richard says; and then, 'When the well is dry they know the worth of water.' But this they might have known before, if they had taken his advice. 'If you would know the value of money, go and try to borrow some; for he that goes a-borrowing, goes a-sorrowing,' as Poor Richard says; and, indeed, so does he that lends to such people, when he goes to get it again. Poor Dick further advises, and says—

'Fond pride of dress is sure a very curse:
Ere fancy you consult, consult your purse.'

And again, 'Pride is as loud a beggar as Want, and a great deal more saucy.' When you have bought one fine thing, you must buy ten more, that your appearance may be all of a piece: but Poor Dick says, 'It is easier to suppress the first desire than to satisfy all that follow it.' And it is as truly folly for the poor to ape the rich, as for the frog to swell in order to equal the ox.

'Vessels large may venture more,
But little boats should keep near shore.'

It is, however, a folly soon punished; for, as Poor Richard says, 'Pride that dines on Vanity, sups on Contempt. Pride breakfasted with Plenty, dined with Poverty, and supped with Infamy.' And, after all, of what use is this pride of appearance, for which so much is risked, so much is suffered? It cannot promote health, nor ease pain; it makes no increase of merit in the person; it creates envy, it hastens misfortune.

"But what madness must it be to run in debt for these superfluities! We are offered, by the terms of this sale, six months' credit: and that, perhaps, has induced some of us to attend it, because we cannot spare the ready money, and hope now to be fine without it. But, ah! think what you do when you run in debt; you give to another power over your liberty. If you cannot pay at the time, you will be ashamed to see your creditor: you will be in fear when you speak to him; you will make poor, pitiful, sneaking excuses, and, by degrees, come to lose your veracity, and sink into base, downright lying; for, 'the second vice is lying, the first is running in debt,' as Poor Richard says; and again to the same purpose, 'Lying rides upon debt's back.' Whereas, a free-born Englishman ought not to be ashamed or afraid to see or speak to any man living. But poverty often deprives a man of all spirit and virtue. 'It is hard for an empty bag to stand upright.' What would you think of that prince, or of that government, who should issue an edict forbidding you to dress like a gentleman or a gentlewoman, on pain of imprisonment or servitude? Would not you say that you were free, have a right to dress as you please, and that such an edict would be a breach of your privileges, and such a government tyrannical? and yet you are about to put yourself under that tyranny, when you run in debt for such dress! Your creditor has authority, at his pleasure, to deprive you of your liberty, by confining you in gaol for life, or by selling you for a servant if you should not be able to pay him. When you have got your bargain, you may perhaps think little of payment; but, as Poor Richard says, 'Creditors have better memories than debtors; creditors are a superstitious sect, great observers of set days and times.' The day comes round before you are aware, and the demand is made before you are prepared to satisfy it; or if you bear no debt in mind, the term which at first seemed so long, will, as it lessens, appear extremely short: Time will seem to have added wings to his heels, as well as to his shoulders. 'Those have a short Lent, who owe money to be paid at Easter.' At present, perhaps you may think yourselves in thriving circumstances, and that you can bear a little extravagance without injury; but,

'For age and want save while you may:
No morning sun lasts a whole day.'

Gain may be temporary and uncertain; but ever, while you live, expense is constant and certain; and 'It is easier to build two chimneys, than to keep one in fuel,' as Poor Richard says: so, 'Rather go to bed supperless, than rise in debt.'

'Get what you can, and what you get—hold,
'Tis the stone that will turn all your lead into gold.'

And when you have got the philosopher's stone, sure you will no longer complain of bad times, or the difficulty of paying taxes."

CHAPTER IV.

"THIS doctrine, my friends, is reason and wisdom: but, after all, do not depend too much upon your own industry, and frugality, and prudence, though excellent things; for they may be all blasted without THE BLESSING OF HEAVEN; and therefore ask that blessing humbly, and be not uncharitable to those who at present seem to want it, but comfort and help them. Remember, Job suffered, and was afterwards prosperous.

"And now, to conclude, 'Experience keeps a dear school, but fools will learn in no other,' as Poor Richard says, and scarce in that; for it is true, 'We may give advice, but we cannot give conduct.' However, remember this, 'They that will not be counselled, cannot be helped;' and further, that 'If you will not hear Reason, she will surely rap your knuckles,' as Poor Richard says."

Thus the old gentleman ended his harangue. The people heard it, and approved the doctrine, and immediately practised the contrary, just as if it had been a common sermon; for the auction opened, and they began to buy extravagantly. I found the good man had thoroughly studied my almanacks, and digested all I had dropped on those topics during the course of twenty-five years. The frequent mention he made of me, must have tired any one else; but my vanity was wonderfully delighted with it, though I was conscious that not a tenth part of the wisdom was my own, which he ascribed to me: but rather the gleanings that I had made of the sense of all ages and nations. However, I resolved to be the better for the echo of it; and though I had at first determined to buy stuff for a new coat, I went away resolved to wear my old one a little longer. Reader, if thou wilt do the same, thy profit will be as great as mine. —I am, as ever, thine to serve thee,—RICHARD SANDERS.

ANTENNÆ.

"The velvet nap which on his wings doth lie,
The silken downe with which his backe is dight,
His broad outstretched hornes, his hayrie thies [thighs],
His glorious colours, and his glistering eies."
SPENSER: *Muiopotmos; or, The Fate of the Butterfly.*

CHAPTER I.

THE Antennæ are in some respects the most important organs of an insect. They differ in every family, and no two species have them exactly alike. Thus, the antennæ give us valuable assistance in discerning the family and species of a new butterfly or moth. The use of these organs is unknown; but thus much is known, that without them a butterfly or moth is perfectly helpless, and unable to fly. You may often see Lepidoptera much mutilated; I have seen some, as the Wood Argus, and others, with half the lower wings gone; but you never see a living butterfly or moth with the antennæ wanting.

If an antenna of a butterfly be examined under a microscope, even of small magnifying power, it will be found to consist of numerous pieces jointed into one another, and thus the outline has a serrated or saw-like appearance, something like a bamboo cane. When carefully examined, they will often be found to have four surfaces; that is, they are frequently like a thread, perfectly round, but more like a piece of paper cut out. The knobs or clubs at the end of the antennæ are sometimes round, and sometimes, like the antennæ, have four surfaces.

Some of the following facts, though not new to scientific men, will perhaps be new to some of our readers. Surely, when we consider the number of Lepidoptera on the globe, and reflect that no two species have their antennæ exactly alike, we shall feel impelled to exclaim:—"O Lord, how manifold are Thy works! in wisdom hast Thou made them all!"

I am sure that any one would be well repaid for examining insects, especially the organs of the head, through a microscope or lens. A very good lens could be obtained for a few shillings, which would lay open vast stores of amusement and instruction unknown before. Nothing could possibly equal the splendour of the wing of the Peacock Butterfly, when seen through the microscope: what was beautiful before becomes more beautiful the more it is magnified.

MICROSCOPICAL OBSERVATIONS ON THE ANTENNÆ OF SOME OF OUR COMMONER BRITISH BUTTERFLIES.

[*Note.*—These observations were made with a glass of small power, but which was quite sufficient to show the scales on the wings, &c. For the sake of clearness, I call the part of the antenna nearest the head, the *base;* the part where the club joins the rest of the antenna, the *tip* of the antenna; the part of the club nearest the head, the *base* of the club; and the extremity of the club, the *tip*, which is generally of a lighter colour than the rest of the club. I think that in Butterflies the antennæ do not perceptibly differ in the sexes. In Moths of course they differ very much, the antennæ being beautifully feathered in the male, but simple and thread-like in the female.—The terms upperside, underside, inner or outer edge, side, margin, &c., will be readily understood.]

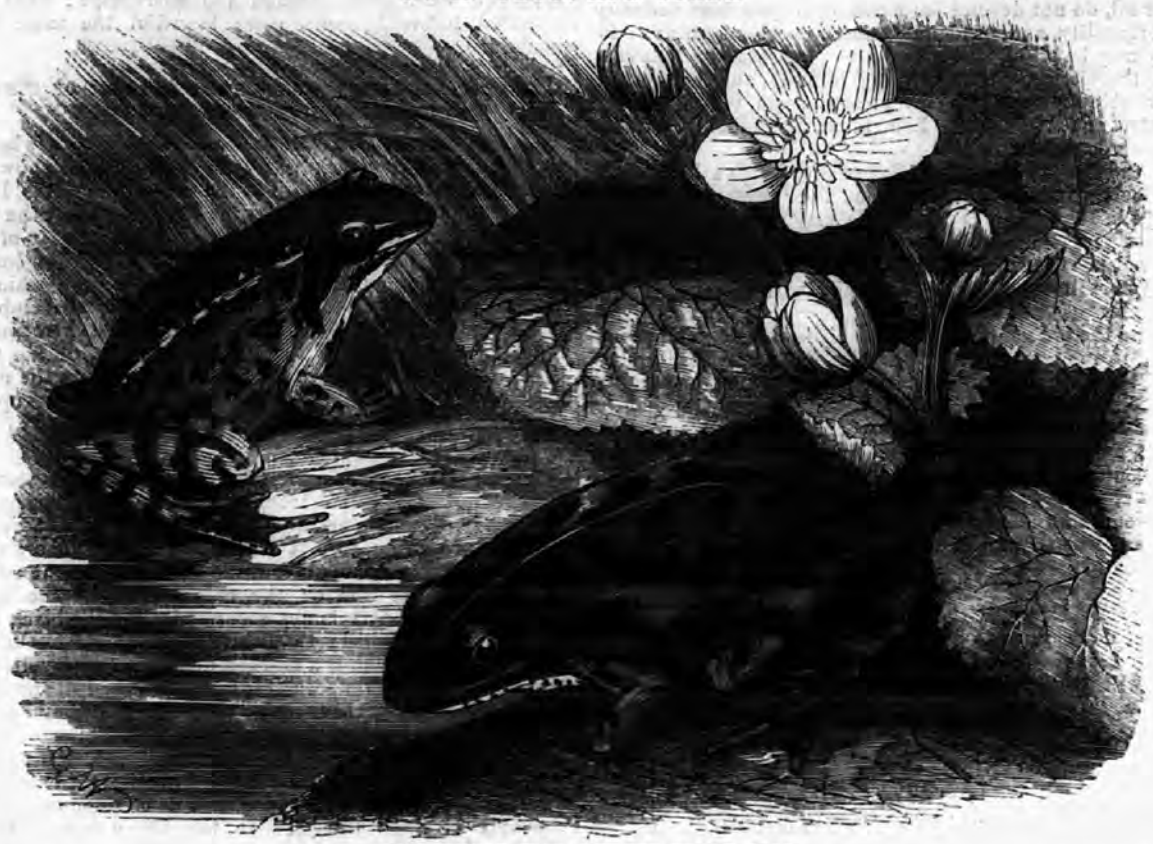
LARGE CABBAGE WHITE (*Pieris Brassicæ*).—Antennæ. Upperside. Black line from base to tip, rather irregular. Underside, ringed, black and white; for about a quarter of its length from the base it is entirely white. The ringed part is slightly separated from the black line on the upperside, by a white line on the outer edge; on the inner edge the ringed part is not separated from the black line. Clubs: black, ribbed; tip, white, not hooked. On the inner side of the club is a marked depression of a yellowish colour. I have never seen this fact mentioned in any book on Lepidoptera. I have never remarked it in any but the family of the Whites (*Pieridæ*), in which the Large White (*P. Brassicæ*), the Small White (*P. Rapæ*), the Green-veined White (*P. Napi*), and the Orange-tip (*Anthocaris Cardamines*) have it. No doubt it is of some use in the economy of these insects. In the Green-veined White (*P. Napi*), as we shall find, this depression is very largely developed. I wish I could communicate to the readers of YOUNG ENGLAND the delight which I felt at this discovery, since I had found out the fact myself, and had not been told it by some one else. As Mr. Newman says, in his delightful History of the British Butterflies, "We must seek knowledge through the avenue of things, not the avenue of words; it is twice as interesting to find out these things as to read them." I hope these papers will cause others to *think* and *examine* for themselves; and they will soon to get to feel the pleasure of discovering things which they would not have cared at all about if they had only read them.

PHOTOGRAPHY UNDER WATER.—A photograph has been taken of the bed of the sea in Weymouth Bay. The camera was placed in a box with a plate-glass front and moveable shutter to be drawn up when the camera was sunk to the bottom. The camera being focussed in this box on land to objects in the foreground, at about ten yards, was let down from a boat, carrying with it the collodion plate, and the shutter raised, and plate exposed for ten minutes. The box was drawn up, and the image developed was of rocks and weeds: but the great advantage anticipated to be derived from this application of the art is to obtain a knowledge of the condition of piers, bridges, piles, and structures under water.

SINGING MICE.—Mr. F. T. Buckland, in a letter to *The Queen*, says:—"Mr. Kidd writes very tenderly about singing mice, but does he know what makes the mouse sing? I believe (and so does Mr. Bartlett, of the Zoological Gardens, a gentleman who has great experience and observation) that this singing is a cry of distress and pain. I have dissected many singing mice, and my observations agree with those of other observers, that singing mice invariably have a terrible living parasite in the substance of the liver. This horrid disease keeps the poor mouse in a terrible state of pain and irritation, and he can't help letting us know, in his own pretty way, that he is in pain and distress. If Mr. Kidd likes, I will send to your office, a singing mouse dissected, to show this curious disease."

THE BRITISH REPTILIA.

No. II.—FROGS AND TOADS.



THE COMMON FROG AND THE EDIBLE FROG.

You see by the drawings there are two Frogs and two Toads; these are all British, and they are all that are known. Frogs and toads are either despised or detested: but they are very useful and wonderful creatures. They are born, virtually, fishes—having gills and a tail, and live in the water; afterwards change to land animals, have lungs, and limbs for crawling and leaping.

In early life, the frogs and toads are pretty much alike—*they are all tadpoles;* only the tadpole of the toad is less in size and deeper in black than the tadpole of the frog.

The natural history of the tadpole is as follows, which you can verify by personal observation during the coming season:—

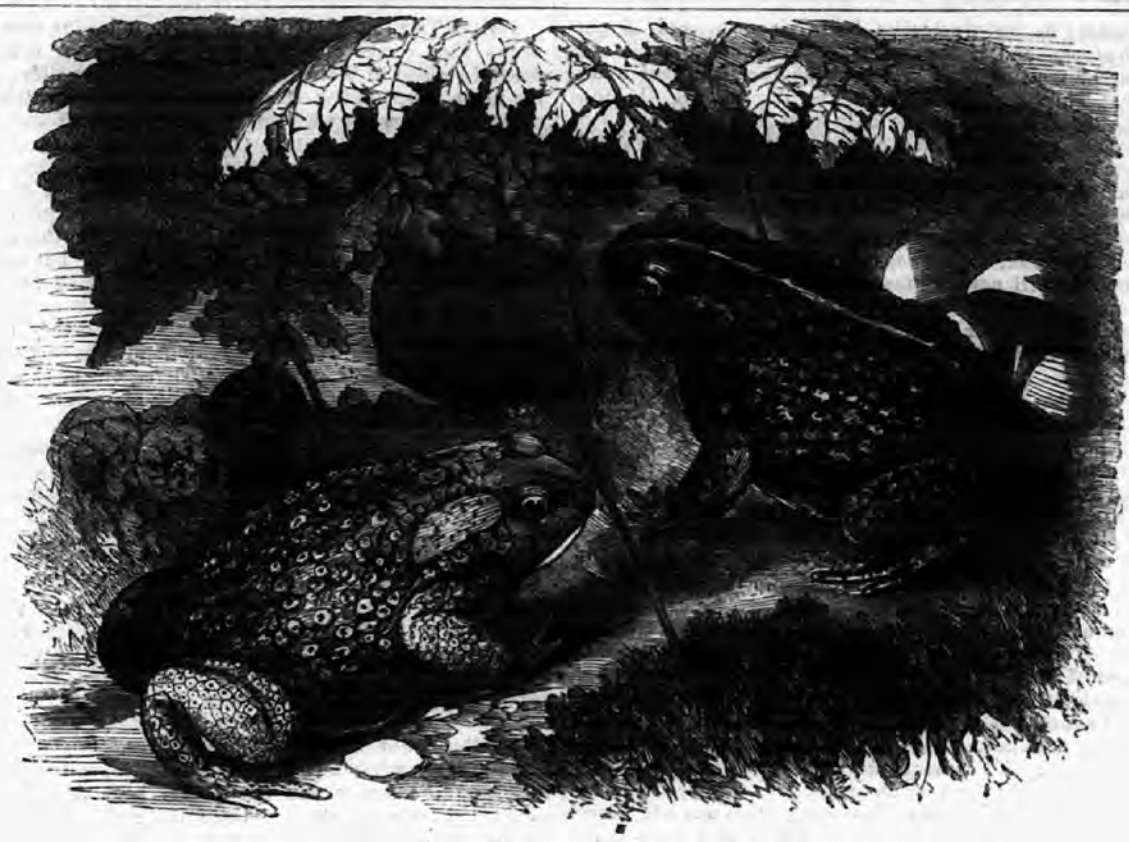
When the egg is laid, it takes up water and begins to swell. It soon reaches its full size. In four hours after the egg is laid a furrow is seen, then the head shows itself; in fifty hours it is very well marked, and the tail is slightly poked out. The beginning of the fringe of the tail may be observed, and then the commencement of the gills; and oh, wonder of wonders! the head and tail begin to move! Then come the nostrils, the mouth, and the eye. The gills (branchiæ) are thrown out into lobes, and the circulation of the blood may be detected. Soon the little creature gives sundry sudden jerks, tears the skin of the egg, and is free. It is now four days old. These observations were recorded by Rusconi, and are repeated by Bell, from whom we have taken them. It should not be forgotten that the tadpoles were developed in a temperature of from 73° to 80° Fahrenheit. In our own climate, in spring, the history which, as above, is comprised in four days, extends itself over a month. The hind-legs of the tadpole come sooner than the fore-legs. One of the most beautiful sights in nature is to see the circulation of the blood in the tadpole. At each beat of the heart a current is poured out, which may easily be seen. The legs being grown, the gills taken in, and the lungs formed, fitted to breathe the air, little Master Taddy is ready to come on land; he therefore drops his tail, having no further use for that formerly useful appendage. There is one thing more which we would rather not tell—but as faithful reporters we feel constrained to add—the tadpoles are cannibals!

With this introduction on tadpoles, we proceed to describe the full-grown animals; and first, let us take

The Common Frog (*Rana temporaria*).

One remarkable difference between the frog and the toad is, the frog *leaps*, the toad *crawls*. Think of Leap-frog, and you will remember this. For this purpose the hind legs are very long and strong. Its colour is brownish green, spotted with black; the belly is yellowish white, with spots similar to those on the back, but smaller, and not so many of them. It has a patch of black behind the eyes, and has the power of changing colour just like the Chameleon. It has four toes on the fore-feet, and five on the hind. It feeds on insects and slugs; it is, therefore, a most useful animal to the gardener and farmer. It seizes its prey by an instantaneous flash of the tongue. Frogs generally pass the winter in a state of torpidity at the bottom of ponds and ditches in a concatenated mass. You might get some up with a long pole, and if opened would be found full of spawn. As the warm weather approaches, they wake up, rise, separate, rove about, mate, and lay their eggs. If you wish to observe the growth of the tadpoles, you should procure some of this spawn, put it into water, in a glass globe or tumbler. We mention water, for water is essential to the birth of both frogs and toads. The spawn of the frog is in a mass, that of the toad in strings, like rows of beads.

Many stories are told of frogs. On one occasion a water-rat was killed by a frog fastening on its throat; the rat swam across the pond, but was choked by the time it reached the other side. We have seen the gold and silver fish in our garden fish-pond, some of them very large, killed



THE TOAD AND NATTERJACK.

by the frogs leaping on their backs, and thrusting their fore-paws into the gills of the fish. The poor fish have swum about in great distress, but could not throw their rider.

The Scottish Frog, which was at one time thought to be a distinct species, is now admitted to be a very fine variety of the Common Frog (*Rana temporaria.*)

A writer in Ireland informs us that "About the beginning of the eighteenth century, Dr. Gwythers, a physician and Fellow of the University of Dublin, brought over with him a parcel of frogs from England to Ireland, in order to propagate the species in that kingdom, and threw them into the ditches of the University Park, but they all perished; whereupon he sent to England for some bottles of the frog-spawn, which he threw into those ditches, by which means the species of frogs was propagated in Ireland. However, their number was so small in the year 1720, that a frog was nowhere to be seen in Ireland, except in the neighbourhood of University Park, but within six or seven years after, they spread thirty, forty, or fifty miles over the country, and so at last by degrees over the whole nation." This is considered proof of the time when frogs were introduced to Ireland, viz. 1720–26.

Dr. Bell, in his interesting book on this subject, says, "That the frog is susceptible of being tamed to almost as great a degree as the toad, is proved by the following anecdote, for which I am indebted to my friend, Dr. William Roots, of Kingston, who informs me that he was in possession for several years of a frog in a perfect state of domestication. It appears that the lower offices of his house were what is commonly called underground, on the banks of the Thames. That the little reptile accidentally appeared to the servants, occasionally issuing from a hole in the skirting of the kitchen, and that during the first year of his sojourn he constantly withdrew upon their approach; but from their showing him kindness, and offering him such food as they thought he could partake of, he gradually acquired habits of familiarity and friendship; and during the following three years he regularly came out every day, and particularly at the hours of meal-time, and partook of the food which the servants gave him. But one of the most remarkable features in his artificial state of existence, was his strong partiality for warmth, as, during the winter seasons, he regularly (and contrary to the cold-blooded tendency of his nature) came out of his hole in the evening, and directly made for the hearth in front of a good kitchen fire, where he would continue to bask and enjoy himself until the family retired to rest. There happened to be at the same time a favourite old domestic cat, and a sort of intimacy or attachment existed between these two incongruous inmates; the frog frequently nestling under the warm fur of the cat, whilst the cat appeared extremely jealous of interrupting the comfort and convenience of the frog. This curious scene was often witnessed by many besides the family."

Generally the eggs are deposited in the middle or latter end of March, and are hatched towards the end of April. But this is not always the case; for in Cornwall, near Penzance, the ova were observed for several years as early as the 21st of December. There is a well-authenticated story of a frog being frozen in a cistern at Clifton in 1845. It was so brittle that a leg was broken off, just as though it had been ice, but on the thaw following Froggy revived, and swam about as well as he could.

The Edible Frog (*Rana esculenta*) is so called because supposed to be the only one eaten; but there is good reason to believe the French frog-catchers do not know the difference between this and the Common Frog, and take both for the supply of the market. It may be distinguished from the other frog by not having the black mark behind the eyes, and by a reddish line down the back. The male has what are called the "vocal sacs" very large: they rise behind the head like half-globes. By these the animal produces its peculiar croak—very different from any other croak, and which has procured for it the title of the Cambridgeshire Nightingale. Its life is spent in the water, or on the leaves of water-plants, having never been found on land. It inhabits either ponds or streams.

The Toad (*Bufo*)

May be known by his inflated body; his toes not so much webbed as the frog's; his skin covered with warts or

tubercles; he has no teeth; he is sluggish, and if pursued stops,—and if touched, will throw out from his skin an acrid moisture, which will make the mouth of a dog froth. This we have seen on the dog seizing the toad to destroy it. This is the only approach it makes to be poisonous, for which it has so bad a name, and for which it suffers so much.

The toad lives on land, and only resorts to water to lay its eggs; if water cannot be reached, they are laid in the dampest place at hand; it hybernates in the hollow of a tree, in the sand, or in a heap of stones.

The toad will not take food that is not alive: insects, of all sorts, and worms are its delight. It sometimes has a sharp tussel with an earthworm, which it seizes in the middle, and pushes into its mouth with its fore feet. It is the toad that eats its skin: the frog loses its skin in pieces in the water. A toad has been seen with a viper in its mouth, and it catches bees with impunity. Query. Is the acrid humour of the toad proof against the poison of the viper and the bee?

The toads lay their eggs in spring, sometimes later than the frog. They have been known to pass the Winter in a sand-pit, where they bury themselves between the layers. They would climb up to a soft place, scratch the sand away, enter the hole, then push the sand under their bellies, and go in as far as eighteen inches from the front. On the return of Spring these toads travelled two miles to the water. This occurred near Poole, in Dorsetshire, towards the end of January, 1840. On the 26th of that month not a particle of spawn was to be seen; on the following day, 27th, a quantity of it was floating in the pond, to which the toads had travelled. On the 30th not a toad was visible. On the 18th of February the first young tadpoles were observed: on the 20th of February ice, the eighth of an inch thick, covered some of the spawn; this was afterwards vivified, and the pond was stocked with tadpoles,—these then gradually diminished till not one could be seen. The writer (in the ZOOLOGIST, page 321) supposes the birds carried them off. We have no doubt the chief cause of their numbers being thinned was their own cannibalism.

Toads are the most useful things to keep in a garden. It is good fun to see one attend upon the gardener as he moves the pots in a tan-pit; Mr. Toad will anxiously wait the removal of the pot that he may feast on the insects below. It is time we came to the second toad.

NATTERJACK (*Bufo calamita*).—This toad is of a lighter colour than the other, with a light line down the middle of the back. It is not very general. Dr. Bell had many in his garden at Selborne, where "the species," he tells us, "is more common than the common toad. It moved with a sort of run, with its body raised. It only resorted to the water for breeding: it liked to be dry, and was found under a shallow layer of turf, covering the top of the wall of a ha-ha, exposed to the powerful rays of the sun in the hottest and driest situation in the garden."

What shall we say of the marvellous stories told about frogs and toads in trees, and stone, and coal, buried for thousands of years? Ah, what? Well, you will see perhaps.

And what shall we think of the reputed "showers of frogs?" Of the frogs caught sometimes in the *hat* whilst falling? This we know, that both frogs and toads wait on the banks of the ponds where they were born till a shower comes, the heavier the better for them, and then they go abroad.

"And when they next do ride abroad
May I be there to see."

PERSONAL SKILL.—You may be able to expound excellently to your son the doctrines of gunnery, or read him a course of lectures upon the principles of horsemanship, but you cannot transfer to him your own knack as a dead-shot, or make him keep his seat over a rasping fence. He must take pains to win these for himself, as you have done before him. Thus it is that much of the best of a man, like Sydenham, dies with him.—*Dr. John Brown.*

FRIGHTENING CHILDREN.—The following true story shows what comes of frightening children:—A few years since, I resided in Wales, at the entrance of a valley, opening into a beautiful bay, on each side of which rise high cliffs of limestone, covered with soft turf, on which the Welsh sheep feed, and climb like goats. On the highest of these cliffs stood a solitary cottage, overlooking the wide expanse of sea; on which, "during every month in the year that has the letter R in it," the little oyster boats are seen out in great numbers. The poor men dredge for these with heavy iron nets; it a is very laborious work; but as they can generally sell their oysters, they are glad to do it. You know the tide, on nearly all coasts, ebbs and flows; and these little boats go out with the tide, and they cannot return to land until it flows in again, and thus carries them ashore. In this cottage on the cliff lived one of those poor men, whose name was John Tovey, with his wife and sixteen children. Some of the elder ones had grown up, and were married, and had gone to live elsewere: some were out at service; some worked in the potato fields; and the little ones were often left at home by themselves. The fern, which grows on the cliffs, the poor people cut and use in winter for various purposes. There was a rick of this fern standing a few yards from the house. The cottage was white-washed, and had a thatched roof. When these children did anything that was naughty, or the mother was angry with them, she used to tell them that an ugly "Old Man" lived in this rick, and that if they were not good, he would "come and have them." So these poor ignorant children believed what the mother so often told them, and they wished very much that the frightful "Old Man" did not live there always. So, one day, when their mother was gone to market to sell her potatoes, and the father was out in his boat dredging for oysters, there were three of these little children staying at home by themselves; and they talked about this horrid "Old Man" in the rick, and they thought that they would *burn him out!* So they set light to the rick, which was all in flames in a few minutes, and they went and sat down under a hedge at the edge of the cliff to watch—perhaps they expected to see the "Old Man" run out when he felt the fire—or else they hoped that he would be quite burnt to death, and so never trouble them any more. The fire blazed very high, and presently caught the cottage also, and so it all burnt away together. Just then the father, who was off in his boat, saw his house and all on fire, and he knew that the little children were there alone, and yet he could not come to them till the tide turned, and for this he had to wait several hours. Oh, how very greatly distressed he must have been not to be able to get home to see if his poor children were burned! So, late in the evening, the mother returned from market, and soon the father also, and found the house entirely burnt down, and everything in it, all but the stone walls; and the poor little children still sitting under the hedge, so frightened that they did not know what to do. They were obliged to go and beg some kind persons in the next village to take them in that night. And I hope the parents learned a lesson, never again to tell their children what was *untrue;* and never to try to *frighten* them. It is very wicked to frighten children; for there is nothing of which children need to be afraid—*except of doing wrong.* A few years ago, a young man was brought before Mr. Hammill, a London magistrate, for kicking, and striking, and trying to choke, an officer and a student. Poor young man, it was not his fault, for he did not know what he was doing—he was mad. And how do you think he went mad? His mother said, "Sir, he is subject to fits of a dreadful character, and all because, when six years of age, he was put into a dark room as a punishment, shortly after which the fits came on and have become worse. Our circumstances were once bright, but we have spent so much money in trying to cure him, that we are now quite poor. The fits come on every two hours, and then he is like a maniac." Mr. Hammill said, "This is a shocking result of frightening children." You had better show this to your parents and to your servants.

THE MUSIC-HALLS.

We are lovers of music, and we know what attractions it has for thousands. Nor would we shut out any one from the enjoyment to be derived from a pure or unquestionable musical entertainment. But when the divine notes of music are prostituted to enhance that which is impure and profane, and are mixed up with scenes or scenic performances which appeal to the lower and the baser passions of our nature, the evil becomes incalculable. And therefore it is that we lift up our voice to warn Young England against those places of evening resort, which have received the fascinating name of Music-Halls, but which, in fact, are schools of vice, in which the mind and heart of youth, male and female, are sadly corrupted. These halls are the rendezvous of the thoughtless and the giddy, the trifling and the gay, the profane and the vicious; and the lessons which are there taught and learned are anything but elevating and ennobling. They are a snare which has been set in our cities and large towns, in which to entrap the young in their simplicity and innocence. Shun them! As you value purity of heart and peace of conscience; as you esteem character, and all those principles on which true character is founded; as you love what is true, and pure, and good—shun them. If you once enter them, you will come out neither so pure in thought, nor so happy in spirit, as when you went in. There is a nobler path open to youth, and joys to be tasted of a purer and more satisfying nature. It is the part of true wisdom to turn away from these turbid waters, and drink at that fountain, clear as crystal, which wells up with life and bliss.

SINE CERA.

From these two Latin words comes our English word sincere:—a significant word truly. Let us see what it imports. When, in ancient times, a potter brought out a vase or vessel without defect, or perfect, it was pronounced to be *sine cera*—without wax; because when there was a defect, it was customary to fill it up with wax. The same phrase was also applied to pure honey, or honey free from any admixture of wax. In its application to man, it denotes a character perfect in itself, and not made up of any foreign elements; what is true, real, free from sham or semblance, removed entirely from all dissimulation and hypocrisy. A noble character this. It is a prime excellence in any one, to be, and not to seem to be. How much is there that is feigned and false in this world! How rare is it to meet a sincere man—a sincere youth! He is one to be admired and loved; worthy of being held up as an example; and whose virtues will shine with ever-growing lustre.

WHAT WILL THE GOVERNOR SAY?

What! does any one mean to say that this is the rule, law, or canon by which he lives and regulates his conduct? Have you no higher motive for acting rightly, than the mere word or judgment of your father?—of whom, by the bye, the designation of governor is not very respectful; or are your filial affection and reverence such as to lead you to fear offending one to whom you are so deeply indebted? If he should disapprove of your conduct, are you prepared to bow to his loving authority, and to follow his sager advice? Or suppose that he should unhappily leave you to follow your own course of action, will that be a justification of your conduct? Remember there is another Governor—a higher Power, to which you are accountable. The question is not, What will the Governor say? but, What will God say? Nay, what has He said? What is written in His word? The light of Revelation is clear and infallible; and it is by this that your life is to be regulated. We would have every youth listen to the voice and follow the counsel of his father so far as it can influence his character for good, and beneficially determine his conduct in the world; but should that father's voice prove neither wise nor true, or should it fail to speak, let it never be forgotten that there is a voice which has spoken in no faint or inarticulate tones; that that too, is the voice of a Father who loves you as no earthly parent can, and whose revealed will is, that you should so live and act as to insure your happiness for ever. Let not others, by their laugh and sneer, by their taunts and insinuations, cheat you out of the supreme good.

THE NEW BARONETS.

"Have you seen the paper this morning, sir?" said an old, self-complacent gentleman to his fellow-passenger in the omnibus, as they rolled along to the city on the morning of Saturday, January 10th, 1863.

"No, I have not. Are there any news of importance, or anything special going on?" was the reply of his fellow-traveller.

"Well," said the old gentleman, "I don't know that there is anything either very special or important; but in casting my eye over yesterday's Gazette, I see that we have got a batch of new baronets, and not one of them connected, so far as I know, with any of our ancient and well-known families. They are mere men of business, who have got together a little money, and in virtue of their money have attained a little influence."

"But don't you think, sir, that those who, by their application and industry and the force of character, have risen to affluence and influence, and who employ their wealth and position in society to promote the welfare and increase the happiness of others, are the parties, above all others, who are entitled to such marks of the Royal favour?"

"Well, well, it may be so; but I confess that I don't like to see these dignities and honours made so common; and would rather restrict them to our older and more distinguished families."

Now that which this old gentleman disliked is a fact which Young England should ever have present to their minds, that there is no position short of that which belongs to Royalty alone, to which they may not aspire, and that there is no distinction which they may not honestly covet and obtain. To the poorest boy in the land the path is open to eminence and honour; and there is nothing, if he has only character and talent, to preclude him from being the Prime Minister of a Sovereign on whose Empire the sun never sets, or from taking his seat on some future day on the woolsack as Lord Chancellor of England, and of grasping the sword of supreme judicial authority; or of his filling the old chair at Canterbury as the Primate of the Church. The fact of six such men as are named in the Gazette of the 9th ult. having been created baronets, and thus enrolled among the nobility of the land, should incite every youth to aspire to their position and their honours, by seeking to exhibit the same lofty character, founded on the same imperishable principles of truth and goodness. There is a higher fountain of honour than the Queen. Seek the honour that cometh from God, and whether you ever receive the distinctions of earth or not, this will encircle your brow with a glory brighter than the diadem of many worlds.

YOUNG NATURALIST'S MONTHLY RAMBLES.

FEBRUARY.

As you walk abroad, you will see, on the fine days, that Spring is here or coming.

BIRDS.—The birds will now begin to change the colour of their plumage, it will become more brilliant. The linnet, for instance, will put on a bright carmine over the head and breast, instead of the purplish dull brown of the Winter. If very mild, the Raven and the Stock-dove will have young by the end of the month, about which time the Rooks will be noisy, and begin to build.

INSECTS.—You may now, as you might have done, indeed, any time during the winter, find the eggs of the following moths. The Gipsy Moth (*Liparis dispar*), of which we present an exact likeness, has the instinct to fasten her eggs to the *branch*, instead of the leaves, of a tree. If the *leaves* were used, the eggs might be blown away with them, far from their food; but being on the *tree*, when hatched—which is just at the time the young leaves appear—they are near their food, and it is ready for them. But inasmuch as they have to pass the storms of winter, she fastens them with a glue impervious to wet, and covers them with down from her body to keep them warm. Is she not worthy of having her portrait taken?

THE GIPSY. (*Liparis dispar.*) Female. *

The Lackey Moth (*Bombyx neustria*) also lays her eggs in nicely arranged rings, "bracelets," around the stems of apple and hawthorn trees, guided doubtless

THE LACKEY. (*Bombyx neustria.*)

by the same instinct. The Ground Lackey (*Bombyx castrensis*) does the same. We cannot express the intense interest with which we look upon these beau-

THE GROUND LACKEY. Female. (*Bombyx castrensis.*)

tiful creatures. Although occupying a low scale in the Creation, they are endowed with a wonderful instinct. For full descriptions of these moths we must refer our readers to the extra Moth Numbers of Young England, pages 36 and 42.

But you may find caterpillars now. The larvæ of the Black-veined White (*Pieris Cratægi*), pass the winter

THE BLACK-VEINED WHITE. (*Pieris Cratægi.*)

in tents, made of leaves woven with silk. Here, in companies, from two to twelve, they brave the severe frosts. See a most interesting description in Butterfly Number, page 4.

The same thing is true of the Ruby Tiger (*Arctia fuliginosa*), and some other of the Tiger moths hybernate in the caterpillar form.

Hold a large cloth or net under, while with a stick you beat the pines, and you will find the green caterpillar of *Thera variata*, and among the "needles" under the pines some "small fleshy-looking circular objects with silvery-looking dots upon them"—these are larvæ of the Red Bar Moth (*Fasciara*). Look also among the leaves, mosses, lichens, &c., and on the bark of the Oak, Beech, and Hornbeam.

What should we say to Pupæ-digging this month? A correspondent who is "a beginner" tells us he has been "very successful in digging for pupæ" having obtained altogether about 100 "rare ones"—this is pretty good for a beginning! It should stimulate all our young ramblers—nine-tenths of the Lepidoptera pass the winter in the pupa state. Here, then, are the gold mines of Entomology: who will go to the diggings?

Among perfect insects, towards the end of the month look for the Oak Beauty (*Amphydasis prodromaria*).

THE OAK BEAUTY. (*Amphydasis prodromaria.*)

You may also find the Dotted Border (*Hibernia progemmaria*).

DOTTED BORDER. (*Hibernia progemmaria.*) Male and Female.

* For male, see extra Moth Numbers of YOUNG ENGLAND, No. 3, page 37.

Both these moths may be found at the end of the month on trunks of trees, palings, &c.

Some moths come out from the pupæ "in the middle of winter." As for instance, the winter moth *Cheimatobia brumata.*

WINTER MOTH. *(Cheimatobia brumata.)*

You may also find, on the bark of the Oak, with the wingless female not far distant, the *Anisopteryx Æscularia.*

ANISOPTERIX ÆSCULARIA.

A few of the Noctuæ come out now on fine evenings.

FISHING.—The English rivers are now open for Salmon-fishing, for the fence months are closed. You are exposed to a heavy penalty if you use Salmon-roe as bait.

THE SALMON.

In warm places you may now succeed with Chub, Roach, Carp, Perch, Jack, and Eels. You may take Flounders in tidal rivers. Walton recommends for fly-fishing, in January, a Red-brown fly and a very little bright Dun gnat for February; he directs you to use the Red-brown, Plain Hackle or Palmer fly, the Lesser Hackle, the Great Hackle, the Great Blue Dun. The best general rules are contained in the following lines:—

A Brown-red fly at morning grey,
A darker Dun in clearer day;
When the summer rains have swelled the flood,
The Hackle red and worm are good.

At eve when twilight shades prevail,
Try the Hackle white and Snail;
Be mindful aye your fly to throw
Light as falls the flaky snow.—SIR JOHN HAWKINS.

REPTILIA.—You might now prepare, if you chose to rear and study the British Frogs and Toads, a pond for tadpoles—put in decaying vegetable and animal matter. Look out for Snakes.

TOO DEAR.—"What are those speckled birds?" inquired Mrs. Skinflint, of a poulterer in a London Market. "Guinea fowls, ma'am." "Keep 'em, then," murmured the lady, as she walked away, disgusted at such imposition; "you don't get my guineas for 'em, that's all!"

Amusements.

ANSWERS TO RIDDLES IN OUR LAST.

1.

Dear Bob,
I expect to see you between 5 and 6. A line in reply.

2.

Come and *eta beta pi* (eat a bit o' pie).

3.

Peacock.
P arro T
E noc H
A nt I
C hes S
O mele T
C rossbil L
K it E
Thistle.

4.

1. Lion.
2. Gnu.
3. Lynx.
4. Ounce.
5. Fox.
6. Sloth.
7. Calf.
8. Hare.
9. Beaver.
10. Tiger.
11. Puppy.
12. Hind.
13. Bull.
14. Hart.
15. Tapir.
16. Rat.
17. Wether.
18. Mole.
19. Wolf.
20. Stag.
21. Mare.
22. Buck.
23. Ape.
24. Glutton.
25. Cat.
26. Pig.
27. Bottle (nosed Whale).
28. Hog.
29. Doe and Roe.
30. Ewe.
31. Mule.
32. Ram.
33. Ferret.
34. Boar.
35. Llama.
36. Sable.
37. Fawn.
38. Rabbit.
39. Reindeer.

5.

Maria Stewarta.

RIDDLES, TO BE ANSWERED IN OUR NEXT.

1.

Come, seek a very little word,
By numerals may be told,
Which tells what everyone should be,
The young as well as old.
Its *last* is just a half of *first*,
Its *third* a tenth of *last*
Its other *two* a fifth of *third*—
Now, sure you have it fast!

2.

A thousand begins and ends me;
Five hundred divides me,
With the first of all letters between;
These, if rightly written, will a title of courtesy name,
Spelt backwards or forwards the same.

3.

Divide pounds and pence with a conjunction, which, if rightly selected, will name a title of nobility.

4.

Find two words in which the vowels follow in successive order.

5.

What verse in the Bible contains all the letters of the English alphabet?

6.

What odd number can you divide into two equal numbers and have nothing over?

M. P.

7.

If the B M T put: If the B. putting:

W. C., Croydon.

8.

THE CHILDREN'S ENIGMA.—THE GRAND BALL UPON THE TEA-TRAY.

As Lizzie and Nellie, one very wet day,
With Charlie and Willie, in-doors were at play.
Miss Liz, tired of dressing her doll so fine,
And Nellie of drinking sham tea and sham wine;
While Charlie kicked over his ninepins and ball,
And Willie declared he "liked nothing at all,"
But wanted some fun or some new game to play.
"Let's dress up as soldiers, and march, march away,"
Cried Charlie. "No, let us be gipsies," said Nell,
"And then we dear Grandmamma's fortune will tell."
"Suppose, now," cried Lizzie, "we dress up the cat
With table-cloth, anti-macassar, and mat."
"Oh! I've thought of something." "What is it?" cried all.
Cried sweet little Nell, "It's a *Miniature Ball!*"
"A miniature ball, dear! Why, what can you mean?
Have you been to Lilliput, or Queen Mab just seen?"
"To invite a large party, and on a tea-tray;
To have room for all, too, is what I would say.
That this is a riddle I scarcely need state,
And think it will puzzle dear Grandmamma's pate."
"Oh, yes!" then cried all; "and what fun it will be
To puzzle dear Grandmamma over her tea.
As we know the secret we'll laugh in our sleeve;
But what it can be, *she* will never believe.
All sorts of grand company we will invite,
In colours blue, red, green, black, yellow, and white,
A sweep, and a miller, and forester green,
An emperor, beggar, and gipsy, and queen."
"But come, now," cried Nellie, "assist me to write
A list of the parties we mean to invite.
And so to begin, dears, as first on the list,
Some members of Royalty I would suggest.
Say *Emperors* two, and both fond of the wood,
And by some thought more of than bold Robin Hood;
One robed in imperial purple so grand,
The other's robe with eyelets notably planned;
The *Queen of Spain* next, in her silver-spot dress;
Another Queen, also, whose subjects, I guess,
Great favourites are, and for industry noted;
A *Burgundy Duke* next, a handsome chap voted;
A *Philistine* next, and the greatest in story;
Then *red* and *white Admirals*, each full of glory;
Some *Beauties* we next must invite for the beaux;
If not, then what may ensue nobody knows;
The *South London Beauty*, the rarest, I ween;
Then one in fine *satin* ever is seen;
Some who've under *Oak, Lilac, Willow*, been christened,
And at whose rare charms our eyes often have glistened;
A *Belle* to compare with these beauties, I'm sure,
We must have; and, perhaps, then a *Coxcomb* may lure;
A *Lady* say next, one who *paints*, we confess;
An *Old Lady* next, in half-mourning dress.
To vary our company now we'll invite:—
A fellow who's noted for *Hercules'* might;
Adonis bedecked in his riches of blues
('Tis said of him Venus was once amoreuse);
Next *one* fond of making *Geometrical* figures;
An *Amazon, Negro*, some *Sextons* or diggers;
A *Spectre*, a *Ghost*, and a *Soothsayer*, too;
Some *Soldiers* and *Sailors*—we might have a crew;
Some freshwater *Boatmen*, who're known very well;
A *Diver*, who carries his own diving-bell.
And now let us have some of the workers and trades:—
Amongst them, we know, are some very sharp blades.
Put first on this new list the *Makers* of *Silk*,
Then *Tapestry, Cloth, Net*, and all of that ilk;
Next *Makers* of *Paper*, and *Masons* of stone,
With *Upholsterers, Carpenters*, this list is done.
Some *Harvestmen* next, and a *Miller* in white;
A *Sweep* next, a contrast, I think, will be quite,
And with a brown *Gipsy*, I'm sure, will delight;
A *Forester*, in his bright suit, golden green,
Will also please numbers of ladies, I ween;
Some *Footmen* in various suits, I suppose,
We must have, and *Lackeys*, and *Dealers in 'clo'es'*;
A troop of *Young Ladies* in lace we'll invite,
A *Gentleman* willing to show them a *light*;
A *Lady* with *lantern behind*, not before her
Lit up as some say, to attract her adorer.
A pleasant reception for each we desire,
So to finish, make ready, and present a *Fire*."
"Were all to accept these invites now, I say,
And come in their best, too, Oh! wouldn't it be gay?
Oh! should not I like just to see it, that's all;
It would be the grandest, most wonderful Ball."
"Far better than a Carnival, a Masquerade, or Fair,
Ha! ha! 'twould make our Grandmamma most curiously stare."

By I. J. and G. W. REEVE.

CORRESPONDENCE.

All Letters, except those on the business of the paper, to be addressed, by the 10th of the Month, to the "Editor of Young England," care of Mr. W. Tweedie, 337, Strand.

Sir,—Will you have the kindness to inform me on what the caterpillar of the Swallow-Tail Butterfly feeds, and when and where the chrysalis is most likely to be found, as I have not seen any since I have been in Devonshire?—F. W., Torquay, Jan. 6.

[It feeds on carrot, celery, parsley, rue, wormwood, but its favourite food appears to be cow's parsnip and hog's fennel. The chrysalis may be obtained now from the fens in Cambridgeshire. We observe it is now on sale in the naturalists' windows in London. The butterfly might be bred and let loose in any part of the country. It comes out in May.]

PHOTOGRAPHY.—Could you inform me in your next what the preparations used in photography on *glass* are?—YOUNG ENGLANDER.

[The solutions required for the albumen process on glass are:—Iodide of ammonium, 160 grains; distilled water, 1 ounce. Nitrate of silver, 50 grains; distilled water, 1 ounce; glacial acetic acid, 2 drachms. Gallic acid, 30 grains; water, 8 ounces. Hyposulphate of soda, 8 ounces; water, 20 ounces.]

BOTANY.—Dear Sir,—Will you be so kind as to inform me which is the best book on Botany for a young beginner?—P. M. C.

[The best we know is by the Rev. C. A. Johns, B.A., F.L.S., published, if we remember, at 6s. by the Society for Promoting Christian Knowledge.]

POSTAGE-STAMPS.—Sir,—In reply to F. C. F.'s query in this month's YOUNG ENGLAND, the two postage-stamps belong to Spain, and were issued in 1860. The new issue of last year bears the word "España;" and it would be advisable for all countries to place the name on the stamp, so that those who "ran might read." The currency is Cuartos, not quartos.—Your obedient servant, MOUNT DROUN.

GEOLOGY.—Dear Sir,—My brother, who is one of your subscribers, has requested me to write to you concerning some geological specimens which I was lucky enough to find last winter. I tried to persuade him that Dr. Gray would rather not be troubled, but he showed me your preface, where I find that the contrary is the case. I have made drawings of them, and should really feel much obliged for any information on the subject. They were all found during last winter between Eastbourne (where we were residing) and Beachy-head. We spent many pleasant hours under the cliff, and I got many specimens of ammonites and other shells. One day we determined to have a grand geological hunt, and started with hammers and other paraphernalia. After about an hour's hammering, we hit upon the bone, the exact size of which I have given in Plate II., which represents the same bone in two different positions. The next day we returned to the same place, and found the bone which I have drawn in Plate I. It is a very interesting specimen, and I have drawn it in three different positions. X and Y represent the different sides of the bone, and Z the end of it. We found them in what I imagine to be the *green sand*, and my brother thinks they are those of the Pterodactyle. Continuing our walk, we came upon some rocks, which had but lately fallen from the cliff above. In one of which I discovered Plate III., a portion of a large ammonite projecting; the line A B represents it. After

a very hard day's labour, we uncovered the whole face, which was about three feet across, and lay in the rock in the position which I have shown. In trying, however, to get it out, we so damaged it, that we were obliged to leave it; but as a remembrance, brought it away with us. The little piece which, as you may see, I have marked at E, a plan of which (the exact size) I have given on one side, and an elevation of it on the other. My brother, who has lately been to the British Museum, could see nothing like it there. I cannot say, for certain, that the plan which I have given of the ammonite is exactly alike, because we had knocked it about very much from E to C; but certainly, at the time, the part which I have marked at E, and the plan and elevation of which I have sent you, appeared to my brother and myself a part of the shell. I have never seen anything like it belonging to any other, nor did we find another like it out of the very many we collected at Eastbourne. I trust you will not think I am encroaching on your time, but my brother thinks he may as well avail himself of your offer to the full, and thinks that the editor of YOUNG ENGLAND will be glad to help the rising generation out of a difficulty; and believe me, sir, yours respectfully—RICHARD G. BULKELEY.

[We do not like to express an opinion upon the bone without seeing it; the probability is, if taken from the green sand, that it is *not* the Pterodactyle. The drawings suggest *two* shells, a large and smaller one.]

A YOUNG GARDENER.—1st. I am a young gardener, strong and active: what prospect should I have in Australia or any other colony?—2nd. What society would be the best to go out under? as I have little or no means of going independently.—3rd. When is the best time to go to Australia?—You must understand, sir, that I should not be particular what I turned my hand to at the first, if there was a chance of something better afterwards. Yours, &c., A. C.

[Write to the Secretary of any of the Emigration Societies.]

Sir,—Will you please send me instructions on what to feed a canary? It sang or rather chattered until about a month back, and then it began to throw both its long and short feathers. Please put in your paper the best remedy for bringing it back to its song. Sir, I hope you will excuse me for writing so late, but I have been very busy through stock-taking.—R. P. H., Kendal.

[Keep the bird warm. In addition to hempseed, chickweed, yolk of eggs, lump sugar, give a little raw beef scraped and moistened with cold water. Be sure it is plentifully supplied with clean water, and sand and gravel.]

BRITISH BIRDS.—J. MOORE, Kelverstone Rectory, will see the series is continued.

M.—Not to be had.

THE GULF STREAM, &c.—SHARKS.—Sir,—In this variable climate any signs which may serve as indications of the probable temperature of the seasons must be generally interesting. During the last two summers visitors to our coasts have been scared by incursions of sharks, which were duly chronicled in the newspapers. On the strength of this I have ventured in both instances to predict mild winters, not, indeed, wholly exempt from frosts, but from frosts of long continuance. My theory is that the presence of sharks is a sure indication that the Gulf stream is setting in full force round the shores of these islands, tempering the severity of these northern climes: for it is a well-known fact that these monsters of the deep abound in tropical latitudes; and therefore it may be presumed that some of them follow the hot water. I am confirmed in this view by observing that the two last winters have been remarkably inclement in Russia and on the continent of Europe generally, while with us, notwithstanding long spells of north winds ought to have frozen us up entirely, we have had very little cold to complain of. I need scarcely add that, if my hypothesis is of any value, sharks will henceforth be looked for as welcome guests. We never hear of any fatal depredations committed by them on these shores, but if Jack Frost be the prey they are in quest of, no one will grudge them their repast. I am, Sir, yours, &c., OBSERVER. December 30.—[Letter to *The Times*.]

THE JERSEY TIGER.—Sir,—Would you please to inform me whether "The Jersey Tiger," a species of moth, can be truly considered a British species?—P. W., Derby.

[The Jersey Tiger (*Hypercampa Hera*) cannot be considered a truly British species; several instances are recorded of its capture in this country, but all more or less doubtful.]

PUNCTARIA.—Dear Sir,—Can you tell me the name of a small moth which I caught in the summer? It is rather smaller than a Bloodvein, and somewhat like it in colour, but rather lighter. It has a black line extending across both wings from the costal to theinner margin, and between this and the hind margin a row ot dark dots. The fringe is, I think, light.—W. S. B.

[Probably *Ephyra punctaria*, or one of the allied species.]

RED ADMIRAL, &c., IN WINTER.—The *Vanessæ* which hybernate, conceal themselves in hollow trees, outhouses, haystacks, &c.

PUPA-DIGGING.—About six inches to a foot.

EGGS OF LEPIDOPTERA.—See the "Rambles of a Young Naturalist" in the present number, and read Butterfly and Moth Numbers of YOUNG ENGLAND.

THE SALLOW.—This is one of the names of the willow, of which there are at least thirty species, some reckon two hundred. It is the catkin which attracts the moths; but do not suppose because a tree bears a catkin that, therefore, it is a willow—*many* others have catkins too.

SAWFLIES.—Will you tell me the name of the Moths or Butterflies which the following larvæ produce? The first larva is of a whitish green colour, of about two inches long, tapers towards the tail; it had eighteen legs, I took it in the end of June. In the middle of July it changed its skin to another of the same colour, with a brown head in place of the former green one. When first touched it emitted an effluvium. In August it spun itself a cocoon, a piece of which I have enclosed. The second is of a deep orange, spotted with black, three-quarters of an inch long, tapers towards the tail. I found the first on the common thorn; the second on the willow; of the last I have also enclosed a piece of the cocoon. Neither of them are pupas yet, but when touched move.—A BOOKWORM.

[Both the larvæ described appear to be those of Sawflies (*Tenthridinidæ*), and not Moths or Butterflies.]

DESTRUCTION OF SMALL BIRDS.— Dear Sir,—Permit me to lift up my voice against a great evil which is daily becoming more alarming, I allude to the wholesale destruction of birds. Now, it has often been alleged that birds, and especially sparrows, are the enemies of the farmer and the gardener, which statement may be proved to be untrue by the fact that only four pairs of these birds are estimated to destroy upwards of a million caterpillars in a single summer, besides butterflies and other insects. And yet, in the very face of facts like this, farmers annually destroy vast numbers of these—their true friends. I remember reading of a lady, who, last spring, destroyed, in her garden and grounds, no less than eight hundred birds, and shortly afterwards was preparing for a second slaughter. The consequence of this war of extermination is that insects and caterpillars multiply at an astonishing rate, and gardeners have, in many instances, been compelled to pay boys to pick them off their fruit-trees. This would have been done much more effectually and "for nothing" by the birds. Let "YOUNG ENGLAND" therefore refrain from robbing the nests of our feathered songsters, let them reflect when tempted to steal the young ones, and let them remember that in holding back their hand from bird-nesting, they are helping to save their beloved country from distress in future years. I humbly request you, sir, if you think proper, to give insertion to this in your interesting periodical.—AN ANTI BIRD-DESTROYER.—Newport, Isle of Wight, December 8, 1862.

A CHEMICAL SOLUTION.—Could any one inform me how to make a solution of any chemical, not being a liquid?—H. C.

NOTE TO CORRESPONDENTS.—Are your Correspondents allowed to ask more than one Question on the same sheet of paper?—F. W., Torquay. [No.]

THE BRITISH REPTILIA.

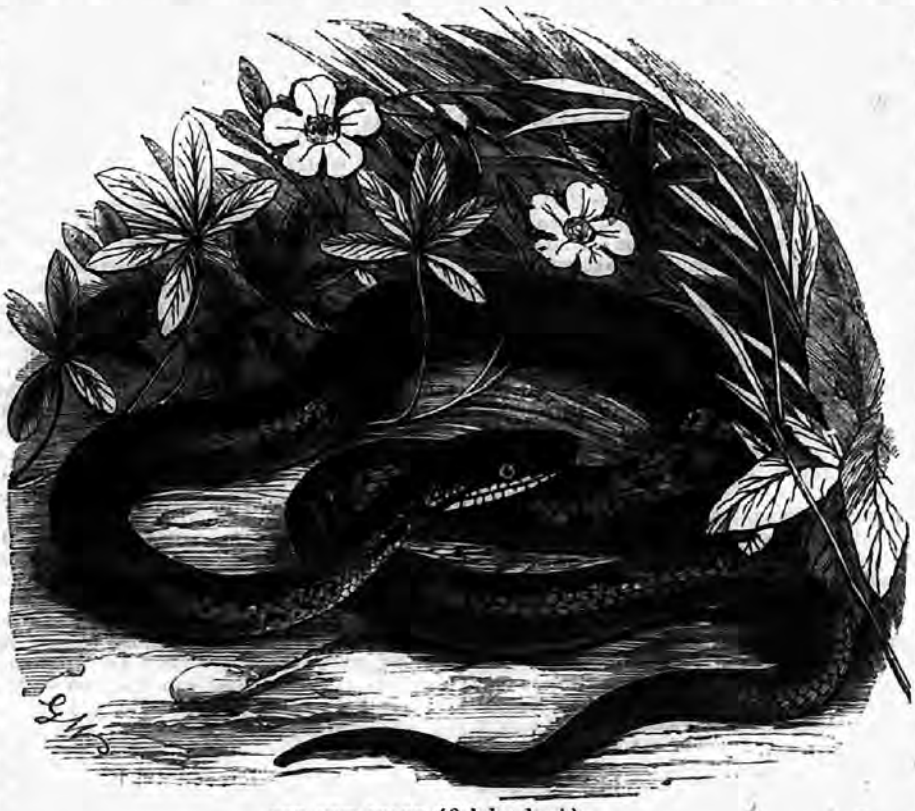
No. I.—SNAKES (*concluded from page 5*).

WE also present an engraving of the *Coluber lævis*, or *Coronella Austriaca*, a newly-discovered British species. This snake is now creating great excitement, as though just now discovered. Our drawing was made nearly two years ago. The fact of its having been found in two places in Hampshire and elsewhere is a strong presumption as to its being a naturalized British species. The Hon. Arthur Russell took to the British Museum, in 1859, a specimen of the female, which was found near the flag-staff at Bournemouth, and in the same year Mr. Bond presented a fine large specimen, which he took at St. Leonard's, near Ringwood, in the New Forest, in 1854. Dr. J. E. Gray, the first to describe the snake, says:—

"It may have been overlooked as an adder, as it is nearly of the colour of the paler specimens (about the usual size) of that species. It is easily known from it by the want of the lozenge-shaped spots on the back, which are replaced in *C. Austriaca* by three rows of small darker spots, by the smooth sides, and the shielded head."

Mr. F. T. Buckland, in a short paper in the *Leisure Hour*, says:—

"A young gentleman-cadet, of the name of Fenton, now studying at the Royal Military College, Sandhurst, caught, one day last autumn, a snake which was neither a viper nor a common snake, and therefore most properly brought it up to the Zoological Gardens, where it was at once recognized by the learned Dr. Gunther, of the British Museum, as being a snake not uncommon in Austria, and whose Latin name is *Coronella lævis*, or *Austriaca*. *Coronella*, or little crown—the markings on the head are somewhat like a crown; *Lævis*, from the smoothness of the scales, equally to snakes. Where this snake came from, there must, or certainly ought to be, his friends and relations. It was no use thinking and speculating on the matter, so I immediately engaged with my private viper-catcher, whose name is White, to go down and look for more. Accordingly, in a few days, White returned with seven vipers, and, to my great delight, one specimen of the new snake in the most beautiful condition. The head is, strange to say, highly iridescent, shining in the sun like the brightest dark emerald-coloured velvet; the scales are as slippery as polished horn; the eye small and very bright; the general appearance very like the head of a lizard; the temper decidedly bad when first caught, for my lady turned round and fastened on to my hand. I knew very well she had no poison-fangs, or the experiment would have been dangerous. I took the greatest care of my new pet, and it was lucky I did so. In a few days it was discovered that my new snake had increased her species, for five young ones were found in the cage with her. Three of these are now alive, and have grown considerably. They are very pretty little things, and have shining iridescent heads like their mother, towards whom, strange to say, they most decidedly show an affection and liking, being never found many inches away from her side. Not contented with this specimen, I again sent my man away, and by his means, and also through the kind assistance of Mr. Fenton, procured other specimens, one of which contained the young—a most valuable example, inasmuch as by dissection I was enabled to show that the nature of this snake is viviparous,—that is to say, the young are born alive, and not inclosed in eggs, as are the young of the common snake. The Hon. Arthur Russell kindly called on me with another specimen which he had obtained in 1859, near Poole, in Dorsetshire. I am convinced that these 'lizard-eating' (for that is their nature) snakes are common enough in England, but that we have hitherto heard nothing of them, because they have been mistaken for, and killed as, the common viper. Next season will doubtless bring out many of these new snakes from their hiding-places."



THE NEW SNAKE (*Coluber lævis*).

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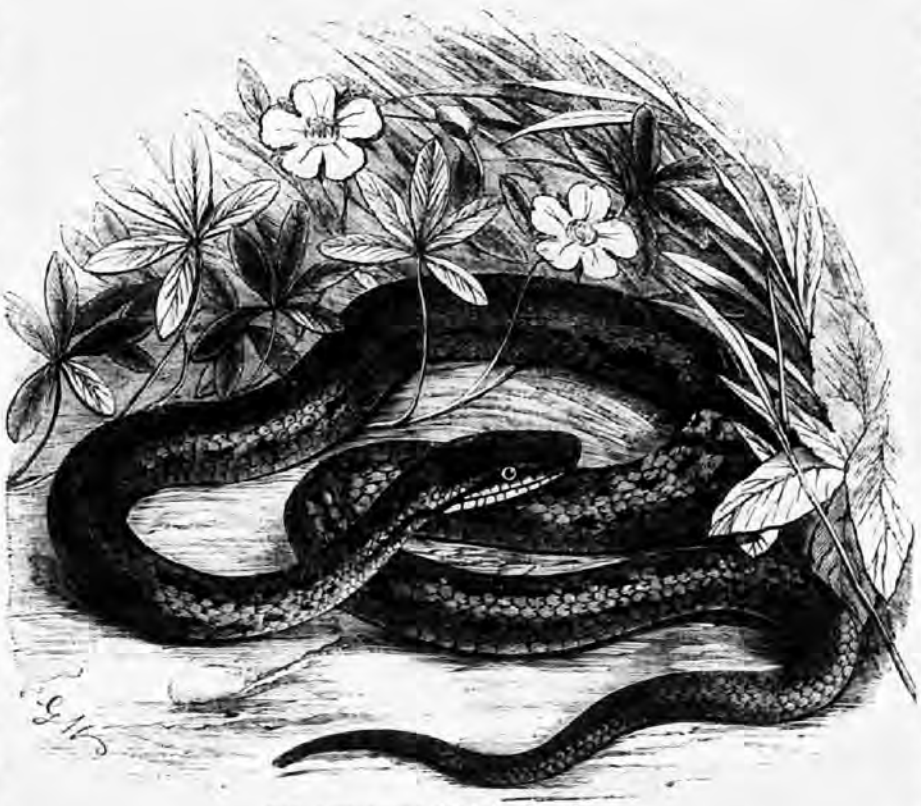
Mr. F. T. Buckland, in a short paper in the *Leisure Hour*, says:—

"A young gentleman-cadet, of the name of Fenton, now studying at the Royal Military College, Sandhurst, caught, one day last autumn, a snake which was neither a viper nor a common snake, and therefore most properly brought it up to the Zoological Gardens, where it was at once recognized by the learned Dr. Gunther, of the British Museum, as being a snake not uncommon in Austria, and whose Latin name is *Coronella lævis*, or *Austriaca*. *Coronella*, or little crown—the markings on the head are somewhat like a crown; *Lævis*, from the smoothness of the scales, equally to snakes. Where this snake came from, there must, or certainly ought to be, his friends and relations. It was no use thinking and speculating on the matter, so I immediately engaged with my private viper-catcher, whose name is White, to go down and look for more. Accordingly, in a few days, White returned with seven vipers, and, to my great delight, one specimen of the new snake in the most beautiful condition. The head is, strange to say, highly iridescent, shining in the sun like the brightest dark emerald-coloured velvet; the scales are as slippery as polished horn; the eye small and very bright; the general appearance very like the head of a lizard; the temper decidedly bad when first caught, for my lady turned round and fastened on to my hand. I knew very well she had no poison-fangs, or the experiment would have been dangerous. I took the greatest care of my new pet, and it was lucky I did so. In a few days it was discovered that my new snake had increased her species, for five young ones were found in the cage with her. Three of these are now alive, and have grown considerably. They are very pretty little things, and have shining iridescent heads like their mother, towards whom, strange to say, they most decidedly show an affection and liking, being never found many inches away from her side. Not contented with this specimen, I again sent my man away, and by his means, and also through the kind assistance of Mr. Fenton, procured other specimens, one of which contained the young—a most valuable example, inasmuch as by dissection I was enabled to show that the nature of this snake is viviparous,—that is to say, the young are born alive, and not inclosed in eggs, as are the young of the common snake. The Hon. Arthur Russell kindly called on me with another specimen which he had obtained in 1859, near Poole, in Dorsetshire. I am convinced that these 'lizard-eating' (for that is their nature) snakes are common enough in England, but that we have hitherto heard nothing of them, because they have been mistaken for, and killed as, the common viper. Next season will doubtless bring out many of these new snakes from their hiding-places."



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EXCHANGE.

EGGS.—The Tufted Duck breeds every year in one or two places in Nottinghamshire. Last year I got four eggs, and I should be glad to exchange one for any eggs I still want. I also have duplicates of the Razor-bill, Puffin, Guillemot, Lesser Black-backed Gull, Wryneck, Coot, Water-hen, Corncrake, Sparrow, Hawk, Lapwing, Bullfinch, Redstart, &c. FERNS.—I can also exchange specimens of Lastræa cristata, Lastræa uliginosa, Lastræa Shelypteris, Lastræa fœnisicii, Allosurus crispus, &c. My desiderata are Asplenium alternifolium, A. septentrionale, A. fontanum, Woodsia hyperborea and Ilvensis, Cystopteris alpina, Dickieana, and Montana. Athyrium rhæticum, Polypodium alpestre, Polystichum lonchitis, Gymnogramma leptophylla, and Ophlioglossum lusitanicum.—THOMAS P. LUCAS, High Wycombe.

CAPTURES.

DIPTERYGIA PINASTRI.—On looking over my captures for the past season, I found a specimen of this uncommon species, it was taken in Clapton the latter end of last June. I have also obtained the following:—Metrocampa margaritata (plentiful in Epping Forest), Tephrosia crepuscularia (ditto), Ligdia adustata, Hybernia defoliaria (off lamps in November), Onisopteryx æscularia (common on palings in March), Emmelesia alchemillata and decolorata (plentiful), Melathia rubiginata (swarming in August on hedges near Chingford), Malbicillata (a very fine specimen in Woodford), Pyralis costalis (very plentiful). Oglossa cuprealis, and a quantity of more common species.—WM. COLE, Tottenham.

BRITISH BIRDS.—Sir,—Can you, or any of your numerous ornithological readers, inform me of a *cheap* work on British Birds, which gives descriptions of them, something similar to the descriptions of moths in "Stainton's Manual"?

SWALLOWS.—Will you inform me whether it is a common occurrence for the swallow (Hirundo rustica) to remain with us so late as the present period (November), as I have seen several during the past few days?—A LOVER OF NATURE.—Ringwood.

[There is no small synopsis of British birds like Stainton's Manual since Turton's British Fauna and Jenny's British Animal. There is a very nice little work on British Birds, with good figures of many species, published by the Christian Knowledge Society, but it does not profess to contain all the species. Some stragglers of swallows often remain to the end of November if the weather is mild.]

POSTAGE-STAMPS.—Sir,—Would you please inform me what stamp this is?—It is oval, at the top Drei Kreuzer, in the centre, head in white relief to the right, at the bottom the number 3.—P. W., Derby.

WRAPPER FOR "YOUNG ENGLAND."—Dear Sir,—Is there a blue wrapper for the January number of "YOUNG ENGLAND" similar to the one for the February number? as I did not receive any.—F. D. CREMER.—[No. The gift of the Almanack precluded the cover.]

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OVA OF THE SILKWORM.—MRS. E. N. wishes to know if any supply these, and at what price, or can they be exchanged? Now then, are there not many who will send them to a lady?

COLLECTION OF NATURAL HISTORY, KENSINGTON MUSEUM.—Can you inform me who are the proper persons to address when about to present a collection of natural history specimens to the South Kensington Museum?—Yours truly, W. CAMPBELL, 34, Church-street, Chelsea.—[Write in the first instance to the Curator or Secretary of the Museum, addressed to the Secretary of the Kensington Museum.]

R. B. SCHOMBERG.—Let us see one.

A DERBY LAD has found some spiders' eggs.—The only exception to the uniform size of "YOUNG ENGLAND" and extra numbers is the Butterfly Number.

ENTOMOLOGIST'S COMMUNICATION.—Sir,—I am very sorry the *Entomologist's Weekly Intelligencer* is discontinued, and I really think that this will be a "heavy blow and great discouragement" to entomology in this country, and I venture to express a hope that either the editor or some other entomologist may open some new channel for the continual and fraternal accommodation of entomologists in place of the one so long enjoyed. With regard to exchange or "selling," as some call it, as far as my knowledge extends, the rule is to give away duplicates, with regard to the return that might be made. In this way every one does the best for his friends.—HENRY BIRD, Hadley, Middlesex.—[Entomologists are at liberty to use the pages of "YOUNG ENGLAND" free of charge for Exchanges, Captives, &c.]

Dear Sir,—Being a firm admirer of Garibaldi, and hearing he was distributing his bandages, I should be much obliged if you could direct me where to get a piece.—I remain yours, &c., BANDAGIUS.—[We are quite ignorant on this profound subject.]

EXCHANGE, &c.—Sir,—I have two pairs of the Broad-bordered Bee-hawk, I should like to exchange for two pairs of the Narrow-bordered ditto. If any of your correspondents have them, I will send mine first. I have made several exchanges through your paper, which I like very much. I saw a great many different ways of relaxing insects. I have tried the box lined with plaster of Paris: it answers very well. I have set out upwards of 200 flies lately: they set out better than when first caught.—A. STEER, Hawk's Road, Norbiton, Kingston, Surrey.—Feb. 6.

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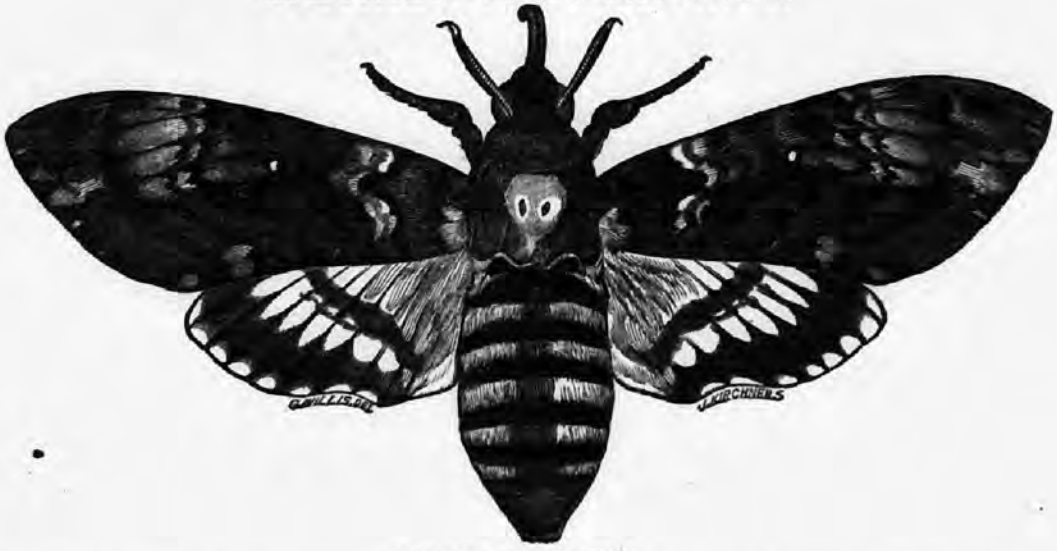

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No. 5, VOL. II.

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SIR,—We have captured, during the last three months, P. Pilosariæ; and bred a female, H. Progemmaria, male and female; C. Brumata, and bred a female; A. Ascularia, B. Hirtaria, H. Leucophearia, several males, but one female; and several other commoner species. We have been very successful in digging for pupæ.—A. G. T. and W. T., 1, Cirencester Terrace, Gloucester Road.

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*** We shall be obliged to our subscribers if every one will get another.

NOTE TO CORRESPONDENTS.—*Please attend to the Rules for those who write for the Press, page* 14, *Vol. II., and always send real name and address, though these need not be printed.*

THE BOTANIST.—Dear Sir,—I desire, through the medium of your excellent periodical, to tender my warmest thanks to Mr. Britten for his notice of the "Botanists' Chronicle." It has supplied a want that, I may say, has been universally felt among amateur botanists, and I sincerely hope that it may meet with the success that its merits deserve.—H. GAMBLE, 8, Shawfield Street, Chelsea, Dec. 5, 1863.

CHEMISTRY.—Dear Sir,—I have read your "monthly" with much pleasure, and I was very glad to see "Chemistry for Boys" begun a few months ago. May I request the continuance of these very useful papers, as, during the winter months, what could be more amusing in the evenings than a few chemical experiments, besides the instruction they convey?—A.C.W., Dec. 9, 1863.

Sir,—In your August Number you gave some instructions for fitting up a chemical apparatus, and promised further instructions on the subject. No further notice has appeared, and those who have bought some of the articles required are unable to make any use of them. Also, with respect to the article on the African Race, no further notice has appeared. I am desirous to learn why these things are so.—A WOULD-BE CHEMIST.—Waterloo Road, Dec. 9, 1863.—[Our correspondent will see the articles on Chemistry are continued in the present Number. The concluding article on the African Race will appear as soon as we can find room for it.]

CHRYSALISES.—Sir,—Would you be kind enough to tell me where I can get the chrysalises of the Swallow-tail, Purple Emperor, Camberwell Beauty, and White Admiral butterflies? By answering the above, through "YOUNG ENGLAND," you will oblige W. BARRASS, Dec. 5, 1863.—[At any Naturalist's, if at all.]

MOTH NUMBERS.—Would you inform me whether you propose to carry on the extra Moth Numbers of "YOUNG ENGLAND," as we all look upon it as a first-class work in this district?—T. FOSTER, Selby.—[Certainly: the next Number is now in course of most careful preparation.]

T. E. G.—We shall be always willing to hear from Norfolk.

A CONSTANT SUBSCRIBER is thanked for his suggestions. We shall be glad to adopt them if we can.

PRY will see his questions are answered under the head "Moth Numbers" above.

VIVARIUM.—In our next. The paper has not arrived.

OBSERVATIONS ON ROOKS.—The article is in type.

FAIRY RINGS.—Also in type. There are several other articles in type, which are standing over for want of room.

EXCHANGE.

SHELLS.—Dear Sir,—Having a number of species of English and foreign shells in duplicate, I should be glad to exchange with any naturalist for English shells, upper tertiary or raised beach fossils. Your very kind notice would oblige, very respectfully yours, ROBERT BELL, Heber Place, Mare Street, Hackney, London.

LEPIDOPTERA.—Among my remaining duplicates I have the following for exchange:—V. Io, H. Hectus, H. dispar (bred), S. salicis, M. miniata, C. flavicornis, B. perla, M. persicariæ (bred) H. aclusta, E. Porata, A. luteata, A. scutulata, L. petraria (a fine series), F. piniaria, C. brumata, M. albicillata, S. dubitata, E. bipunctata, P. costalis, R. pinivorana, R. arcuella, E. roseana, H. fœnella, H. minimellus, P. querana. I have also two very fine male specimens of *Colias Edusa*, which I should like to exchange for a pair of either E. cassiope, L. sibilla, P. arion, S. tiliæ, or for 4 T. primi, 4 P. Adonis, 4 P. Artaxerxes, or 6 N. lucina.

Applicants had better send lists of *all* their duplicates, my wants being too numerous to mention.—Address, H. RAMSAY COX, West Dulwich, Surrey, S.

CAPTURES.

LEPIDOPTERA.—S. ocellatus, S. tipuliformæ, N. camelina, L. monachia, O. pudibunda, B. quercus, G. flavago, N. hispidaria, P. pilosaria, A. prodromaria, B. roborario, M. albicilata, O. sambucaria, E. tiliaria, B. temeraria, T. crepuscularia, A. paphia, A. selene, A. Euphrosyne, W. C. album, E. Jacobææ, C. Aprilina. To prevent disappointment, the last three are the only specimens I have in duplicate.—THOMAS FOSTER, Church Lane, Selby.

LEPIDOPTERA.—I send a list of my principal captures during the year. If you think them worth insertion, they are the following:—L. ægeria, L. mægera, H. hyperanthus, H. tithonus, C. pamphilus, V. atalanta, V. io, C. phlæas, S. populi, S. ocellatus, H. lupulinus, H. sylvanus, C. vinula, D. cæruleocephala, P. Buchephala, O. antiqua, L. complanula, L. quercus, C. spinula, X. rurea, C. alsines, C. blanda, N. augur, S. stabilis, E. lucipara, G. libatrix, N. C. nigrum, H. micacea, H. pennaria, B. rhomboidaria, A. æsculuria, B. amataria, C. miata, E. mensuraria, A. derivata, A. badiata.—A. B. WATSON, Midlothian Villa, Leamington, 10th December, 1863.

BIRMINGHAM NATURALISTS' UNION.—ANNUAL EXHIBITION OF SPECIMENS.—This Union held its first exhibition on the evenings of Nov. 18 and 25, at their rooms, 125, Suffolk Street. It was kept up for two evenings on account of the interest taken in it, and a large number of members and their friends were present. Mr. W. Evett (Vice-president) took the chair at the first meeting, and Mr. A. Franklin (President) on the second. The room was tastefully decorated with specimens in every branch of natural science. Around the walls were a number of representations of British and Australian birds. On the walls, also, were a large variety of horns; hanging from the ceiling were two fine specimens of the kalong bat (*Pteropus Javanicus*), and a large skin of the boa constrictor, measuring fourteen feet long. Entomology was well represented. There were two cases brought by Mr. W. Evett, containing some very fine insects (*Ceriopia*), all captured by the exhibitor near Philadelphia, United States. Entomological cases were also shown belonging to Mr. W. Macmillan and Mr. J. C. Barnes. Mr. A. Franklin also brought some cases of insects containing upwards of four thousand specimens. *Cervicornis*, one of the beetles exhibited, is remarkable for its manner of obtaining branches of trees or shrubs; it lays hold of the desired twig with its mandibles, and then flies round it till it has succeeded in sawing it off. Mr. A. Franklin lent a nice collection of birds. Mr. R. Price brought some plants, beautifully dried and mounted by himself. There were also some hundreds of geological and mineralogical specimens. A large case at one corner of the room contained a number of zoological specimens belonging to Mr. W. Macmillan, Australian grasses, botanical specimens from the vicinity of Snowdon, sphagnum from Shropshire, and lichens from Cornwall. On the 18th, Mr. Grice read a paper, entitled "Reviews of the Past Year's Proceedings," in which, in his usual fluent style, he delineated the progress of the Union during the past year. On the 25th, a paper was read by another member, on "The Snow Bunting." On both evenings several members and other gentlemen addressed the meeting on the Union and the specimens around them. This is the first exhibition of the Union, but we hope it may not be the last. May it invigorate the members to new efforts in the cause, and let the next exhibition far outvie this one, and do their best to fully make known the works of the great Creator.

DAISY.—The Rev. Mr. Morris has published the British Moths, coloured. How far the work is gone, or what is the price, we do not know; but any bookseller would ascertain for you. Mr. Stainton's Manual is an excellent work, and would probably suit your purpose for identification. For the British Butterflies you certainly cannot do better than buy the "YOUNG ENGLAND" extra Number by Mr. Newman, which Number contains the British Butterflies, with accurate engravings of them all. If "Daisy" wishes to exchange her butterflies, she must say where she grows, or rather blooms—in other words, must give her correct address to her correspondents.

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TO ENTOMOLOGISTS.—The Remainder of the Collection of Lepidoptera that was advertised in the November Number, are still for sale in lots from 2s. 6d. and upwards. There are above 15 species in each of the 2s. 6d. lots, and above 30 species in the other lots. A list of the lots will be sent on receipt of a stamped envelope. Also the "Entomologist's Weekly Intelligencer" complete from the commencement; six volumes of which are neatly bound in cloth and gilt letters; the other four volumes are unbound. The lot, price 21s. Address, T. H. Wood, 29, Bondgate, Darlington.

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The Instruction and Amusement

OF THE

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ALPHABETICAL TABLE OF CONTENTS OF THE PRESENT NUMBER.

Latin Names of the Subjects in Natural History.

No. 2, VOL. III.

LONDON: W. TWEEDIE,

337, STRAND.

Captures, Exchanges, Notices, &c., may be inserted here free of charge when not for purposes of trade.

*** We shall be obliged to our subscribers if every one will get another.

NOTE TO CORRESPONDENTS.—*Please attend to the Rules for those who write for the Press, page* 14, *Vol. II., and always send real name and address, though these need not be printed.*

NOTICES.

NOTICE TO ENTOMOLOGISTS.—It will be seen we are continuing the British Moths in YOUNG ENGLAND. We hope this will meet the wishes of our eager, incessant, and very numerous correspondents. This Number finishes the winter moths. The next Number will enter upon the Larentiidæ, including the famous Eupithecia. The Extra Moth Numbers, 6d. each. Six are out.

YOUNG ENGLAND FOR ENTOMOLOGY.—Dear Sir,—The decease of the *Weekly Entomologist* has caused another void in entomological literature much to be regretted. The *Entomologist*, and its predecessor the *Intelligencer*, supplied a want long felt. They devoted themselves entirely to entomology in all its branches, and were the means of publishing many valuable papers and much useful information. The extinction of the former paper has again thrown us upon our beam-ends, and we look anxiously for a successor. Doubtless the *Entomologist* came out too frequently, and its pages were therefore difficult to fill; a periodical coming out comparatively seldom, and having a less space to fill would unquestionably be a great boon to the junior workers in the study of insects. Now, in the correspondence column of YOUNG ENGLAND, you have a constant succession of notices and information, which, if carefully sorted, the chaff being separated from the wheat, would doubtless go very far towards filling that void that now exists. We have carefully considered the whole of these circumstances, and, though feeling our own inability, are willing to offer our services in managing the entomological portion of YOUNG ENGLAND, and sifting and examining such contributions as may be forwarded. We would propose that a page be given up for entomological matter, which we would, assisted by our friends, and aided by the present contributors to YOUNG ENGLAND, undertake to fill. Should you consider the suggestion and offer tangible, it would be as well to insert this letter, and to invite all the entomological readers of the paper to co-operate with us. It would be most convenient for letters to be sent to either of us, addressed as below, where we could recopy or extract such portions as might be necessary. The general arrangement would be an humble imitation of the *Intelligencer*, and would doubtless be acceptable as a substitute. Finally, we would stipulate that our services must be purely honorary. We have the honour to remain, your most obedient servants—F. LOVELL KEAYS, 4, Harringay Villas, Tottenham, N.: HOWARD VAUGHAN, 14, Gaisford Street, N.W.—[We are quite willing to devote a separate page of YOUNG ENGLAND to this object. Our entomological correspondents are therefore invited to send their communications as above; or their letters may appear in the ordinary way, as heretofore.—ED. Y. E.]

THE BIRMINGHAM NATURALISTS' UNION.—The meetings are held on Wednesday evenings, at eight o'clock, at the rooms, 125, Suffolk Street, where gentlemen desirous of joining may obtain every information. Members have the privilege of introducing a friend at any meeting.—Secretaries, JOSEPH GRICE, 56, Lee Crescent, and A. H. ATKINS, 195, Irving Street.

JOURNAL FOR ENTOMOLOGY.—Sir,—It gave me great pleasure to see in your excellent journal that a periodical entitled the *Botanist's Chronicle* has lately been brought before the public. I truly wish that the same might be done as regards entomology. It is a deplorable fact that there is no paper now in print whose columns are devoted entirely to the study of entomology. I appeal to you, sir, and to any who may read this letter who feel themselves able to edit a paper on entomology, not to hold back; for I am assured such a paper would be a source of great pleasure and instruction to every entomologist throughout the land. Sincerely hoping that you, sir, will do something in this matter, I remain, sir, yours faithfully, A. B. WATSON, Midlothian Villa, Leamington, 11th January, 1864.—[A paper devoted entirely to entomology has been tried twice, and has resulted in *heavy* pecuniary loss, and we believe these are not the only instances. We have had nothing to do with them, nor could we be induced to start a paper wholly devoted to the subject. A part of YOUNG ENGLAND is given up to entomology—more than that is not needed, nor should be asked. See notice above.]

CRICKET.—Now is the time to get ready for Cricket. See "Cricket," by Lillywhite, price 6d.

CAPTURES.

Sir,—I send you a list of my principal captures during 1863, which I should like to see on the covers of YOUNG ENGLAND.

E. cardamines, L. Egeria, L. Megera, H. Tithonus, C. pamphilus, H. hyperanthus, V. Atalanta, V. Io, A. Euphrosyne, A. Selene, N. lucina, C. phlæas, T. quercus, T. tages, P. sylvanus, S. populi, A. villica, H. dononula, M. maura, O. potataria, C. elinguaria, O. sambucaria, S. libatax, H. perneria, D. Noveriberis, G. vaccini, E. blomeri, S. unipunctana, A. leporina, B. rhomboirador, P. Gamma, P. Iota, C. Jacobæ, Burnet, &c. To prevent disappointment, I have none to change.—YOUNG ENTOMOLOGIST, James's Street, Taunton.

EXCHANGE.

LEPIDOPTERA.—Dear Sir,—My wants being very numerous, I should be glad to exchange fine-bred insects of the following, if any of our Entomologists are in want of them, and I should be glad to receive offers for them:—"B. historia, L. pectinctaria, M. tristata, H. aurantaria, M. subtristata, D. cæsulecaphala, A. basillinea, C. cubicularis, T. fimbria, N. brunea, H. citrago, P. chi, A. Aprilina, and many others.—Address to R. W. BURGESS, top of Spital Street, Sheffield.

Sir,—I have a quantity of the C. curtula and C. anachoreta pupæ, and should be glad to receive offers for them.—Address, GEORGE IRELAND, 18, Peter Lane, Market Street, York.

SPECIMENS OF SHODDY MANUFACTURE.—Will you kindly state in your next month's Number, that I have a few sets of nearly forty specimens of the different stages of the shoddy manufacture for exchange for similar other collections, eggs, &c.—96028, Batley, Yorkshire.

AQUARIUM.—I have been very successful with following the directions laid down in YOUNG ENGLAND for the fresh-water Aquarium, and now feel very desirous of trying a salt-water Aquarium, but, living inland, have not the opportunity of getting the necessary plants, seaweed, fish, &c. Is there any reader of YOUNG ENGLAND would kindly supply me with the necessary plants, &c. Please address, stating price, &c., to J. POOLE, Clayton West, near Huddersfield, Yorkshire.

INSECTS,—Sir,—Will you please to inform me whether you intend to publish any more information (than at present) in the Young England, with regard to insects: for I, with several of my acquaintances, subscribe to it for that information alone.—R. KAY. [Certainly we do. See the above Notice to Entomologists, and the Letter from Messrs. Keays and Vaughan—ED.]

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NOTICES.

ENLARGEMENT OF YOUNG ENGLAND.—It is proposed to enlarge YOUNG ENGLAND, by a considerable increase of the number of its pages. The many advantages of this enlargement are so obvious as not to need enumeration. It will give room for treating a larger number of subjects, not only of things in general, but specially entomology, botany, geology, conchology, &c. Our valuable correspondence may thus be increased to a very great extent. We wish our paper to afford ample space for gentlemen and ladies too, to record their observations in Natural History and other subjects of general interest. Let them, then, turn out their treasures and prepare them in short, clear articles for publication. They should send to us in good time.

We should like to hear from them during the present month, so that our preparations may be complete early, especially if the papers require illustration. Many who have already written to us can now receive that attention which our limited space would not allow before.

THE BUTTERFLY SHEET is not printed: there were so few orders we did not feel disposed to go to press.

THE BRITISH MOTHS.—From the numerous letters we have received it is evident our subscribers would prefer the Moths to be continued, *not* in YOUNG ENGLAND, but in the Extra Nos. as before. We have therefore determined to proceed with the seventh No. as soon as ready.

B. B. SCOTT.—The common Yellow Under-wing (T. pronuba).

GROSVENOR HODGKINSON.—Probably, but will not promise. To the second question, No, but hope to have soon.

J. A. HARKER.—We cannot say positively.

T. M. HICK.—We are obliged by the suggestion, and for promise of Entomological Notes.

A. B. WATSON.—In our arrangement of the Moths we follow Doubleday's Catalogue, and mean to abide by it. Our friend will see by that the Moths in question are arranged under another head. We are coming to them.

SIR,—It may interest some of your readers to learn that during the last few weeks several very nice specimens of the following birds have been killed in the neighbourhood of Epworth, Bawtry, Lincolnshire, and sent to me for preservation. Ruddy Shieldrake (*Anas rutila*), Common Shieldrake (*Anas tadorna*), Hooper or Whistling Swan (*Cygnus ferus*), Peregrine Falcon (*Falco peregrinus*), Bittern (*Stellaris ardea*), Spotted Sandpiper (*Totanus macularius*), Redbreasted Merganser (*Mergus servatea*), Marsh Harrier (*Falco æruginosus*). The above birds are in my possession, except one.—I am, sir, yours faithfully, H. GRAVIL, Epworth, Feb. 13th, 1864.

HECKMONDWIKE NATURALISTS' SOCIETY.—This Society consists of twenty-five members, is one of the six societies constituting the West Riding Consolidated Naturalist Society. Meetings are held monthly at the house of Robert Jackson, Heckmondwike. President, Joseph Exley, Heckmondwike. Secretary, Isaac Binns, Batley, Yorkshire.

W. R. R.—Out of print.

GEORGE ROBERTS.—Let us see the MS.

SIR,—Can you inform me if the *Botanists' Chronicle*, alluded to in "YOUNG ENGLAND," No. 2, Vol. III., is really in print, as I have seen no advertisement of its publication; if it is in existence, can you tell me where to procure it?—J. J. LITTLEWOOD, Thorne, near Doncaster, Yorkshire.

[The *Botanists' Chronicle* has been sent to us; there are five numbers out; the price is 1*d*. There is no publisher's name on the numbers we have received; but, from the articles, we suppose it is supplied on application to 28, Upper Manor Street, Chelsea. It appears to be ably edited, and is well printed.—ED. Y. E.]

Is there any blood in a partridge or a hare, &c., after it has been well roasted, supposing it had been shot?—HALIFAX.

[Yes, some would be retained in the lungs.]

PIGEONS.—Which is the best work (from about 1*s*. to 2*s*. 6*d*.) published on Pigeons, with good instructions how to keep and preserve them; also with good coloured illustrations?—J. R. TURNER, Coggeshall, 10th March, 1864.

[We do not know, but any one may supply the information in our next Number.]

EXCHANGE.

BIRDS AND EGGS.—I have a large number of eggs and birds for exchange.—J. J. ARMISTEAD, Virginia House, Leeds, Yorkshire.

EXCHANGE.—One of our correspondents complains that his notice (lists of shells) has not appeared: it has probably got mislaid. Will he send it again? it was not intentionally omitted.

EXCHANGE.—The writer wishes to exchange for historical collections of the following manufactures:—lace, cotton, flax, silk, paper, straw plait, pins, needles, &c. Write to him, address 96,028, Batley, Yorkshire.

SHELLS.—I have a great many British land and fresh-water shells in duplicate, which I shall be glad to exchange for any I require. A marked list will be sent on application. Address, Lizzie Gillett, The Close, Charlbury, Oxon.

LEPIDOPTERA.—I have a number of good specimens of A. Galathea, P. Corydon, V. Atalanta, O. Sambucaria, which I shall be glad to exchange for any of the following:—C. Hyale, H. Semele, A. Adippe, M. Cinxia, M. Artemis, A. Aglaia, T. Pruni, P. Comma. Address, Lizzie Gillett, The Close, Charlbury, Oxon.

OFFER TO CAPTURE.—If the coming season prove favourable, I shall be glad to obtain the following Butterflies for any Entomologist, either in exchange for Northern species, Birds' eggs, Minerals, or geological Specimens:—Rhamni, Edusa, Cardamines, Sinapis, Galathea, Ægeria, Semele, Hyperanthus, Sybilla, Cardui, Atalanta, Io, Paphia, Adippe, Selene, Euphrosyne, Cinxia, Artemis, Lucina, Quercus, Rubi, Alsus, Corydon, Agestis, Alveolus, Tages, Linea, Sylvanus, and perhaps others.—WILLIAM JORDAN, Binstead, National School, Ryde, Isle of Wight.

CAPTURES.

Sir,—I send you a list of my principal captures in 1863, which I should like to see in "YOUNG ENGLAND:"—L. megæra, L. egeria, A. galathea, H. jamia, H. tithonus, C. pamphilius, V. Atalanta, V. Io, V. urticæ, C. phlœas, P. alexis, P. linia, P. sylvanus, S. populi, S. convolvuli, A. caja, C. ligniperda, H. humuli, P. statices, Z. filipendulæ, L. rubricollis, E. Jacobæ, C. villica, L. salicis, B. bucephala, O. potatoria, N. brunnea, T. satelliata, P. gamma, G. tubenca, A. pistacina, X. polyodon, X. tithoxglea, A. megacephalia, E. mi, H. rupicapiaria, H. progemmaria, B. hirtaria, C. diluta, G. putris, G. gebatrix, R. rhomboidaria, C. venula, B. perla. I have none to exchange except a few of the commoner ones.—G. ARNOLD, 4, Albert Villas, Seven Sisters' Road, Holloway.

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ALPHABETICAL TABLE OF CONTENTS OF THE PRESENT NUMBER.

Latin Names of the Subjects in Natural History.

No. 5, VOL. III.

LONDON: W. TWEEDIE,

337, STRAND.

Captures, Exchanges, Notices, &c., may be inserted here free of charge when not for purposes of trade.

NOTE TO CORRESPONDENTS.—*Please attend to the Rules for those who write for the Press, page* 14, *Vol. II., and always send real name and address, though these need not be printed.*

NOTICES.

ENLARGEMENT OF YOUNG ENGLAND.—It is proposed to enlarge YOUNG ENGLAND, by a considerable increase of the number of its pages. The many advantages of this enlargement are so obvious as not to need enumeration. It will give room for treating a larger number of subjects, not only of things in general, but specially entomology, botany, geology, conchology, &c. Our valuable correspondence may thus be increased to a very great extent. We wish our paper to afford ample space for gentlemen and ladies too, to record their observations in Natural History and other subjects of general interest. Let them, then, turn out their treasures and prepare them in short, clear articles for publication. They should send to us in good time.

We should like to hear from them during the present month, so that our preparations may be complete early, especially if the papers require illustration. Many who have already written to us can now receive that attention which our limited space would not allow before.

We invite suggestions so that the enlargement may be, to as great an extent as possible, an improvement.

NOTICES TO THE PUBLIC.

CORRESPONDING NATURALISTS' CIRCULAR.—The subscribers to the *Corresponding Naturalists' Circular* are respectfully informed that such periodical is now incorporated with YOUNG ENGLAND, and that all subscriptions to the *Circular* have been (or will be) returned by Mr. Macmillan. YOUNG ENGLAND may be ordered through any bookseller, or will be sent by post on the usual terms.

NOTICE.—It may be useful to some of our friends to be informed that Mr. George Willis, draughtsman, has removed his place of business to No. 8, Danes Inn, where all business communications should be addressed.

BIRMINGHAM NATURALISTS' UNION.—The attention of all lovers of Nature is directed to the objects and pursuits of this Union. The members mutually aid each other in the various branches of Natural History, by means of papers, conversations, exhibitions of specimens, field days, the formation of a library for circulation and reference, and the establishment of collections in Ornithology, Entomology, Botany, Geology, &c. The meetings are held on Wednesday evenings, at eight o'clock, at the rooms, 125, Suffolk-street, where gentlemen desirous of joining may obtain every information. Members have the privilege of introducing a friend at any meeting. Programme —May and June—May 4, "The Eider Duck." Mr. F. Collins; May 11, "Feathers—their adaptation," Mr. A. Franklin; May 18, "The Land rail," Mr. J. Bettridge; May 25, "The Kingfisher," Mr. W. Ashbourne; June 1, Exhibition. N.B.—The members are earnestly requested to forward their specimens early. June 8, "The Fox," Mr. R. Stanton; June 15, "The Dipper," Mr. E. Dalton; June 22, "Wild Flowers," Mr. R. Price; June 29, "The Brown Bear," Mr. J. C. Barnes. The Committee meet on May 4 and 25. Passes for the exhibition may be obtained from any of the members. The Committee will have great pleasure in receiving any books for the library, specimens for the collection, or well authenticated notes. Members residing at a distance may have their papers read on the appointed evening by forwarding them to the secretary.—A. H. ATKINS, 195, Irving Street, Secretary.

NOTICES TO CORRESPONDENTS.

W. BARRASS.—We do not know.

W. BUTLER.—10s. 6d. Partially.

G. T. P.—The next chapter is in type, waiting for room.

S. F. HEATH.—The botanical name of the nipplewort is *Lapsána communis*. The numbers of the first volume can be obtained through the bookseller.

BIRDS' EGGS.—Will the editor be kind enough to give me the names and addresses of two or three respectable dealers in birds' eggs, of whom I may procure price lists?—GEO. ROBERTS, Lofthouse, Wakefield.—[Dealers in birds' eggs had better write.]

Will X. Y. Z., who sent us two problems from Brighton, send the answers? We will then print the problems.

D. S. W.—Will D. S. W. have the kindness to state what parts of the article are not sufficiently clear?

PHOTOGRAPHY.—W. H. W. has sent part of an article from another paper, not an extract. If he sends an extract or an article by himself, we will insert it.

J. R. HARDING.—The English name of *Acherontia atropos*, is the Death's-head Hawk Moth. We do not know; probably M. Deyrolle, No. 19, Rue de la Monnaie, Paris, can inform you.

GIFT.

SEEDS.—Dear Sir,—I have a limited quantity of American seeds of plants grown in Philadelphia, America, last year, portions of which I will send gratis (until the supply is exhausted) to those applying, on receipt of a stamped envelope. The seeds are those of the following plants, viz.:—Zea Maize (Indian corn), Convolvulus major (Morning glory), Lupinus Americanus (American lupin), Helianthus Williamsii (Jamaican sunflower), and Philadelphus corondrias (Mock orange), and a few other plants.—Wm. E. WILLIAMS, Jun., M.D., Chapmanslade, Westbury, Wilts. N.B. I intended to send this in time for the March number of YOUNG ENGLAND, but it was forgotten.—W. E. W., Jun.

EXCHANGE.

FIVE-SPOTTED BURNET.—Sir,—I shall be glad to exchange, in any quantity, specimens of the Narrow-bordered Five-spotted Burnet, Z. loniceræ, either in the pupa or perfect insect, set or unset. Any one wishing for the pupa, an early application is requested to prevent disappointment. Any young entomologist can have one specimen of the above gratis by sending box and paying postage. My wants are too numerous to mention. I send a list of a few, and where they are deficient in value, I will make up in quantity or some other species:—P. cartægi, A. cardamines, L. sinapis, G. rhamni, V. polychloros, V. Io, V. cardui, and a host of others, larva or ova.—W. B. CUTTS, Filey, Yorkshire. April 10th, 1864.

LEPIDOPTERA.—Sir,—Will you oblige me by stating, in your May number of YOUNG ENGLAND, I have the following insects to exchange: A. galathea, A. Euphrosyne, A. selene, P. alexes, T. rubi, H. dispar, P. monacha, A. villaca, L. quercus, A. psi, A. aprilina, P., meticulosa, T. fimbria; for D. euphorbiæ, D. galii, D. livornica, C. celerio, C. nerii, G. fuciformis, M. bombyliformis, any of the clearwings, except tipuliformis, M. arundinis, H. sylvinus, H. velleda, L. rubricollis, E. grammica, D. pulchella, C. dominula, E. rusulla, B. neustria, B. castrensis, L. ilicfolia, E. versicolor. None

will be accepted but first-rate insects. All letters not answered in ten days, will understand I am not in want of their offers.—H. Wilkinson, South Milford, Milford Junction, Yorkshire. March 28th, 1864.

Eggs for Lepidoptera.—Dear Sir,—I have the following eggs — starling's, blackbird's, thrush's, hedge-sparrow's, or any of the tomtits'—in exchange for any of the stated lepidoptera:—G. rhamni B., S. ocellatus M., S. tiliæ M., or any of the Zygænidæ.—W. Wakerley, 10, Bridge-street, Kilburn.

Lepidoptera.—I have a few good specimens of the following for exchange:—Brimstone butterfly (gonopteryx rhamni), peacock (Vanessa Io), red admiral (Vanessa Atalanta), grayling (Hipparchia semele), small copper (Chrysophanus phlæas), small tortoiseshell (Vanessa urticæ). Applicants had better send a list of all their duplicates, my wants being too numerous to mention.—T. R. Price, 71, Week-street, Maidstone.

Birds' Eggs.—I have a quantity of sea birds' and a few land birds' eggs to exchange for good specimens of British lepidoptera. My stock consists of the great black-backed gull, lesser black-backed gull, herring gull, kittiwake, razorbill, puffin, gullimott, rock dove, kestrel hawk, jackdaw, magpie, moorhen, landrail, and sandmarten, and many others.—W. B. Cutts, Filey, Yorkshire.

Plants.—Would you be so kind as to tell me, through your paper, if the *Gagea lutea* is a rare plant? I have some specimens I would exchange with any one for any specimen of a dried plant which I have not. I also will be happy to give or exchange specimens of a wood sorrel with a very dark pink corolla—which, I think, is almost peculiar to this place — to any one who will send his address and a stamped envelope for postage.—J. M. Hick, Rev. B. C. Caffin's, South-street, Durham.—[*Gagea lutea* is rare, and it is the only British species.—Ed.]

"The Common Cuttle?"—Yes.

Larvæ.—Dear Sir,—I am in want of the following larvæ:—C. dominula, C. villica, L. glandifera, T. subtusa, C. dotata, C. elinguaria, and E. lichenea. If any of our entomological friends can assist me to obtain any of the above, I shall be glad to add to their list of *desiderata*.—William Woodcock, No. 2, Sunderland-street, Cemetery-road, Sheffield.

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CONTENTS OF THE APRIL NUMBER:—

Adventures of Cannibal Jack. Chap. XIII.
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Hawking.
Heron, the.
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Parroquet.
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Starling, the.
Stoat, the.
Stone, the London.
Spring.
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JUNE, 1864—PRICE 2d.

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ALPHABETICAL TABLE OF CONTENTS OF THE PRESENT NUMBER.

Latin Names of the Subjects in Natural History.

See also Entomologist, Botanical Notes, Summer, Entomology for Months, Notes on Nests, and Correspondence.

No. 6, VOL. III.

LONDON: W. TWEEDIE,

337, STRAND.

ENLARGEMENT OF YOUNG ENGLAND.

ON and after the 1st July, "YOUNG ENGLAND" will be enlarged to Sixty-four Columns; and the price increased to Sixpence. These two things are a necessity:—the former to our readers, and the general requirements of the paper; the latter to us.

Our principal object in the enlargement of the paper, after securing ourselves from loss, is to make room for subjects of general interest, whilst, at the same time, there shall be, at least, no curtailment of Natural History, which has ever been a prominent feature of the publication.

Instead of stating the various improvements which we are making, we would rather refer our friends to the forthcoming Number of the paper itself—they will then see them, and, we hope, with satisfaction.

We acknowledge, with many thanks, the warm interest taken in our work by a numerous body of subscribers. We have to ask them—and this we do with great earnestness—to distribute carefully and wisely, the small handbills which they will receive in their paper, and to get us at once—at least one new Subscriber.

We have now laboured in this work for years, and have never received a farthing; on the contrary, the loss has been heavy,—it is, therefore, time that the friends of the paper should stir themselves, and not imagine that their interest and support are matters of indifference to its well-being and prosperity.

If they were to take one copy for themselves, and another, for a few months—say to the end of the year—for presentation, in order to extend our circulation, it would be a great help to us. As naturalists, they must know "a good circulation" is one of the essentials of health. A word to the wise is sufficient.

Any suggestions for improvements will be thankfully received.

Original papers, written in easy style, with no attempt at what is called "composition," we shall be glad to insert. If one were to work out the Botany of his district—another, the Geology—another, the Birds—another, the Shells—another, the Entomology, and give us not mere lists, but interesting notes of facts, the result of their labours would be valuable additions to our paper. Probably, many of them have nice little articles ready, which, with a slight revision, might look well in print. Let us all aim at the real, and try, every one in his own sphere, to get rid of the horrible sensational literature, or rather rubbish, which is doing irreparable damage, and educating, in its own way, a race of sentimental, fast, flashy, slangy, do-nothing, pert, unbearable, incapable noodles.

We should like to have some account of what is done by our youth for the poor, and destitute, and miserable. Let us avoid selfishness. Can we not have some "do-good" groups of youth? Our columns are open to them.

And now help, all of you,

Your faithful Servant,

THE EDITOR.

London, June, 1864.

Captures, Exchanges, Notices, &c., may be inserted here free of charge when not for purposes of trade.

NOTE TO CORRESPONDENTS.—*Please attend to the Rules for those who write for the Press, page* 14, *Vol. II., and always send real name and address, though these need not be printed.*

NOTICES TO CORRESPONDENTS.

L. P. W.—Please send the other articles complete.

T. G. N. S., Post Office, Vigo Street, must send his real name and address.

R. COLBRIDGE, HULL.—We are much obliged by his good opinion. Any edition or number will be duly announced when published.

ELLEN DIBBEN.—We are making all the haste we can with it.

HENRY FOSTER.—They are not.

E. H. N.—We cannot say positively, probably in July.

The Maidstone Entomological Society desire to make exchanges with any other societies or individuals during the present season. As they are but young, they would be glad to receive some hints from older bodies. Lists of moths and butterflies found in this locality will be sent in exchange for those in other localities.—T. R. PRICE, Secretary, 105, Week Street, Maidstone, Kent.

PIGEONS.—Sir,—In answer to "J. R. T.," in the April Number of YOUNG ENGLAND, I beg to say that the best cheap book I know of on Pigeons is published at the *Cottage Gardener* Office, 162, Fleet Street. Post-free, 1*s.* 8*d.*—T. H. SAGAR.

A YOUNG NATURALIST, Oxford, should have sent his name.

EXCHANGE.

DEAR SIR,—I have dried specimens of the following ferns in duplicate, viz., Polypodium dryopteris, Polypodium calcareum, Polypodium vulgare (in two or three varieties), Polystichium angulare, Lastrea oreopteris, Aplenium adiantum nyrium, Aplenium marinum, Ceterach officiorarum, Blechnum spicant, Cystopteus fragilis, which I should be glad to exchange for eggs of British sea birds, or for the following ferns:—Polypodium phyopteus, Gymnogramma, Polystichum lonchitis, Lastrea cristata, Lastrea rigida, Lastrea thelypteris, Asplenum alternifolium, Asplenum lanceolatum, Asplenum fontanum, Asplenum septentrionale, Cystopteus dickieana, Cystopteus montana, Woodsius, or Hymenophyllums.—Faithfully yours, JAMES W. LLOYD, Bridge Street, Kington, Herefordshire.

LEPIDOPTERA.—I have larvæ of the following insects:—T. fimbria, T. ianthina, P. monacha, M. belgiaria, A. agathina, and perfect insects of each, for which I shall be glad to receive offers of exchange.—J. BENN, Jun., Wortley, Leeds.

EXCHANGE.—I have some fine-bred specimens of B. glandifera and A. villica; also some good C. graminis and A. australis, with a number of others, which I should be glad to exchange for C. solidaginis, H. rectilinea, H. semibrunnea, H. petrificata, any of the Cucullia except umbratica, E. venustula, E. fuscula, H. uncana, P. orichalcea, P. festucæ, P. interrogationis, S. anomala, and many others. Any one not hearing from me in ten days will conclude that their offer is not accepted.—NEIL MCARTHUR, 32, Guildford Street, Brighton, Sussex.

*** *Many Communications came too late to be attended to, even if our limited space had permitted.*

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