

PHILATELIC SECTION.

# THE MATCH TAX: 

a PROBLEM IN FINANCE.

BY<br>W. STANLEY JEVONS, M.A., proprasor of political bconomy in ofent college, mancheater.



## LONDON:

EDWARD STANFORD, $6 \& 7$, CHARING CROSS.
1871.

## THE MATCH TAX:

## A PROBLEM IN FINANCE.

I propose to occupy the following pages with a careful inquiry into the merits or demerits of the tax on lucifer matches. That tax has been abandoned, but I do not think that the subject has therefore lost all interest. The recent budget of the Cbancellor of the Exchequer was received both by the House of Commons and by the people with unquestionable disfavour; but it is not quite clear how far this disfavour was due to the real demerits of the proposals, or how far it might arise from mere vexation of spirit at the necessity of raising additional revenue.

The public disapprobation was chiefly concentrated upon the proposed new tax, which was variously denounced as "reactionary," as "violating the first principles of financial administration," or even as "the very worst tax that has been proposed within recent memory." I cannot say that among the mass of articles upon the subject which appeared in the daily press, I found evidence of much care in calculating and estimating the real
effects of the proposed Match Duty. It is worthy of remark that 'The Spectator,' which had apparently bestowed more inquiry upon the subject than any other newspaper coming under my notice, was rather in favour of the proposed duty. The fact that this Match Tax was a favourite notion of so eminent and enlightened a free-trade financier as Mr. Wells, ought to have secured for the proposal a more careful and respectful examination on the part of the English press and public. The tax is also likely to be adopted in Italy and France. Hence I do not think it superfluous to take up the subject, and, with the advantage of time for inquiry and deliberation, to attempt to measure at their true value the numerous objections brought against the tax.

I cannot believe that the present Government, a cabinet of financiers, as it has been called, could have made this unexpected proposal without some good reasons. It must be a very strong Government indeed that could afford to impose new taxes out of mere gaiety of heart. But new taxes must usually be imposed with some degree of suddenness and secrecy, otherwise the first year's revenue would be wholly lost, and most unfair profits would fall to those who contrive to gain the earliest information. No time can thus be given for previous
deliberation, and if some trust be not placed in the ministers who are responsible for the proposal, we may find ourselves in the somewhat absurd position of deliberating after the occasion is passed.

At the present time, we cannot give too much attention to the principles and rules of taxation which we accept. We are at the critical point where one great and true policy has been nearly, if not quite, accomplished; and without any strong guiding principle like that of free trade before us, we are in danger of drifting instead of carefully steering, in our financial course. If one balf of the doctrines and arguments which were brought against this Match Tax should be accepted as really true and cogent, the balance of our financial system would be in danger of complete derangement. I consider it therefore a matter of no slight importance to pass under calm and impartial examination the various opinions hastily uttered during the recent warm discussion; and 1 will attempt to estimate fairly both the real objections which may be urged against the tax, and the reasons which may be found to exist for the selection of such a new impost at the present time.

I shall divide my inquiry into three parts. Beginning with the most simple points, I shall try to ascertain whether the tax could have been brought
into successful operation, many persons having asserted off-hand that it was impracticable. Supposing it to pass muster in this respect, I shall proceed to the more difficult inquiry whether it is theoretically a good tax, and in harmony with the fundamental principles of political economy. It will still remain to be decided whether the tax is needed, and suitable in its general character and incidence to form a part of our financial system.

## PRACTICAL OBJECTIONS TO THE TAX.

There is hardly a limit to the variety of diffculties and evils which may be found to result from the imposition of a tax. We may start with the concession that every tax is bad; but as we must have revenue, the question really takes the form whether one tax is bad compared with others existing or proposed. I shall therefore consider the comparative advantages or disadvantages of the Match Tax, in regard to a list of practical difficulties, which I have made as exhaustive as possible. A tax may be bad, then, because it is subject to-

1. Fraudulent evasion.
2. Non-fraudulent evasion.
3. Costliness of collection, as regards the Government.
4. Costliness to the public in money.
5. Loss of time and trouble on the part of the public.
6. Interference with home trade.
7. Interference with foreign trade.

を. Unpopularity.
9. Incidental objections.
10. Inadequacy of returns.

1. Fraudulent Erasion.-There can hardly be a greater evil in a tax than that it opens an artificial path to dishonest gains; and if there be any considerable chance of such evil arising in the operation of the Match Tax, it is sufficiently condemned. But it is stated that in America the tax is collected with peculiar ease and certainty, because the public necessarily assist the revenue officers in detecting fraud. It is the peculiar excellence of the stamp system that every purchaser of an article has evidence upon the article whether the duty has been paid or not. A manufacturer surreptitiously sending out unstamped goods cannot know that they will all fall into the hands of unprincipled persons; and the danger of detection either by honest persons or the revenue officers is too great to be incurred by direct disregard of the law.

Various suggestions have been, or may be, made as to disguised modes of evading the tax. Forgery is not to be feared, since it is capable of easy and sure detection, and is not found to occur with more valuable stamps. 'The Economist' suggested that the tax would lead to the sale of two-ended matches, and as matches are usually made in that form in the earlier stages of the process it would have been quite possible. But I find that in the printed Bill introduced into Parliament and ordered to be printed on the 21st April, provision was made for this difficulty in the interpretation clause, which says: "When any match has more than one point or part prepared as aforesaid, every such point or part shall be deemed to be and shall be counted as a separate match."

The tax would be partially evaded again, if the boxes were filled with more matches than was allowed by law for the stamp affixed. But, on the least thought, it is evident that the manufacturers or retailers cannot announce publicly that they break the law, and they can only make the public aware of the fact by systematically over-filling the boxes, which would not only be exceedingly costly to them, but would infallibly lay them open to detection. A much surer and safer profit would be made by under-filing the boxes, which indeed
is the common way of under-selling in the match trade at present.

The only mode in which I should fear evasion would be by the collection and refilling of old stamped boxes, to which there would be some temptation on the part of small retailers or hawkers. But old stamps and boxes would be unsaleable, except to unprincipled manufacturers, and full penalties were provided in the Bill against such a practice. Moreover the stamp was to be affixed so that the box could not be opened without tearing it. The most closely analogous taxes, those on playing-cards and patent medicines, both marked by stamps on the cases, are collected without any fraud worth mentioning, and where the stamp is of so slight a value as $\frac{1}{2} d$., there is no reason to fear any appreciable evasion by malpractices.
2. Non-fraudulent Evasion.-It is often possible to aroid a tax without committing fraud, as by substituting some other article, or even dispensing with the article altogether. It may sometimes be an advantage in an indirect tax that the payer may regulate his consumption in accordance with his means, and contribute more or less as he thinks proper; but on the other hand the Government ought not to put people to the inconvenience or harm of altering their habits needlessly. We have
given up the notion that people are in unimportant matters to be guided in the way they should go. There ought as a general rule to be freedom of life as well as freedom of trade. The Stamp Tax would have been a very bad one had it been possible to dispense with matches altogether, as for instance by retrograding to the old tiuder-box or the fire-sticks. If people by long trial have found matches in a certain quantity desirable, it is hurtful to them to be forced to any less convenient habit. But we must compare the inconvenience with the revenue produced, and must remember that extensive losses by fire, as well as loss of life by poisoning and fire, do arise from the careless use of matches. Taxation is not a subject in which principle alone can guide us; though a high place must be given to principle, all circumstances must be taken into account. Now the Match Tax would not be wholly evaded, because bowever dear matches were made, they would remain greatly preferable to other modes of getting fire; and though some slight inconvenience would arise from reduced consumption, it would be to a great extent balanced by the prevention of accidents, or by the saving of money now spent on a needless use of matches.
3. Costliness of Collection.-A tax may be defective because it absorbs in the expenses of the
revenue department a considerable percentage of its own yield. It is an unavoidable evil of most indirect taxes, that they are costly; thus of the whole expenditure of the Government in 1869, $6 \cdot 7$ per cent. (or about 5 -millions in 75 millions) was absorbed by the charges of collection. There are indeed many useful or even indispensable public services, incidentally performed by revenue officers, and Mr. Dudley Baxter considers that the actual cost which can be fairly debited to the collection of revenue amounts to 6 per cent. in the case of customs duties, and 4 per cent. on the aggregate of the inland revenue. Now the Match Tax would not be costly, comparatively speaking. I have ascertained from the revenue authorities that the cost of the stamps would be $7 d$. per thousand, or about $30 l$. per million, so that the percentage on the revenue would be $1 l$. $8 s$., or say $1 \frac{1}{2}$ per cent. I have no exact information as to the amount it would be requisite to add for office expenses and revenue officers, but I cannot suppose it to exceed 1 per cent. In the Bill it was proposed to allow a discount of 1 per cent. for prompt payment of duty in sums of more than $50 l$. at a time, but this may be regarded as rather a decrease of the tax, or a diminution of the charge to the public. I estimate the cost of collection therefore at $2 \frac{1}{2}$ per cent., which is
considerably less than the average, though not so low as in the case of some direct taxes.
4. Costliness to the Public.-It is an inconvenience in all indirect taxes that they throw a somewhat greater burthen on the public than is represented by the revenue yielded. Those who pay the tax in the first instance require interest upon the capital temporarily invested, and it is believed by some persons that the effect of customs and excise duties is thus increased 20 per cent. or more. I do not know that the evil is entirely confined to those taxes. In the case of many stamp duties, the effect of interest must be very serious, because the duty paid is often charged against the capital account of a business-it is as much a charge upon industry as would be a duty on the materials of manufactures.

The Match Tax seems to me to be subject to such inconveniences in a very slight degree. Matches are articles of direct household consumption; hence the tax falls upon the consumption rather than the production of wealth, and there is no ulterior effect upon the industry of the country. No one is in any appreciable degree hindered in his business because his wife or servants use a few less matches, and pay a few pence more for them. All taxes ought as far as possible to fall upon the con-
sumer at the moment of consumption, and few taxes could be devised which are more clearly correct in this respect than the Match Tax.

As a general rule the match trade is, I believe, a regular and steady one, in which there is an even demand. Thus the stocks kept need not bear more than a small proportion to the quantity manufactured. Moreover every match manufactory would act as a natural bonding warehouse, because the manufacturer would not be required to stamp the boxes until they are actually delivered out to purchasers. There is, indeed, some decrease of demand for matches during the summer which leads to a certain accumulation of stock towards the beginning of winter, but there would not have been the least necessity to pay duty upon this stock until it was wanted for consumption. It was proposed too that the manufacturer should receive credit for the duty during a period which would average one month, so that the matches would often have been consumed before the duty was paid. Nevertheless, as the manufacturers give three months' credit, or 5 per cent. discount, it must be allowed that they would suffer a loss of interest during about two months, for which they would require a recompense of between 3 and 4 per cent. on the value of the stamps. Hence arises a charge to the public of
about $2 \frac{1}{2} d$. per gross of match-boxes. But this is not all. The labour of affixing the stamps to the boxes is not inconsiderable, and I am informed by manufacturers that it would cost $2 d$. per gross of boxes, or about 2.8 per cent. on the tax. Various slight inconveniences would also arise in the operations of manufacture. At present it is found desirable to put up the match-boxes in packing-cases as soon as they are completed, in order that they may be out of the reach of accident. Were the matches expected to remain long in stock, it would become requisite to keep them unpacked at increased risk, or else unpack them again for the purpose of stamping. I have no exact information as to the probable cost of the incidental changes in manufacture which would thus become requisite, but they would be very slight, and I venture to assign $1 d$. per gross, so that the whole charges to the cost of manufacture would be :-

| Interest on Capital invested in Stamps | .. | .. | $\frac{d}{2 \frac{1}{2}}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost of affixing Stamps | .. | . | .. | . | .. | 2 |
| Incidental Charges | .. | .. | .. | .. | .. | .. |

The manufacturers affirm indeed that there would be considerable increase to the risks of their business. The stamps might be destroyed, lost, or
purloined by work-people; the stamped boxes might be accidentally burnt, or crushed. If the wholesale price of the matches is trebled by the tax, the risk of every kind is trebled. But it appears to me that the purloining of stamps would be readily prevented, and is almost out of the question, because the stamps would be unsaleable, and valueless, except at a match manufactory. Damaged stamps might, if it were found worth while, be allowed for by the revenue department, as in the case of other damaged stamps. If not, the destruction of stamps would not be real loss to the country, since it would increase the revenue, and add slightly to the rate of the tax : I think that $1 d$. per gross is ample allowance for all such additional pressure of the tax.

It may seem indeed that I have overlooked the risk of bad debts, which will extend not only to the cost of the matches, but the value of the stamps. In reality the ordinary discount of 5 per cent. for prompt payment represents mercantile risk as well as interest. It means that the manufacturer is in the long run indifferent whether he waits three months with the chance of not receiving the money at all, or receives the money down, with a reduction of 5 per cent. I conceive, therefore, that the allowance of $3 \frac{1}{3}$ per cent., or $2 \frac{1}{2} d$. per gross, which I have
already made for so-called interest, really includes an allowance for bad debts. Accordingly I estimate the whole additional charge to the public beyond the amount of the tax, arising from inconvenience in the wholesale trade, as follows:-


As the destroyed stamps would be added to the revenue, I cannot calculate the real loss to the public at more than $5 \frac{1}{2} d$., or rather less than 8 per cent. on the amount of revenue.

In this estimate, however, we have followed the article only into the hands of the wholesale dealer. The actual retailer of matches makes profits varying from about 12 per cent. up to 200 or 300 per cent. In the retailing of such cheap things as matches there is really no rule or method. The boxes are bought as cheaply as possible and sold for a convenient coin. The very same matches costing wholesale $2 \frac{1}{2} d$. per dozen will be sold to some customers at $\frac{1}{2} d$. each, and to others at three for $1 d$. , so that two different rates of profit, 100 per cent. and 60 per cent., are indifferently applied. The fact is that
such profits have no relation to the interest of 'money whatever. It is the labour of distribating the goods which is by far the most important consideration in the case of many small retail trades, like those of druggists, grocers, small-ware dealers, \&c. It cannot be seriously asserted that a poor hawker of matches, who starts in the morning with a shilling's-worth, and returus at night with his money doubled or trebled, is earning interest on his capital. If so the interest would be 100 or 200 per cent. per day. It is really the wages of labour that the seller of matches earns. Accordingly I see no need to suppose that the retailer need earn more when the price of the matches is increased than before: all legitimate trade would go on well enough if the rate of profit were somewhat reduced and equalized, and it is possible that the tax might effect some good by reducing the profit on matches sold as a disguise to mendicancy.

I have never been able to meet with any exact estimates of the loss to the public arising out of interest and risk upon other indirect taxes, though it is often stated as high as 30 per cent., and I have myself assumed it at 20 per cent. Other duties involve the cost of the bonding system, and the interference of the excise officer with the operations of malting and distilling. If we pay regard
then to the simple and rapid character of the trade in matches, the ease with which the payment of duty can be deferred until the matches are wanted for consumption, with a credit of one month added, we must perceive that the Match Tax would be comparatively speaking an economical one, requiring a less addition to the expeuses of manufacturing and retailing than is usual in the case of indirect taxes.
5. Loss of Time and Trouble to the Public.Financiers are hardly sufficiently alive, I think, to the loss of time and trouble to the payers of taxes which they often occasion. The stamp duties are especially irksome in this respect: a person requiring to get a receipt for money may sometimes lose a quarter of an hour in obtaining a penny stamp, so that the loss of labour is many times as great in value as the revenue paid. Could we estimate the whole loss by the delay, hindrances, and uncertainty occasioned in business by the stamp duties, it would be found to form, I believe, a very considerable percentage upon the revenue yielded. People bear these charges with almost unreasonable patience. Now it is a peculiar merit of the stamp on matches that it would occasion no trouble whatever. The stamps would be purchased by the manufacturer in thousands or even millions, and
affixed with great rapidity by skilful practised hands. The stamp would serve in some degree to. keep the box closed till wanted, and all the public would have to do would consist in tearing the stamp while opening the box. I set the tax down as wholly unexceptionable in this respect.
6. Interference with Home Trade. - The most disagreeable fact connected with the Match Tax is the undoubted effect it would have had in throwing a number of poor persons out of employment for a time. During the first year or even two years after the imposition of the tax, the trade would have been in a state of considerable depression and confusion. There are no means of deciding how far the consumption of matches would have been reduced by the doubling of the retail price. We may indeed apply to this case the observation of Dr. Chalmers* that the price of a commodity which forms a very small part of a person's expenditure has not a great effect upon its consumption. A household expends so little upon nutmeg, for instance, that if the price were doubled or trebled there would be no appreciable motive for economy. The same principle will hold true in some degree of matches, and I should not anticipate a reduction in consumption of more than one-third part. I find that this opinion

[^0]exactly coincides with that of some leading manufacturers.

The trade would not be depressed to the same amount, because to some extent they work for foreign markets, and the export trade, as I shall show, would be quite free from hindrance. I find from the Board of Trade returns that the total value of the matches exported in 1869 was $175,273 l$., and if we take the average wholesale price of the matches consumed in the country as high as $\frac{1}{4} d$. per box, their value will be about $600,000 l$. If the home consumption be reduced one-third part, then the total change in the trade will be from $175,000 l .+600,000 l$. to $175,000 l .+400,000 l .$, or by the amount of 26 per cent. But I should think the manufacturers might push their foreign trade to a slight extent, and thus prevent the whole production from falling more than about 20 per cent.

I have despaired of obtaining any accurate information as to the number of persons engaged in the trade; the Census Tables are wholly astray on this point, giving the number as 532, not a tenth part of the truth. The match-box makers consist to a great extent, especially in London, of young children working at home. This work is capable of being learned at a very early age. These children
have then no peculiar knowledge or skill to be thrown away, and when they are of a fit age for work they can be absorbed in any other trades which exist in the neighbonrhood.

The fixed capital involved in the trade is not of serious amount. The small manufacturers often get their blocks of wood sawn at public saw-mills; the boxes are made at the workers' houses, so that beyond the slicing machines for cutting the splints and the thin wood for boxes, the frames for holding the matches, and possibly a machine for arranging the splints in the frames, there is no peculiar fixed capital of noticeable value.

When once the contraction of the trade to the extent of a fourth or fifth part was effected, there would no longer be any hardship. The time ought to be passed when the common plea that people must have employment found for them, can meet with attention. Men, women, and children are not born specially to be match-makers, and if by the wise organization of our finances we can promote the general prosperity of trade and industry, it is no matter of regret that a few hundred or a few thousand children have been transferred from one occupation to a more useful and healthy one. The safety and welfare of all requires that revenue shall be raised. If we increase the duty on tea or sugar,
not only do we deprive some people of their ordinary comforts, enforcing economy in a point where it is far less desirable than in matches, but by depressing foreign trade we lessen the employment of those who, in any part of the country, produce goods for exportation. As for those who thought the corn duty better than the Match Duty, their proposal amounts to taxing millions of the very poor for years to come with a burden several times as great in proportion to the revenue yielded as the Match Tax would have caused. This fact I shall demonstrate farther on. (See pp. 53-56.)

It is doubtless an unfortunate point in the tax that it produces a sudden and sharp though temporary hardship to a definite class of persons. But at its worst the result would not be nearly so great as what is often caused by a strike of moderate extent; and I can only say that if we once allow reforms to be impossible because some persons will suffer from them, then all reforms become impossible. No minister can suggest a single measure which will not hurt some persons. It is the law of nature and the law of society that the few must yield to the good of the many, provided that there is a clear and very considerable balance of advantage to the whole community. It is a matter of opinion whether in this case the balance of
advantage was sufficiently great to warrant the measure.
7. Interference with Foreign Trade.-Such a tax as that which we are considering should certainly fall upon articles consumed in the kingdom, and should leave foreign trade wholly untouched. Members of Parliament and other persons appeared to think that this object could have been accomplished in the case of the Match Duty, only by granting a drawback upon matches exported. They assumed that it would be requisite to stamp all boxes, and 'The Economist' even went so far as to suggest that by paying the duty on boxes containing 100 matches each, and then claiming drawback on the same matches made up in boxes of 50 each, a great but of course fraudulent profit could be made. Had a drawback been necessary, it would have consisted in repaying one halfpenny for every stamp upon a box exported, and it is for the writer in 'The Economist' to explain how bis ingenious suggestion could have been carried out. Had the number of boxes been doubled, a double number of stamps would have been required, before a double drawback could have been received.

But the fact is the Government expressly provided in the Bill that matches intended for export should not require stamps at all. Just as playing-
cards are exported free of duty, according to the regulations of the 25th Victoria, cap. 22, sec. 37, so matches might have been exported. A manufacturer wishing to export playing-cards, simply sends a notice to the proper revenue officer, and receives in return a certificate allowing him to convey the unstamped cards upon any vessel named in the notice. In the case of matches, all that would have been requisite was to secure them in proper packing-cases, send notice to the revenue officer, and convey them direct on board ship, and with the exception of the notice to the officer, this is what is usually done at present.

There could not be said, therefore, to be any interference at all with export trade, and as no fraud is found to arise under similar regulations concerning the export of playing-cards, on which the duty is six times as high, it is not to be supposed that any fraud would be attempted with matches.

As regards the trade in foreign matches, the importer need not have stamped them until about to sell them for home consumption. If desiring to re-export them, he would have the same facilities as a manufacturer. But it must be allowed that some slight cost and inconvenience would arise from the necessity of opening packages of foreign matches,
and stamping the boxes before they could be forwarded to the retailer, so that the tax would operate in a slight degree against the consumption of foreign matches, and therefore in favour of home producers. This is a point which the English manufacturers failed to perceive.
8. Unpopularity.-We cannot refuse altogether to consider the feelings of the taxpayers when we impose or even retain a tax. If people choose to part with their money more readily in one way than another, I suppose a wise financier will pay some regard to the fact. I consider that a moderate hearth tax would be an excellent measure in this kingdom, but no one would venture to propose the re-imposition of that tax, simply on the ground of the antipathy known to exist to it. Now if the population as a whole, whether upon reasonable or unreasonable grounds, have an antipathy to the stamp on matches, there is an end of the matter. The Government cannot always engage to teach people what is best for them, and as we are never likely to convert this kingdom into Utopia, I suppose we must pay some attention to the most unreasoning prejudices. It may be very absurd, but I believe that the strongest objection to the stamp on matches was that people would constantly have the symbol of taxation before their eyes. Most of
the indirect taxes are paid unconsciously, and raise no murmurs. Many of the stamp duties, though really exceedingly troublesome, are patiently borne, because they become associated with agreeable incidents, such as the receipt of money, the completion of important business, the conferring of authority, \&c. Everyone knows how important it is to ask for money at the right moment and in the right manner. But if after the fact is known we condemn the Match Tax as simply unpopular, let us acknowledge the ground on which we do it. Let us also remember that it is hardly possible to foresee the turns which human caprice will take.
9. Incidental Objections.-A tax often leads to curious results which are not intended, and are sometimes impossible to foresee. Some manufacturers for iustance have roundly asserted that this Match Tax would lead to a general deterioration in the quality of matches, and I have tried to make out whether this would really be the effect. The general tendency of an impost fixed in proportion to quantity, is certainly in the opposite direction, for according as the value of goods is higher, so the proportional pressure of the tax is less. Thus wine, subject to the duty of $1 s$. per gallon, may vary in value from $2 s$. to 30 s . per gallon, so that
the poorer wine is increased in value 50 per cent. and the finer only 7 per cent.

Now the general tendency in the case of matches would be the same, and owing to the comparatively large amount of the duty it ought to have a strong effect. Thus I think it is quite clear that the very cheapest boxes of matches would be put out of existence altogether. The very poor, with their usual mistaken notions of economy, purchase small boxes at $\frac{1}{4} d$. each. I have found such boxes containing as few as 34 matches, and the average is about 40. They are sold in the very same shops where large penny boxes may be had containing 250 good matches. Poor people thus often waste 30 per cent. of their money at least by buying in dribblets. These farthing boxes would be destroyed by the tax, for it would be too absurd to pay $\frac{3}{4} d$. for 40 matches when twice the number or more could be had for a perny.

But the halfpenny boxes form the great bulk of the trade, and it is a difficult question to decide whether such boxes could with the duty be sold at $1 d$. each. The wholesale price is at present commonly $2 s .6 d$. per gross, and manufacturers inform me that with the tax it would rise to $10 s$. per gross, which would certainly leave insufficient profit for the purely retail trade at ld. each. Using the
previous estimate (see p. 16) of the effect of the tax, I find that the price would probably be :-
s. d.

| Present wholesa | 6 per gross |  |  |
| :---: | :---: | :---: | :---: |
| Stamps | 6 | 0 |  |
| Incidental expenses in manufacture | 0 | $6 \frac{1}{2}$ |  |
| Wholesale priee, with tax | 9 | $0 \frac{1}{2}$ |  |

Thus we find that there would remain about $3 s$. per gross profit to the retailers, while at present the profit varies between $1 s .6 d$. and $3 s .6 d$. , according as the boxes are sold at three or two a penny. If the boxes are to be sold at $1 d$. each, the retailer must accept a profit of about $3 s$. and yet must invest more than three times as much capital as before. It is a matter of opinion whether the trade could go on under such conditions. I think it not improbable, because, as I have said, the profits of the retailers are not interest, but chiefly recompense for trouble, and there is no rule or method in the present rates of profit, which are in some cases three times as great as in others.

But it certainly seems impossible to improve or increase the present $\frac{1}{2} d$. boxes if they were with the tax to be sold at $1 d$. The match trade is at present very lax with regard to numbers; the best makers distinguish their boxes according as they contain $50,100,150$, or 200 ; but these are only
the " nominal contents," or even " nominal reputed contents," and everyone who knows the difference between a reputed pint bottle and an imperial pint will appreciate the meaning of "nominal reputed contents." In fact boxes reputed to contain 100 matches often contain only 60 , and rarely more than 85 . To diminish the proportional weight of the tax it would of course be desirable to substitute "full count" boxes of between 90 and 100 matches, but this would be apparently impossible were the boxes to sell at $1 d$. There is an obvious inconvenience in raising the retail price beyond $1 d$. I am inclined to think that had the tax been imposed, only a comparatively small portion of the trade would have consisted of superior full-count boxes at $1 \frac{1}{2} d$. or $2 d$. each, while the main bulk of the matches would have been boxes just such as are now sold at $\frac{1}{2} d$., but raised in price to $1 d$. A tax of $\frac{1}{8} d$. per box of 100 would probably have led to a general improvement, owing to the fixedness of price of $1 d$.

In the letter of Messrs. Bryant and May which appeared in 'The Times' of 24th April, 1871, they asserted that one effect of the tax would be to discourage the use of safety matches, and thus increase instead of diminish the risk of fire. This would be a result much to be deplored, but I see no reason to fear it. In the first place safety
matches have made little real progress. They have been in existence twenty years, ever since the Exhibition of 1851 , and yet they form only a very small portion of the total quantity now used. At a great number of small shops where matches are sold they are unknown. This does not solely arise from their greater price, for I am told on good authority that they might be made as cheaply as common matches if there were a sufficient demand for them, and I have met with good little boxes of safety matches, "the English safety Tandstickor," containing 60 matches for $\frac{1}{2} d$. or $5 d$. per dozen. Messrs. Bryant and May's well-known boxes appear to contain about 85 to 90 at $1 d$. each, or from $9 d$. to $10 d$. per dozen. The fact is that these matches are at present cousiderably dearer than other kinds owing to their being better made. There are only a comparatively limited number of housekeepers in the country who have the sense to prefer safety matches, and I see no reason to suppose that they would change their opinion upon the imposition of the tax. It is evident that the dearer matches will rise less in price proportionally than cheaper matches, so that, with a little re-arrangement in the size of the boxes the stamp might be made to act in favour of rather than against the high-class safety matches.
10. Inadequacy of Returns.-There are two extremes to be avoided in taxation. If we have very few taxes, their pressure is sure to be uncertain and irregular. Some persons will pay unduly, or, as is more likely, they will manage to shift part of the burden to other people in various undesirable modes. On the other hand, if we have a great number of small taxes, the interference with freedom, the complexity of legislation, aud the cost of collection become great compared with the revenue raised. We should therefore aim at maintaining or devising a limited number of taxes, each of which will return a good round sum. The Match Tax cannot be approved then unless it returns a considerable profit to the Government.

I bave attempted in various ways to learn how nearly the Chancellor of the Exchequer approximated to the truth in the estimates he gave concerning the match trade : replying to a question in the House of Commons, he thus stated the supposed amount of matches produced and consumed :-

Number of Boxes of Matches.
Produced in the United Kingdom .. $560,000,000$
Fuzces .. .. .. .. .. .. $45,000,000$
Imported .. .. .. .. .. .. $35,000,000$

$$
640,000,000
$$

Exported .. .. .. .. .. .. $135,000,000$
Consumed in the Kingdom .. .. $505,000,000$

Many persons were incredulous as to such a vast quantity being consumed, but if we take the average contents of the boxes at 70 matches, it will be found that the quantity stated amounts only to about three matches per day per head.

At one halfpenny each this number of boxes would yield a revenue of about $1,052,000 l$. If we assume that the reduction of consumption would amount to one-third part, there remains a revenue of $700,000 \mathrm{l}$. It is to be remembered, however, that at present comparatively few boxes of matches contain 100, and no inconsiderable portion of the whole are farthing boxes containing only about 40 matches. The general effect of the tax would be to raise the numerical contents of the boxes, and if this change were in the ratio of 70 to 90 , the revenue would have been still further reduced to about $540,000 l$., and in the first year would have yielded even less. I question therefore whether in estimating the produce of the tax at $550,000 l$., the Chancellor of the Exchequer took into proper notice the low contents of boxes now commonly used.

The reader will see, however, that the whole of these calculations are of a very uncertain character. The reduction of consumption might possibly be greater than I have supposed; on the other hand there is an apparent impossibility in selling full
boxes of matches of 100 each at 1 d . after the imposition of the stamp, as I have pointed out (p. 28). If the public then refused to pay more than $1 d$. per box, the average contents would have to remain much as at present, and the revenue would be all the greater in consequence.

Again, it must really be an open question whether Mr. Lowe has been correctly informed as to the extent of the match trade. I do not find that any accurate information on the subject exists, and even manufacturers can only make rude guesses. I find that some who have as good means of knowing as any, consider his estimate a low one. From the statistics of the trade in lucifer matches with Australia I have drawn a similar conclusion, though the figures are not worth giving in detail. In Kopp's 'Chemical Technology,' it is asserted that English people consume on an average eight matches per head per day, which would amount for the whole kingdom to about 900 millions of full boxes of 100 each. This statement is said to agree with statistics concerning the use of matches in Belgium, which are not in my possession. But there is inexplicable discrepancy between these statements and the returns of the Match Tax in the United States. The information I possess is clear and decisive only for one year, ending 30th June, 1870, when the one
cent tax yielded $1,945,400$ dollars, representing a consumption of rather less than $200,000,000$ boxes. This, it will be observed, is the consumption under the tax, and if the same rate of consumption held here, we could not expect a revenue of more than $400,000 l$. at the most. If we wish to deal with certainties, I regard this as the best estimate, but the actual produce might have proved to be considerably more.

The amount, even at the lowest estimate, can hardly be called an inadequate or trifling addition to the revenue, being half of the abandoned corn duty, the whole of the assessed tax on carriages, nearly as much as the railway duty, and equal to the aggregate of a great number of small licence and stamp duties, some of which might before long be repealed with much advantage. In respect of its amount it can hardly be thought an unsuitable addition to our list of taxes.

I have now considered in sufficient detail all the techuical and practical points at which difficulty, so far as I can see, could arise. I trust I have given full weight to the unpopularity of the tax, to its certain effect in reducing the trade, and its very doubtful effect upon the quality of the matches; but with these exceptions, I am really unable to
discover any technical dificulties in its operation worthy of notice.

A paper having been circulated giving "Reasons against the Second Reading of the Match Tax Bill," I will, before concluding this part of my inquiry, give these objections literally, with brief answers.
" 1 . The proposed tax will be an impost varying from 100 to 500 per cent. on the wholesale selling price."

Answer.- This is true, but the effect on the trade and consumption of matches will be measured by the change in the retail price, which will be generally 100 per cent.
"2. The tax will inevitably throw thousands of persons throughout the country, and particularly in the east end of London, out of honest employ."

Answer.-This is true, if by thousands we mean a very few thousands at the utmost.
" 3 . It will, therefore, greatly increase the poor rates.".

Answer.-It will very slightly increase the poor rates for a short time.
"4. The principle of the tax is too important to be determined on three days' notice, and without giving those whose daily bread is dependent on an employment which the tax would destroy, an opportunity of petitioning."

Answer.-Financial changes of the kind must be made with some degree of suddenness to avoid evasion of the tax and unfair gains. Even during the discussion of the subject the manufacturers' and dealers' stocks were cleared out, and matches which had been lying by for years were got rid of.
" 5 . The tax will prevent the manufacture of the better and safer kinds of matches now made in England. The million, to whom farthings are of importance, will not pay a price sufficient, if the tax be added, to enable the trade to sell any but the very commonest kind of matches."

Answer.-This is a matter in which doubt exists, but I have given my reasons for believing that the very poorest kinds of matches would be extinguished by the tax and moderately good penny boxes would be the rule.
" 6 . This will tend to increase the sale of the commonest and most dangerous sorts, which are mostly made abroad."
" 7. A large proportion of the manufacture will be driven from this country and thrown into foreign hands."

Answer.-These appear to me mere ad captandum statements for which there can be no foundation in facts, unless either the manufacturers are deficient in sense, energy, and ingenuity, or our country
is in some way less fitted than foreign countries for the production of matches, in which case free trade would naturally lead to the partial abandonment of the manufacture here. I see no reason to anticipate this result.
" 8 . The tax will fall most heavily on the lowest classes, because, from their greatest numbers, they are the greatest consumers."

Answer.-I need hardly point out that the words most heavily are here used in an ambiguous sense ; of course the more numerous classes will contribute the larger part of the tax; but I sball show that in proportion to the revenue raised the burden inflicted on the poor would not be more than from one-sixth to one-third part of that produced by the almost nominal corn duty.
" 9 . The tax is unfair to manufacturers who have already got contracts on hand at prices which cannot possibly enable them to pay the tax."

Answer.-It cannot be supposed that any contracts would have obliged the manufacturers to pay the tax out of their own pockets. To avoid all doubt or difficulty I think a clause might have been inserted in the Act of Parliament annulling all such contracts on the day when the stamp was imposed.
" 10 . The tax affects prejudicially the following important industries: match makers, match-box
makers (all poor people), timber merchants, taper makers, chemical manufacturers, and tin-plate workers."

Answer.-True; but except upon the match and match-box makers, and perhaps half-a-dozen makers of phosphorus, the effect would be inconsiderable.

## FUNDAMENTAL OBJECTIONS TO THE TAX.

Having found that the Match Tax is capable of being worked without fraud or considerable practical inconvenience, we must now inquire whether it is economically justifiable. We meet at once the important objection that lucifer matches are necessaries of life, and an economist of such great eminence and authority as Adam Smith has asserted that the necessaries of life should be untaxed. I acknowledge of course that a moderate use of matches is indispensable, though not the profuse and dangerous use often made of them at present. If the dictum of Adam Smith is to be obeyed the tax must undoubtedly be rejected.

Now I would remark that the great majority of those who decried the Match Tax allowed that the revenue had to be raised, and they urged that it
ought to have been raised by an addition to the tea or sugar duties, or even a re-imposition of the shilling corn duty. But surely corn, tea, and even sugar are more necessary and useful articles than the greater part of the matches used; hardly anyone will call tea and sugar luxuries in the present day; they are some of the commonest elements of food with which no one can fairly be expected to dispense. The evident inconsistency of such objectors, therefore, puts them out of court.

But if we are to accept this dictum concerning the taxation of necessaries, we must go farther and wholly exempt from taxation those who enjoy only the necessaries of life. It matters not to a poor cottager whether he pays ten shillings a year in the increased price of bread, or in poor rates, or in any other mode. If he is obliged to pay the money, he has so much less to maintain his family. Logical consistency therefore would lead us to assign an amount of income below which taxation shall not descend. But the moment we attempt to fix such a limit, immense practical difficulties begin to present themselves. What are, in the first place, the necessaries of life? Are they potatoes and buttermilk, or oatmeal and bacon, or beef and bread and butter? As long as there are people to be found who maintain health and strength on nothing but simple
potatoes and buttermilk, I do not see that anything more can be called absolutely requisite. But a great majority of English labourers would refuse to go without bread, and many would regard some kind of meat as indispensable. Nay, a very large number would consider a glass of beer as absolutely essential; they would be found to prefer cutting down their food rather than wholly abstain from stimulants. Now I conceive that the question as to what is essential can only be settled, if at all, by the will of the great majority. If a statesman lays a tax upon an article on the ground that poor people need not consume it, but if it is found that with few exceptions they do consume it, the effect is practically the same as if he knowingly and avowedly taxed necessaries.

Again, it is certain that the cost of the necessaries of life, whatever they may be, varies greatly between different places, especially between town and country. Houses are, I suppose, necessary, and including house-rent the expenses of living are probably at least 50 per cent. higher in many towns than in the country. It is not long since we heard that large bodies of artisans in London declared they would not and could not maintain their families and themselves for less than 7 s .6 d . per day, whereas there are many agricultural labourers who earn little more
than that per week. But this difficulty of assigning the point at which necessity is felt, leads me to question the whole truth of the doctrine. Economists have supposed that there must be some amount of wages which is the least that a working man can live upon and rear a family so as to maintain the supply of labour. If we tax a man receiving only just such wages, then he must either have his wages raised by an equal amount or he and his offispring must cease to be. But if the number of labourers decreases, employers will ultimately have to pay higher wages; accordingly a tax upon the necessaries of life always falls according to these economists upon the employers of labour, and through them upon consumers generally. In short, those who live at or close to the margin of famine must be exempted. It is on the ground that the labouring classes cannot be taxed, that Adam Smith advocated the exemption of necessaries from taxation, and not on the ground of humanity or any other consideration. But the subject is altogether a debatable one. Ricardo, in his 'Principles of Political Economy and Taxation,' controverts most of what Adam Smith said upon the subject, and distinctly states that " his whole argument is founded in error;"* but I cannot clearly gather from the chapter concerning

[^1]'taxes on wages' whether Ricardo condemns the taxation of necessaries or not. Mr. Mill says: "Taxes on necessaries must thus have one of two effects: either they lower the condition of the labouring classes, or they exact from the owners of capital, in addition to the amount due to the state on their own necessaries, the amount due on those consumed by the labourers. In the last case, the tax on necessaries, like a tax on wages, is equivalent to a peculiar tax on profits; which is, like all other partial taxation, unjust, and is especially prejudicial to the increase of the national wealth." This statement indeed is in part self-evidently true, for if the taxes are not paid by labourers they must be paid by somebody else.

Economists have brought themselves, as it seems to me, into a very puzzling dilemma. The great object they wish to avoid is the partial taxation of capitalists, for by hindering the accumulation of capital this would decrease employment and lead to injury throughout the whole of society. If at the present day we draw, for instance, ten millions from the labouring classes, this is disadvantageous, if it must really be paid by capitalists indirectly. But surely if we repeal the taxes yielding this ten millions and substitute other taxes, for instance, the income tax, we clearly impose a new direct pressure
upon the class of capitalists, and in a roundabout way commit the very same injury to the working classes which we were seeking to avoid. A close examination will show that the argument involves a vicious circle, and the only way out of it is to allow that the working classes may, and in fact must, bear their portion of the national burdens. Paupers of course must be excepted, for they have the privilege of taxing other people; but all who earn honest wages must depend for those wages upon the general prosperity of the country and the abundance of capital. They cannot really be exempted, and the only question is whether the pressure shall be laid upon them in a more direct and economical manner, or in a less direct and less injurious manner.

Observe that, even if we were to grant the theoretical validity of the dictum concerning the taxation of necessaries, we should meet a serious practical difficulty. We cannot remit indirect taxes upon the very poor without remitting them also upon those artisans who are not very poor, and to whom the dictum does not apply. Of every million of taxation upon necessaries which we remit, only a portion falls upon the very poor, and if we have to substitute an income tax, probably a much larger portion falls upon the profits of capitalists,
and diminishes the sources of employment, the very evil which economists aimed at avoiding. When any person shall have shown demonstrably how we can tax all persons, for instance, whose incomes exceed $18 s$. or $20 s$. a week, while leaving untouched those with less incomes, it will be time enough to consider whether we ought to exempt the very poor, although my own opinion is to the effect that we ought not.

The more carefully and maturely I ponder over the problem of taxation from various points of view, the more convinced I always return to the principle, that all classes of persons above the rank of actual paupers, should contribute to the state in the proportion of their incomes. I will not say that this is a theoretically perfect rule. From feelings of humanity we might desire to graduate the rate of contribution and relieve persons who are comparatively poorer at the expense of those who are comparatively richer. But we must beware of obeying the dictates of ill-considered humanity. If we once professedly enter upon the course of exempting the poor, there will be no stopping. We should hardly have completed our work before it would become apparent that we had miscalculated and brought upon the poor the very evil we wished to fend off. Let it ever be remembered that the
vast machine of British industry depends for all its movements upon the profuse supply of capital. Other lands indefinitely surpass ours in extent and natural riches, but accumulated skill and capital, aided by the yet abundant stores of coal, enable us to take the leading position in most kinds of industry. But capital is a very liquid element, and escapes like water from any unequal pressure. Place an excessive burden on such capital, and you would find it oozing out and escaping in various subtle channels to more free and profitable employment in the colonies and distant countries. The poor would be the first to suffer, for their employment in this closely-packed island depends almost entirely upon the capital of the rich.

I may seem in the preceding discussion to have overlooked the fact that a large part of our revenue is at present raised from alcoholic liquors and tobacco, which cannot be called necessaries. Almost the half of our national revenue proceeds from the customs and excise duties on spirits, wine, beer, and tobacco. As an expedient for repressing intemperance this arrangement is very good, but it rests upon no other principle; and I much question the wisdom of relying too exclusively upon so very narrow a basis of taxation. I fail to see any reason why a highly-paid artisan, because, from inclination
or otherwise, he does not smoke or drink spirituous liquors, should pay little or nothing to the state. I see nothing immoral or prejudicial to the state in drinking a strictly moderate amount of beer per day. Comparing sugar and malt liquor, I should hesitate to say that in moderate quantities sugar is the more necessary. I perceive no principle at all according to which the moderate drinker pays so much more to the state than the abstainer, except, of course, that the moderate drinker is in the present state of things much too likely to become the immoderate drinker. It is the duty of Parliament, as I should conceive, inexorably to maintain the duties on spirits and tobacco, but I am not prepared to admit that they should make these the exclusive bases of an indirect taxation. Should all other duties be repealed it will be difficult to prevent the unreasoning impatience of taxation from falling upon the few remaining pillars of the revenue. Even our spirituous stronghold may not remain unassailed; and indeed have not many attempts already been made to undermine one of its necessary outworks-the malt tax?

I reject then for two distinct reasons the dictum that necessaries should not be taxed. I question the theoretical validity of the rule, and I am sure that, even if there were any real basis for the rule,
it could not be safely and consistently carried out with the means at present in our possession. In endeavouring to observe the rule we should probably incur in an aggravated form the very evil, the excessive taxation of profits, which the rule was framed to avoid. I must therefore hold that the Match Tax is not to be condemned on this ground. Nor am I aware that any other principle of sound finance is violated by it. It is certain that we ought not to lay a burden upon articles which can be considered materials of industry, or which enter in any appreciable degree into the costs of manufacture. We ought not to allow, still less to impose, a tax having any protective or distorting influence upon the industry of the country. It has not been asserted, however, that the Match Duty is defective in any such points. That duty is distinguished by falling in a very direct way upon household consumption, and for exerting no ulterior effect upon any kind of industry, except of course so far as on the one hand it disturbs the match trade, or on the other hand decreases the risks of fire. I pass on, therefore, to the third part of my inquiry.

## SUITABILITY OF THE TAX.

I now enter upon the more general question whether the Match Tax is suited to form a part of our system of finance. Is it a tax needed not only to raise revenue, but to distribute the burden equally and fairly? As it is quite impossible to discover any single tax which shall fairly press upon every subject in proportion to his ability, our English system, like that of all other countries, employs a variety of imposts, so that those persons who escape one tax may fall under the pressure of others. We must strive to attain approximate equality, that is proportionality of taxation to expenditure, and I believe that at present, with the important exception of the taxes on intemperance, we are not far from it. At the last meeting of the British Association I gave a brief statement of the result of an inquiry which I made a little time since into the probable pressure of taxation of the United Kingdom.* These results are not very far different from those obtained about the same time by Mr. Dudley Baxter in a similar inquiry. Some of the details of the calculations are given in an appendix to this pamphlet.

[^2]We may say that the taxes on tea, sugar, coffee, and fruit are paid by all classes, and form an appreciable burden of 1 per cent. or more upon the poorer classes; they become proportionally less as we rise to richer classes. Taxes upon stimulants seem to be four or five times as heary, even as regards a strictly temperate consumption. Owing to their being charged entirely according to weight or capacity they fall comparatively much more lightly on more wealthy persons. The inequality in the indirect taxes is redressed by the exemption from the income tax, and practically from many other taxes, enjoyed by labourers and artisans. But no sooner bas a family acquired an income of about 200l. a year than they incur about $3 \frac{1}{3}$ per cent. of direct taxes, which increase nearly proportionally to their income, however much they may . acquire. The local taxes are also included in my estimate, and, being imposed by rate, are nearly proportional to expenditure, but somewhat more heavy on the poor. Some duties which are not noticed in my estimate either fall in an indirect manner equally, that is proportionally to expenditure on all classes, or else are confined to the rich. Could we estimate the effect of all taxes, we should probably find that on the average different classes of persons pay about 10 per cent. of their income
to the local or general government, exclusive of the special burden of taxes upon intemperate persons.

If we are to regard the duties upon spirituous liquors and tobacco in exactly the same light as other taxes, then the working classes undoubtedly pay more than their fair share. Even a temperate consumption costs them from 4 to 6 per cent. in taxation alone, and a heavy drinker and smoker may readily pay as much as 20 or 25 per cent. of his income to the public revenue. But I decline to regard such taxes on the same footing as other taxes. They must be considered as one mode which the state adopts of repressing intemperance. The liquor traffic is one in which freedom is found by experience to lead to the worst results, and if by imposing heavy duties the consumption of alcohol can be reduced, the individuals who are taxed gain as well as the state which receives revenue. Besides, the intemperate impose upon the rest of the community, by the wasting of their possessions, the destruction of their health, or the commission of crime, a charge which is inadequately balanced by the taxes they pay.

I conclude then that artisans and labourers who are strictly temperate pay an equal percentage to the state with more wealthy persons; but there is this difference, that abstinence from alcoholic liquors
and tobacco reduces their contributions by at least a half. An abstemious man below the limit of the income and other direct taxes, need not pay more than about 1 per cent. of taxes to the state, through his consumption of tea and sugar, in addition to about $2 \frac{1}{2}$ per cent., on the average, of local taxes. Now if we were to proceed with the removal of the remaining duties on tea, sugar, coffee, and fruit, we should leave the abstaining portion of the working classes wholly free from any state taxes except the trifing amount which they contribute through the Post Office net revenue, the indirect effect of some stamp duties, or the occasional payment of the dog or gun tax. I hold that it is not right to exempt any class from taxation. .We must carefully guard against imposing upon the very poor any charge disproportionate to their income, and from those who are actually paupers we cannot really take anything. But if representation is to be coincident with taxation, then taxation must be coincident with representation. We may strive privately to alleviate the extreme differences between the incomes of the poor and the rich, but to allow any exemption from the duties and responsibilities of citizenship would be a concession ultimately fatal to the welfare of all.

The only ground on which I should like to see the
tea, coffee, and sugar duties repealed, is that these articles are useful counter-attractives to alcoholic drinks; but we must first have some substitute for the revenue they produce. The extension downwards of the income and other direct taxes would be the proper measure were it practicable, but it is impossible to entertain the notion for a moment. The collection of such taxes would be in the highest degree costly and unpopular, and while a considerable portion of the working classes would readily evade them altogether, the remainder would pay them with feelings of pardonable indignation. I heartily agree therefore with the remark of 'The Economist,' that "every proposal which makes the more numerous class of society, collectively a very wealthy class, pay any part of the taxation is in the present day most valuable." Now the Match Tax appears to me admirably fitted for this purpose. It falls upon a commodity the profuse use of which we desire to repress rather than to favour as in the case of tea. It must be paid more or less by every household in the kingdom, and will thus collect from the great mass of the population a slight equable contribution in some degree countervailing the exemption of those classes from more fixed and serious burdens. And it is an advantage in the tax that those who are really very poor may reduce their
contributions to an almost inappreciable amount by an economical use of matches, which though possibly occasioning a little trouble will bring advantage rather than harm in other respects.

It has been remarked by many persons that the Government would have done much better to retain the small corn duty of $1 s$. per quarter, instead of proposing this new tax on matches. Such persons cannot have reflected at all upon the real character of their recommendation. That corn duty seemed a very slight one, and it was indeed no more on an average than 2 per cent. on the price of wheat; but it was requisite to impose the same duty on the cheaper kinds of corn, oats, barley, and maize, on which the percentage of price would be considerably higher. Now one objection to the tax is that some of the imported corn was employed for the feeding of horses and cattle, so that we were really enduring a tax upon a material of industry. A much more serious evil was that the rise of price occasioned by the tax was not confined to the corn actually imported, but was communicated more or less extensively to the corn raised within the kingdom. The corn duty, however low, was undoubtedly a protective duty, and though I should hardly agree with the financial reformers of Liverpool, that the duty occasioned a charge to the people four times as great as
the revenue yielded, I certainly think that the charge must have been at least twice as great. Even on this head alone the objections to the corn duty were immensely greater than any which can be brought against the Match Duty. But the incidence of the corn tax was most unfair to the very poor.

Bread, unless it be replaced by potatoes, is the cheapest food available; it is therefore more largely consumed by the very poor-those families whose weekly earning range from 10 s . or 12 s . to 20 s . per week-than by those artisans who, with wages varying from 20 s . to 60 s . per week, can afford to buy more or less animal food, which is wholly untaxed. Now from the unimpeachable information given by Dr. Edward Smith, in a report to the Poor Law Board on the dietary of workhouses, I learn that a family of three and a half adults well fed with bread would consume 12 lbs . of bread-stuff per week per adult, or almost exactly 1 ton in the year. The duty was equivalent to $4 \frac{1}{2} d$. per cwt. of flour, so that without even allowing interest to merchants, dealers, and bakers, the charge on the family consuming foreign corn would be 88 pence, or $7 \mathrm{~s} .4 d$. per annum. With an income of $15 s$. per week, or say 40l. a year, this tax would therefore be $\cdot 91$ per cent.; with a large family of young children
the charge might be still greater. Now the grossly unfair point in the tax was that artisans' families enjoying probably twice the income, would actually eat less bread, owing to the use of butcher's meat, provisions, dairy produce, \&c. An artisan's family of three and a half adults would not pay more than one-half per cent. at the most. These calculations proceed on the supposition that the flour is either imported or raised in price by the tax, as would be the case in the seaport and large manufacturing towns and many other parts of the country. The fact, if true, that it was not paid all over the country, scarcely redeems the tax in any degree.

Let us compare these effects with those which might have been anticipated from the Match Duty. On the average of the years 1863-9, the corn duty yielded almost exactly 800,000 l. a year. Let us assume for the sake of argument that the Match Duty would have given the same revenue. I calculated the corn duty on the assumption that a family consists of three and a half adults, that is, two adults and two children, or four persons altogether; but according to the Engiish census the average size of a family is 4.47 persons, so that, for the whole population of the United Kingdom, we may calculate the number of families at about $6,900,000$. Supposing then that all families, poor
and rich, used matches with equal profusion, the average contribution of each family would be $2 s .4 d$. per annum. If the Match Tax yielded only $400,000 l$. a year, then the average charge per family would be ls. $2 d$. per annum. What I wish forcibly to point out is that, proportionally to the revenue raised, the burden of the Match Duty upon the very poor would be less than one-third of the burden of the corn duty. This extraordinary difference is due partly to the protective character of the corn duty, and partly to the necessity under which the very poor suffer of consuming bread in large quantities. It is further to be noticed that under the pressure of poverty a family can economize in lucifer matches, but cannot properly economize in bread. Four and a half dozen boxes of matches a year are not necessary for the preservation of life; half that quantity might readily be made to serve all useful purposes, so that the very poor need not have suffered under the Match Duty more than about a sixth part of what many of them endured under the old nominal corn duty.

The shilling corn duty is one of which no one complained; the stamp duty on matches is one of which everybody complained; yet when we investigate the real character of these taxes, the econo-
mical advantages are so greatly on the side of the Match Tax, that I believe its substitution would have been justifiable at any time. Were the corn duty in existence now, it seems to me that the Chancellor of the Exchequer would have acted in accordance with the duties of his high office in proposing its abolition even at the cost of imposing the Match Duty in its place. But if we were to compare the sugar duty and the Match Duty, a different result might be expected. Not only is the sugar duty an important one, on account of the large sum it yields, but in its incidence it is probably well suited to distribute taxation over the non-income-tax-paying classes. It is an article of food in which economy may readily be practised, so that the very poor may be sparing in its use, and the highly paid labourer may be more profuse. The consumption of sugar may thus be expected to vary in an opposite manner to that of corn. The adjustment of the sugar duties is indeed a question of great scientific complexity, and I have never been able to understand it. Men of much financial knowledge like Mr. J. B. Smith, hold that that tax is in some degree obstructive to industry, and there was thus some extraneous motive for the reduction of the sugar duties. But this protective influence must be of such a minor
importance that I should be strongly inclined to regret the loss of two millions and a half of sugar duty. Had the Chancellor of the Exchequer felt able and justified in retaining that revenue in his hands, he need never have felt the financial difficulties of the present year. I suppose that in the present day the pressure of the House of Commons for the remission of taxes whenever there is a surplus, is so great that the boldest Chancellor of the Exchequer cannot hope to hold a large straightforward surplus. But if such a fact be true, it is hardly creditable to the great financial reputation of the House of Commons. There are few members of that House, I should believe, who would not act upon sounder principles in their own private finances.

I should be transgressing the limits of the subject which I proposed to myself in these pages were I to inquire whether there was any need at all for the Match Tax. I have attempted to investigate the character of that tax, but of course the final cause of a tax is the revenue it raises. People might reasonably object to being experimented on by the most skilful of tax inventors if the revenue were not needed. And there is moreover a primd facie objection to all financial changes. In the course of time trade adjusts itself to unavoidable conditions,
and a tax thus loses part of its disturbing and noxious powers. An old impost in some degree defective may be more tolerable than a new one which is theoretically better, but in its imposition disturbs the course of industry. The feeling that new taxes may be suddenly and unexpectedly imposed, produces some slight addition to the risks under which all investments of capital are made. If it can be avoided it is obviously undesirable that anyone in reading the morning paper should find that a death-blow to his business had been given by the Chancellor of the Exchequer the previous evening. I believe we have arrived at that point of financial reform when a minimum of change is desirable. Could we have retained the old sugar duty undiminished we need never have heard of the Match Tax, and the moral with which I would finish is this: Let us for the future allow the Chancellor of the Exchequer to hold a larger surplus on hand, the produce of which will properly go towards the reduction of the National Debt, and we shall then deprive him of any opportunity for imposing new taxes.

Having candidly submitted to the reader all the information I have been able to obtain concerning the probable effects of the Match Duty, I have only now to offer for his consideration and judg-
ment the following summary of the conclusions which I am inclined to adopt.

1. Judged according to the principles of political economy and taxation, the proposed tax is free from any fundamental objection; it ought not to be rejected because it falls upon one of the necessaries of life.
2. It is remarkably free from technical difficulties, and would not be costly in collection.
3. It would undoubtedly create a great temporary disturbance in the match trade, and would for a time throw out of employment one-fourth or onefifth of the persons engaged in the manufacture.
4. It is well fitted to draw a small contribution to the revenue from the very large part of the population who are exempted from direct taxes and have lately been relieved from many more injurious taxes.
5. Compared with the small corn duty lately remitted, it is found to be immensely superior in regard to its economic results and its incidence upon the very poor.
6. Nevertheless the Match Tax, as is now apparent, would probably be an unpopular one.

## APPENDIX.

(See p. 48.)

## ESTIMATES OF TAXATION.

I have framed three estimates, which I think worthy of some reliance, concerning families supposed to expend in the year $401 ., 85 l$., and $500 l$. respectively.

Each family is supposed to consist of man and wife, one child over ten years of age, and one under that age, this being the family which most nearly represents the average composition of the population. Their consumption is taken equal to that of $3 \frac{1}{2}$ adults. The family expending $500 l$. a year is supposed to include also three adult servants, making altogether $6 \frac{1}{2}$ adults.

The consumption of necessaries in the families of the poorest class is taken from Dr. Edward Smith's 'Report to the Poor Law Board on the Dietary of Workhouses' (20th Annual Report of Poor Law Board, 1868, p. 62), but as Dr. Smith has given no information concerning the earnings of the families, I have assumed them, after comparing information concerning the various rates, at $15 s$. a week.

In framing the estimate concerning an artisan's family, I have been assisted by information gathered from 43 families in Manchester, partly procured by minute personal inquiry, and partly through the aid of some large employers of labour.

I have met with little success in endeavouring to obtain direct information from more wealthy families, and their consumption of necessaries is assumed from somewhat narrow data. As, however, the whole of the taxes on necessaries paid by a family spending 500l. a year or more is less than 1 per cent. of the income, no great inaccuracy can have been committed, and many of the larger items, such as income tax, house tax, local rates, \&c., can be estimated on very simple data.

In calculating the duty paid, I have considered it indispensable to make an allowance for the interest and profit
which dealers will receive upon the amount of the tax. Great stress has been laid upon this element of the question in many writings, and I have endeavoured to be on the safe side by taking it at 20 per cent.

I have considered that licences required for the sale of tea, coffee, beer, wine, \&c., are always paid for ultimately by the consumers of the articles, and I have calculated the effect by adding the licence duty to the customs or excise duty, and ascertaining the addition to the customs or excise duty which would have been equivalent to the licence duty. The rates of duty thus arrived at are as follows:-

Flour.- $4 \frac{1}{2} d$. per cwt., with profit $5 \cdot 4 d$.; but as only half the corn consumed is supposed to be raised in price by the duty, the average effect of the duty is $2 \cdot 7 d$., which is the rate employed.

Tea.-6d.'per lb. Effect of licences, $\cdot 15 d$. per lb. Total $6 \cdot 15 d$., with profit $7 \cdot 4 d$. per lb.

Coffee.-4d. per lb. Licence included in tea, with profit 4.8 per lb.

Sugar.-Average rate of duty $9 s .6 d$. per cwt., or just $1 d$. per lb ., with profit $1 \cdot 2 d$. per lb .

Fruits.-7s. per cwt., or $\frac{8}{4} d$. per lb., or with profit $9 d$. per lb.

Beer.-The effect of the malt duty amounts to about $\frac{1}{2} d$. per quart (Select Committee on the malt tax, 1868, query 3347). Effect of the licence duties $\frac{1}{20} d$. per quart. Total with profit ${ }_{3}^{2} d$. per quart.

Wine.-Strong 2s. 6d. per gall. With licence 2s. 9d., with profit $3 \mathrm{~s} .3 \frac{1}{2} d$. per gall. Weak wine 1 s ., licence included in strong wine. With profit $13 \cdot 2 d$. per gall.

Spirits.-Duty, 10 s. $2 d$. per gall. Effect of licences, $5 d$. Profit, 2s. 2d. Total, 12s. 9d. per gall.

Tobacco.-Average duty as imported, $3 s .4 d$. per lb. Effects of licences inconsiderable ( $=\frac{1}{2} d$. per lb.); with profit, 4s. per lb.

The income tax is calculated at $5 d$. in $1 l$., the average of the four last years.

The rent is taken at oneeighth part of the income, and the ratable value at six-sevenths of the rent, that being the average proportion between ratable value and rental in England and Wales.

Family of $3 \frac{1}{2}$ adults expending $15 s$ weekly, or (say) 400 . a year:-


Family of $3 \frac{1}{2}$ aduluts expending 33 s, weekly, or (say) $85 l$. a year:-


Family of $6 \frac{1}{2}$ adults expending 5007 . a year :-

|  | Per Adult per Week. | Family in Year. | Tax. | Per Cent. upon Income. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{llll} \pm & 8 . & d .\end{array}$ |  |
| $\begin{array}{llllll}\text { Flour } & \text {.. } & . . & . . & \text {.. } & \text {.. } \\ \text { Tea } & . . & \text {.. } & . & \text {.. } & \text {. }\end{array}$ | 7 l l ${ }^{2} \mathrm{lbs}$ ozs. | 21 cwt 52 | $\begin{array}{rrr}0 & 4 & 9 \\ 1 & 12 & 0\end{array}$ | -05 |
| Coffee .. .. .. .. .. | $1{ }^{13}$ | 26 | 0105 | - 10 |
| Sugar .. .. .. .. .. | 1 lb . | 338 " | 1139 | $\cdot 34$ |
| Fruits .. .. .. .. |  |  | 020 | -02 |
|  |  |  | 4211 | - 8 |
| Rent 63l. a year. Ratable value, 54l. at 38. 6d. in 11. Income Tax, $5 d$. in $1 l$. |  |  | 990 | $1 \cdot 9$ |
|  |  |  | $\begin{array}{llll}10 & 8 & 4\end{array}$ | $2 \cdot 1$ |
| House Duty, 9a. in 11. | , | .. .. | 278 | 5 |
| Insurance, 1s. $6 d$. per 100l, on 800l. .. |  |  | 012 | 1 |
|  |  |  | 22167 | $2 \cdot 7$ |
| Legacy and Probate Duty on property of $100 l$. a year <br> Beer, Tobacco, Wine, and $\ddot{\text { Spirits, }} \ddot{\text { with }} 2 \ddot{20}$ per cent. profit added |  |  | 3170 | 8 |
|  |  |  | 900 | $1 \cdot 8$ |
| Total distributed Taxation .. |  |  | $3916 \quad 6$ | 8.0 |

As is afterwards explained, many of the stamp, licence, or assessed taxes are not included in the above statement, because they cannot be distributed without the free use of conjectare.

Summing up the above results we get the following Table:

| Description of Tax. | Percentage of Income paid In Traxea by F'amily expending in the Year- |  |  |
| :---: | :---: | :---: | :---: |
|  | \&40. | 885. | £500. |
| On Necessaries .. .. .. .. .. | $2 \cdot 1$ | I-7 | -8 |
| Rates and Tolls .. .. .. .. .. | $2 \cdot 5$ | $2 \cdot 4$ | $1 \cdot 9$ |
| Direct Taxes ..... .. .. .. | - | - | $2 \cdot 7$ |
| Legacy and Probate Duty .. .. .. | 5.5 | - | $\cdot 8$ |
| On Stimulants .. .. .. .. .. | $5 \cdot 5$ | $4 \cdot 1$ | $1 \cdot 8$ |
| Total distribnted Taxation | 10•1 | $8 \cdot 2$ | $8 \cdot 0$ |

One fact which is very apparent in the foregoing Table, is that about half of the taxation of the poorer families is yielded
by the taxes on stimulants, and may therefore be avoided by those who are willing to abstain from their use, whereas the upper classes could escape in this manner only a comparatively small part of their taxation.

It must be clearly understood that the preceding numbers are not intended to represent the whole pressure of tazation. No notice is taken of the self-imposed tazation of immoderate drinkers and smokers, because the taxes on spirits and tobacco are maintained and defended on the ground of their beneficial action in checking intemperance. Nearly ten millions of the revenue is probably contributed in this manner, and is unrepresented in my estimate.

Nearly ten millions more of the revenue is unrepresented either because it is not the produce of taxes, or because its effect upon incomes cannot be calculated.

The following statement shows the amount of these portions of revenue:-

Undistributed Revenue.


The undistributed portions of the customs, licence, and stamps, and the Post Office revence, fall to a great extent as a charge on industry, and are thus spread in a very equal manner over the whole population. The remainder falls mainly upon the upper classes in the form of postage, receipt, and other stamps, charges on the conveyance of property, etc.

If we accept Mr. Baxter's estimate of the income of the country ( 815 millions in 1867), the proportion of imperial and local revenue to income would be about 11 per cent., the
amount raised being in the year ending 31st March, 1868, as follows:-


But if we allow a profit of 20 per cent. to dealers in taxed articles, as I have invariably done, there is an increased pressure on the taxpayer of $8 \frac{1}{2}$ millions, which brings the whole amount up to about 100 millions, and the percentage to about 12 per cent.

If in the above estimates we make allowance for recent modifications of the tariff, namely, the final removal of the corn duty, and the reduction to one-half of the sugar duty, we shall arrive at the following statement of the present incidence of those taxes of which the effects can be calculated :-

|  | Family spending per Annom- |  |  |
| :---: | :---: | :---: | :---: |
|  | \& 10. | ¢85. | £500. |
|  | Per Cent. | Per Cent. | Per Cent. |
| Taxes on Necessaries-Tea, Sugar, Coffee, Fruit .. .. | 1.0 | $1 \cdot 1$ | $0 \cdot 6$ |
| Local Taxes $\quad .$. | $2 \cdot 5$ | $2 \cdot 4$ | $1 \cdot 9$ |
| Income Tax, House, and Legacy Duty .. |  |  | $3 \cdot 4$ |
| Stimulants-Beer, Spirits, Wine, Tobacco .. | $5 \cdot 5$ | 4-1 | $1 \cdot 8$ |
| Total per cent. of Income .. | 9.0 | $7 \cdot 6$ | $7 \cdot 7$ |

[^3][^4]BY THE SAME: AU'ГHOR.


Demy 8vo, cloth, 48.
A SERIOUS FALL in the VALUE of GOLD ASCERTAINED, and ITS SOCIAL EFFECTS SET FORTH.

With Two Diagramb.
London : EDWARD STANFORD, 6 and 7, CHARING CROSS, S.W.

Second L'dition, reoised, 8vo, 10s.6d.


Fcap. 8vo, 28. 6d.
THE SUBSTITUTION OF SIMTLARS THE TRUE PRINCIPLE OF REASONING;
derived from a modification of aristotle's dictum.

18mo, 3s. 6d.
ELEMENTARY LESSONS IN LOGIC;
Delluctive and Inductive, with copious Questions and Examples, and a Vocabulary of Logical Terms.

In the Press. 8vo.
THE THEORY OF POLITICAL ECONOMY.

London: MACMILLAN \& CO., 16, BEDFORD STREET, COVENT GARDEN, W.C.


[^0]:    * 'Christian and Economic Polity of a Nation,' vol. ii., p. 251.

[^1]:    * ' Principles,' \&c., 3rd ed., 1821, p. 272.

[^2]:    * 'Journal of the Statistical Society,' vol. xxxiii., pp. 317, 323.

[^3]:    THE END.

[^4]:    LONDON: PRINTED BY EDWARD STANPORD, 6 \& $\boldsymbol{T}_{i}$ CHARING CROBS.

