John FAIRRIE

Robert Andrew MACFIE

(16 mai 1851)

Brought from the Lords, 4 July 1851.

REPORT

AND

MINUTES OF EVIDENCE

TAKEN BEFORE THE

SELECT COMMITTEE OF THE HOUSE OF LORDS

APPOINTED TO CONSIDER OF

THE BILL,

INTITULED,

" AN ACT further to amend the Law touching LETTERS PATENT for INVENTIONS;"

AND ALSO OF

THE BILL,

INTITULED,

" AN ACT for the further Amendment of the Law touching LETTERS PATENT for INVENTIONS;"

AND TO REPORT THEREON TO THE HOUSE.

Session 1851.

Ordered, by The House of Commons, *to be Printed,*
4 *July* 1851.

Die Veneris, 16° *Maii* 1851.

THE EARL GRANVILLE, in the Chair.

Evidence on the Patent Law Amendment Bill, and Patent Law Amendment (No. 2) Bill.

Mr. John Fairrie.

16th May 1851.

Mr. JOHN FAIRRIE is called in, and examined as follows:

909. WILL you be so good as to state to the Committee what your occupation is?
I am a sugar-refiner.

910. On a large scale?
I believe on as large as any individual in Britain, at present.

911. Is it the interest of the sugar-refiners generally which you represent today?
I had a consultation yesterday with Mr. Macfie, and Mr. John Davis, another principal sugar-refiner in London, and it was agreed that I should be requested to appear before the Committee.

912. Have you had an opportunity of considering the two Bills which are before this Select Committee?
No, I have not; I only saw them yesterday; my attention was called only to a single clause.

913. That clause is with respect to the exclusion of the colonies, is not it?
Yes.

914. Will you be so good as to state what your opinion of that clause is?
If a patent is taken out for sugar-refining, and a large sum is charged under it to the sugar-refiners of Great Britain, which the sugar-refiners of the West Indies are free from, it amounts of course to a tax upon us. It does not appear to me to be a matter of so much interest to sugar-refiners as to patentees, because a patent, if it does not extend to the colonies, becomes of much less value in Great Britain. If the colonies are allowed to use it free of expense, of course it diminishes the value of the patent so much.

915. Is not it a hardship upon the colonies to be obliged to pay for an expensive machine when they can get a similar one very cheap?
I think they, as British subjects, should be subject to the same expenses as others are. A sugar-refiner in the West Indies should be put, I think, under the same regulations as we are placed under at home. We might, in some cases, get machines made in Belgium very cheaply, free from the patent right, if we were allowed to do so.

916. Do you think that the present system has been useful in promoting inventions of the kind adapted for your trade?
I can hardly say that I have made up my mind on a subject so extensive as that, but I rather think it has not worked very well, and I do not think the system which I understand to be intended is likely to work any better; in fact, it would be worse, I think. A man gets hold of an idea; he runs immediately to the Patent Office before he has made any attempt to perfect his process; he gets a protection for six months, and he goes about examining every publication connected with the particular subject he is engaged on, and getting all the information he can; and when the time for delivering in his specification

comes,

Mr. John Fairrie.

16th May 1851.

comes, he has entirely altered the original view which he entertained; I know that to be so from experience. I was at the expense of a patent within the last six months, and the original idea with which the inventor started was entirely abandoned before the patent was taken out. He experimented with me during the whole of the six months, and laid himself out for obtaining information on all subjects connected with it. He put into his patent every thing he could find, and, among other things, discoveries which he had no right to claim at all. The correct principle would be, as it appears to me, that before a patent is taken out at all, the whole of the process should be described as it is intended to be worked.

917. Does not it sometimes happen, that a very valuable principle suggests itself to a man, and yet it is very difficult for him to work it out to a satisfactory conclusion, without an almost public exhibition of it, and confiding the secret to a great many workmen?

That is so to a certain extent; there is a difficulty, no doubt, in that respect.

918. You would only allow mature inventions to be patented?

The exact principle should be stated on which the man intends to proceed in his invention. He should not be allowed to take out a patent when he has made no discovery at all, but means to look about him in the meantime; or he has heard of some man who is trying some particular process, and he runs and takes out a patent, with the view of cutting out the very individual who perhaps is the real discoverer. It appears to me, that making the cost of patents so very small, instead of doing any good, will do harm; there will be such a number of patents on every trifling subject, that manufacturers will be prevented making any alteration or progress whatever. If patents could have been obtained at 20*l.*, I might have taken out 50 patents; for a great many of the adaptations in use at present originated with me many years ago. I never thought, under the existing system, of taking out a patent; but if they could have been got for 10*l.* or 20*l.*, I should have tied up half the present arrangements now in use in sugar-refineries.

919. Which would have been an obstruction to others in the same trade?

It would.

920. You consider that the existence of a patent operates, in fact, as an obstruction to the further progress of improvements, except in the hands of the patentee?

Very considerably; for instance, I know of a process which is in use at the present moment; I see improvements which I could make upon it; but I cannot make those improvements, because the original patentee says, "No, I shall not allow you to touch this thing at all."

921. Do not you think the increased periodical sum payable on the renewal of patents would be a very great inducement to people to abandon them when the time of payment arrived?

By the proposed law there is to be a certain charge for three years; I think that is an improvement undoubtedly.

922. By that means do not you think that a patentee would get an ample reward during the short time that he was protected, and yet the public would not be seriously damaged, as, after a brief period, they would obtain possession of the patent?

Yes, I think that is the case.

923. With that protection and guard, do you think the injury which you have pointed out, of making patents so cheap and easy to be obtained, would be so great?

It would not be so great, in my opinion.

924. Do not you think, from your experience, that the improvements which are going on in your own processes, and in processes with which you are acquainted, are effected more by a continual series of small steps than by occasional great advances?

Undoubtedly.

925. Do not you think that if all those small steps were clothed with patent rights,

rights, the effect would be rather to obstruct that continued daily course of improvement than to forward it?

I think so.

926. Do you think the evil likely to arise, and which within your experience has arisen, in that form is sufficient to overbalance the good to be obtained from granting patent rights to great and valuable inventions?

I think it is, in a very great measure.

927. Then, according to your opinion, patents are injurious altogether?

My opinion is rather on that side than the other. I have conversed with a very ingenious man to-day, who takes a very opposite view; he says, "I have inventions in my head; if I were not allowed to patent them, I should not discover one of them." I said, "That is not wise of you; you can go and try what you can get for them; there are always men who are willing to pay large sums for improvements."

928. There are two classes of improvements; is not there a class such as you would naturally introduce into your processes from time to time, comprising small improvements at a small cost; and another class which it is supposed requires the lengthened attention of the person specially applying his mind to the subject?

Undoubtedly; in our business there have been only two very important discoveries within my experience within the extent of 40 years; the first was Howard's patent, which was for boiling sugar *in vacuo*. He got hold of the idea, and by the assistance of Boulton and Watt he perfected, as he conceived, that idea; when it came to be tried, however, it was an entire failure; the plan would not work at all: it was a suggestion by a German workman which at last enabled that patent to be worked, which ultimately produced 40,000 *l.* or 50,000 *l.* a year. The original plan was entirely a mistake; it was the slight improvement of a German workman which brought the thing to perfection.

929. Was that improvement patented?

No, it was not patented.

930. The application of that principle was, in fact, new?

It was new.

931. The improvements with which you are specially conversant, I apprehend, are improvements depending upon chemical processes and chemical discoveries rather than upon the direct adaptation of mechanical means?

Mechanical means in a considerable degree. The only other great improvement which has taken place is the use of charcoal in a particular way; the charcoal is used in small grains, like gunpowder, through which the sugar is filtered; that has had the effect of reducing the price of fine sugar 20 *s.* a hundred weight.

932. In the case of mechanical improvements, is not it very difficult to specify what is the invention contained in each of them; is not it generally the mere application and more dexterous manipulation of wheels to regulate, direct and control forces previously known?

I can hardly give an answer to that question without consideration.

933. In a general way, do you think it difficult to define what is or what ought to be considered a discovery?

In a great many cases it is very difficult indeed.

934. In most cases is not it the application in a new manner of discoveries previously made?

It is; I can give you an illustration of that. People took out a patent for a machine called the centrifugal machine, to be used for drying cloth; a gentleman in Liverpool said this would be applicable to sugar-refining; he went and took out a patent for that, though he had made no discovery, simply because the idea occurred to him, and without ever having tried it; and so had the means of excluding all the world from using it, though it was not his own invention at all.

935. Do you think that a person should be equally protected by a patent who merely

Mr. John Fairrie.

16th May 1851.

merely applies already made discoveries in a novel way, and is not himself the discoverer of the original principle?

Certainly not; I think the cases quite distinct.

936. When you state that you agree in the principle, is that with reference to the supposed rights of inventors, or is it with reference to the supposed tendency of patent regulations to promote the public interest?

Both, I think.

937. Do not you think that it is as important for the public interests to promote a more skilful management, or manipulation of known powers and known principles, as it is to encourage the invention of further principles?

Certainly it is. I have mentioned another great discovery in sugar-refining, the use of this grained animal charcoal, which has the curious property of removing all colour from the sugar. The power of animal charcoal was a known principle for many years. It occurred to me that the proper way of using it was to use it in grains. I tried it, but it never occurred to me that it should be patented, because it was only an application of a known power. To my surprise I found I was forestalled; that a patent had been taken out, though I had known the principle, and applied it two years before.

938. Could not you go on employing the process without paying anything for it?

No, I was prevented.

939. That was owing to your unwillingness to go into a court of law?

I went into a court of law. The opinion of the Judge was, that I was quite in the right; but the opinion of the jury was, that I was wrong. I saw this plainly, that if a patentee comes before a jury, the jury will always give it against the public, and in favour of the patentee; that was plain in this case. The Judge directed the jury that my opponent had no case at all; the jury, in the face of that direction, gave a verdict for the patentee.

940. It has been stated to the Committee that patents operate as a great encouragement to inventors and to invention; is not it your opinion that in the event of there being no patent to protect an inventor, he might still count, in most cases of useful inventions, upon remuneration for the communication of his improvement to the trade?

I think so, to a very large extent, if the invention is important. He might not get so large an advantage, but he would get a considerable one. No man could get 40,000 *l.* or 50,000*l.* a year, which Mr. Howard did; but he might get a certain amount of remuneration.

941. Its value in the market would be sufficient to operate as an encouragement to invention?

Yes.

942. In Mr. Howard's case, you consider that it was not the true inventor who obtained the reward, do not you?

He was the inventor.

943. You stated that the really useful idea accidentally suggested itself to a German boiler?

That was the case; the invention was put into the hands of a sugar-refiner, a Mr. Hodgson, who, in attempting to carry it out, was said to have spent his whole fortune. Before this mode was discovered, it was said that he lost 40,000*l.* in attempting to carry out Mr. Howard's idea; when just at the last moment this person made incidentally a discovery of the way of applying it.

944. Do you make many improvements in your works and processes without seeking the protection of a patent?

A great many, in small adaptations.

945. That is a fact of frequent occurrence?

Yes, constant occurrence.

946. Do you know, of your own knowledge, that the same fact is of frequent occurrence in other cases?

I do

Mr. John Fairrie.

16th May 1851.

I do not know; but I should think, from my experience in my own particular business, that it must be so.

947. In those cases, what is the reason that you do not protect yourself by a patent?

They are small matters. If a patent were to be got for 10 *l.* or 15 *l.* or 20 *l.*, I very likely should have taken out many patents; but when the expense comes to be 200 *l.* or 250 *l.*, it makes a great difference.

948. Had you possessed a facility for taking out patents on account of their cheapness, do you or not think that those patents in your possession would have been obstructions to the processes of other people?

I think so, certainly.

949. Do you think that the want of power to take out patents in your case, in consequence of the cost of them, has in any degree tended to check the application of your ingenuity to the discovery of further improvements?

Not in the least.

950. All patents involve the principle of a monopoly?

Yes, and on that account the inclination of my mind is, that it would be better to have no patents at all; the progress of improvement, I believe, would be as rapid, or even more rapid, if it were not obstructed at every turn by patents.

951. You do not imagine that it is the protection held out by the patent laws which induces active minds to apply themselves to make discoveries?

I do not think so.

952. You believe that the same energy of mind would be displayed, and the same anxiety to make new discoveries felt, whether there were this hope of protection or not?

I think so; in the case of manufacturers, certainly. I think the great bulk of improvements proceed from the manufacturers themselves, and not from mere inventors.

953. You imagine that the advantage derived from a discovery, in the increased facilities for the manufacture, is quite sufficient to operate upon the minds of parties, and lead them to introduce every possible improvement?

I think so. Of the patents which have been taken out in sugar-refining, though they have amounted to hundreds within my recollection, there have only been two or three which have been of any value whatever; and those which have been of value have been made so from the application of the experience and knowledge of manufacturers themselves—men who have been practical men, not inventors, who devote their attention to catching improvements from every quarter.

954. Is there any other point connected with this subject on which you wish to make any remark?

No; but I may repeat, the clause to which I have referred respecting the colonies appears to me to be an unfair clause; it is unfair to give one class of Her Majesty's subjects advantage over another class.

955. You mean the advantage of using in the colonies that which cannot be used upon the same terms in this country?

Yes.

956. A patentee may now take out a patent for England alone?

Yes.

957. Is not that frequently done?

Yes.

958. Is not an Englishman, whose trade is affected by that patent, placed exactly in the same position of disadvantage, compared to an Irishman and a Scotchman, as he would be by that provision in this Bill with regard to the colonies?

No doubt. What I mean is this, that there may be an invention which has very little relation to Ireland. For instance, in the case of sugar-refining, people would hardly think of taking out patents for Ireland in that manufacture, because no such trade has ever been carried on there to any extent.

Mr. John Fairrie.

16th May 1851.

959. You mean that a patent for sugar-refining, taken out for England and Scotland, is practically the same in its results as if it were taken out for the United Kingdom?

Yes; there may be other matters which are similarly circumstanced.

960. Is there much sugar-refining now carried on in the West Indies?

To a very small extent.

961. Do you think that the introduction of such a provision as you have referred to might lead to sugar-refineries being established in the West Indies?

The tendency is to enable the West Indians to refine sugar, having an advantage over us in being taxed to a smaller extent.

962. Are any of the processes now used by you patented, or have the patents expired?

In all cases I think they have expired, except in one case, which has been recently introduced—the use of the centrifugal machine in refining sugar.

963. Practically, at this moment, the clause in question would not give the West Indians any great advantage?

In this case 6 *d.* a hundredweight is charged for the use of this machine; but the West Indians would get the use of it free.

964. That is the only instance you can refer to?

That is the only instance which occurs to me at present.

965. Is it within your experience that the effect of the existing patent law is seriously to restrict the use of a patented article, or is it merely to leave the use of it free to the public, but at a higher cost than they would otherwise have to pay?

It is the latter.

966. You think that it does not generally restrict to any extent the actual use of the article?

That depends upon various circumstances; it depends upon the charges which may be made for the use of the patent.

967. So far as your experience and observation go, can you tell the Committee whether the expiry of patent rights is usually marked by any important change either as to the price or as to the extent of use of the article patented?

A very great change. In the case of Howard's patent, who charged 1 *s.* a hundredweight previously to the patent expiring, not above one-fourth of the refiners of London used the process: as soon as the patent expired, it was almost universally adopted.

968. That might be the result in a very peculiar case, such as that to which you have alluded, without being the general character of the results; what is your opinion of the general character of the results?

It depends altogether upon the amount of the charge which is made. If the patentee charges a very small sum, the existence of the patent, of course, will have very little effect; but if the charge amounts to 6 *d.* or 1 *s.* a hundredweight, as it does in many cases, it is otherwise. Mr. Howard attempted, originally, to begin with 4 *s.* a hundredweight.

969. Does not it depend also upon whether the patentee is a manufacturer?

It does, of course.

970. In which case, he would be interested in making the amount of protection upon the invention high, in order to have the monopoly of supplying the machines?

Yes.

971. There is a clause in the Bill denying protection to importers of inventions; do you approve of that clause?

Certainly; I think it is altogether ridiculous to allow a man who merely finds out that a particular plan of working is carried on across the water, to exclude every body in this country from using that invention.

972. On the other hand, it is stated that it is a disadvantage to the inventor here that he should be precluded from protection when his article is not generally known, because it may have been in use in some distant part of the world?

If

Mr. John Fairrie.

16th May 1851.

If it were brought from Persia, for example, it might be an important thing; but if it were brought from France, the merit would be trifling.

973. The greater number of the inventions which are imported into this country come from Europe and the United States?
Almost all of them.

974. You do not think, according to your experience, that there is any tardiness as to the importation of foreign inventions into this country which requires to be stimulated by granting patent rights?
I think not.

The Witness is directed to withdraw.

Mr. R. A. Macfie.

Mr. ROBERT ANDREW MACFIE is called in, and examined as follows:

975. IN what occupation are you?
I am a sugar-refiner at Liverpool, as well as in Scotland.

976. Have you heard a considerable portion of the evidence of the last witness?
I entered the room during the course of his examination.

977. Did you concur in that portion of the examination which you heard?
Entirely; except that I think Mr. Fairrie did not appear to know that there is one sugar-house and two molasses refineries, or boiling-houses, in Ireland.

978. Do the patents which affect sugar-refineries generally extend to Irela now, or have they been taken out for England alone?
Owing to the very awkward state of the law, requiring you to take out a patent for each of the three kingdoms, they are universally taken out for England, generally for Scotland, but rarely for Ireland. The reason why sugar patents are rarely taken out for Ireland is, that Ireland is a most expensive country, and till very recently there were no sugar-houses or refineries of molasses in Ireland.

979. By an expensive country, you mean that the expense of a patent is great for Ireland?
Yes.

980. Do the English refiners consider it a grievance that Irish refiners should be exempted from the operation of a patent?
That is my opinion. We—that is, the firm I am connected with—have a sugar-house working in Greenock to a considerable extent, for the market of the North of Ireland. We have a sugar-house in Liverpool, working bastards, I may say chiefly for Ireland. It would be very awkward, in the case of an important patent, if we were liable to pay the patent charges, while our rivals on the other side of St. George's Channel are exempt. The house I refer to, which is working chiefly for Ireland, is working molasses. There are two molasses-houses in Dublin, the very market to which most of our bastard sugars are to go. Very high rates have generally been charged by the discoverers of important improvements. In the case of Howard's patent, our firm paid for a number of years 1*s.* per cwt. upon our sugar, and 4*d.* per cwt. upon molasses. We agreed for our Edinburgh house, about 15 years ago, to pay Messrs. Terry & Parker either 1*s.* 6*d.* or 2*s.* per cwt. for the use of their patent, and the supply of materials. About 18 months ago, refiners were asked to pay for Dr. Scoffern's patent, 2*s.* per cwt. Mr. Finzel, for the use of his centrifugal improvement, proposed to charge 1*s.* per cwt.—that is known generally under the name of Rotch's Centrifugal Patents. One shilling per cwt. upon foreign sugar and upon colonial sugar, when colonial sugar has been cheap, is very nearly five per cent. ad valorem. I may perhaps anticipate a question, which your Lordships will probably propose. We should find it very awkward to be obliged to compete under free trade, if we must pay five per cent. to an inventor, while we have no protection whatever against rival refineries in the colonies—I speak chiefly of the colonies at present,

Mr. R. A. Macfie.

16th May 1851.

present, because I do not think it is competent for us at this point to legislate with reference to foreign countries.

981. With regard to the great injustice of which you speak, it would be cured by the present Bill, would not it?

Entirely; I think it is a very satisfactory improvement to include the three kingdoms in one patent.

982. You would wish to carry the proposal a little further, and to include the colonies under the same clause?

I have a great objection to patent rights, as involving a monopoly; but I hope that your Lordships and the other House of Parliament will immediately follow this relief by exempting us at home also. It would be very hard to say that we should be obliged to pay a tax to patentees, if we are to be called on to compete with those who pay no tax.

983. You gave a list of patents, the use of which was paid for in the sugar-refining trade; you did not say whether those patents generally extended to Ireland or not?

It is a point upon which I have not information. I should think in general, unless it were important, no patent would be taken out for Ireland. With respect to the centrifugal system, no patent has been taken out for Ireland. Mr. Finzel patented what he considered an improvement upon it, which consisted in the application of steam, in order to facilitate the escape of the molasses from the crystals of sugar.

984. Have the refineries in Ireland, of which you spoke, been recently established?

I think the molasses-houses have been instituted within the last very few years; one of them, at any rate, within the last two or three years; the sugar-house in Cork was established probably about three years ago.

985. It is probable that when the invention was made, no such establishment existed in Ireland, which would account for the patent not having been extended to that country?

When Hardman's patent was taken out, there was no sugar-house in Ireland; I feel pretty confident of that.

986. Do the houses to which you have alluded in Ireland use processes which are patented in England, and not in Ireland?

I am not aware whether they do or not; if the processes are of value, and they are in a condition to use them, they would not be judicious and skilful manufacturers unless they did use them.

987. The question is rather directed to the fact than the theory of the case, whether, in your knowledge, houses recently established in Ireland are using processes which they could not use in England, on account of patent rights being in existence?

I am entirely ignorant of that.

988. You cannot state whether those houses have been established in Ireland in consequence of the non-existence of patent rights in Ireland which do exist in England?

I cannot say so; I was never in any sugar-house in Ireland.

989. Does it come within your knowledge, or are you able to cite instances of processes or manufactures being established in Scotland or Ireland, in consequence of patent rights not extending over those parts of the kingdom which would have precluded those houses from setting up their business in England?

It is not within my knowledge; it may be the case.

990. In the instances of the patent processes to which you have just alluded in your evidence, as imposing heavy payments upon raw materials, were those patent privileges in the possession of the inventors, or were they then in the possession of the parties who had purchased the patents?

I should say that they were all in the possession of the inventors, or the parties who had, after the invention was patented, entered into an arrangement with the inventors.

Mr. R. A. Macfie.

16th May 1851.

991. Are you competent to say whether, generally speaking, patent rights are usually retained, and the profits of them appropriated to the benefit of the inventors, or are they usually sold at one form or other by the inventors, and passed into the possession and used for the benefit of other parties?

I think that is a point upon which a patent agent only could speak; we have generally had intercourse with the inventors themselves, I think.

992. The object of my question is to ascertain whether, according to your experience and knowledge, the principal benefit arising from patent rights passes generally into the possession of the inventor, or whether a large proportion of it passes into the possession of those parties who have purchased them in some form or other from the inventors?

I know, with respect to a notable patentee, that he gets a very small remuneration for his application of an important principle; but that was his voluntary act; he chose to arrange with certain parties for a per-centage, or for a certain moderate remuneration.

993. That portion alone of the profit derived from an invention which the patentee gets can be considered as an inducement to further inventions; that portion of it which passes to the capitalist purchasing the patent can in no respect tend to the encouragement of invention; it is with a view to that consideration that my questions were put?

I should say that, so far as pecuniary inducement operates upon the minds of clever men, they have that inducement to a considerable extent under the present law.

994. The inducement under the present law goes only to the extent to which the benefits derived from patent rights pass to the inventors; it does not include the portion of pecuniary benefit which passes to the purchasing capitalist?

The purchasing capitalist must give a consideration for them.

995. That portion which goes to the inventor in the form of purchase-money for his discovery is the only part of the profits of the patent right which really acts as a stimulus to further invention?

Certainly.

996. At the same time, I suppose there are some inventions which require the assistance of the capitalist in order to bring them into useful operation?

I think there cannot be any doubt of it. There has lately been a society formed for buying up inventions or discoveries—I suppose unpatented—from those who are unable to patent them themselves, and bring them forward.

997. Do you believe that the exemption of the colonies from the operation of the patent law would lead to any considerable extension of the process of sugar-refining in the colonies?

I think it could not fail to do so, provided there were any great discoveries made and patented; at present I do not think we are in that situation. The importance of the matter is very great in my eyes, and I think it can hardly be sufficiently so in the eyes of your Lordships. Your Lordships, perhaps, are not aware that there is a great change going on at this moment in regard to the form in which sugar is used. Till within these few years a very large proportion of the consumption of sugar was in the state of raw sugar; the rest being in the state of lump or loaf sugar; now, the consumption of raw sugar is rapidly diminishing, and its place is being supplied by an imitation of raw sugar, produced in refineries, of a better flavour and a higher colour: as refiners, we have no doubt it is a better article; the fact is, it is displacing raw sugar; we are making it to compete with the colonies; and if the colonies and we are to make that article, the one under a tax to the patentees, and the other not, we shall be put to a disadvantage.

998. So that the exemption would operate as an unjust and unfair advantage to them?

I am very glad that your Lordship has used such a strong expression; I did not like to state it so decidedly.

999. Are there many sugar-refineries in the colonies now?

I only know of one in Barbadoes, and one or two very small, and I suppose

Mr. R. A. Macfie.

26th May 1851.

dying, ones in Jamaica; but there has been a strong disposition to adopt central factories, and those are just sugar-refineries.

1000. They are not adopted yet?

A great deal has been said about them, and I dare say eventually they may be adopted. As refiners, I think we ought not to encourage a distinction between the manufacture and refining of sugar; the patent laws do not distinguish between the two; I consider refining as just the perfecting of a process which is begun on the estate, and it may be perfected on the estate.

1001. There is a portion of that manufacture which can only be carried on in the colonies, and cannot be carried on in this country, and therefore by extending the law of patents to the colonies, you would expose them to injurious competition from other sugar-growing countries into which, necessarily, the patent laws do not extend?

Of that there is no question; I think their case, and that of sugar manufacturers at home, whether from beet-root or imported raw materials, exactly correspond; the exposure to such competition is alike.

1002. Is it your opinion that the progressive improvements in various processes in your manufacture from time to time have been accelerated or retarded by the existence of the patent laws?

Monopolies, I think, in no case can be beneficial. My own impression is, and it is a very strong impression, that the manufactures of this country as a whole, and ours in particular, suffer very much by the existence of any patent laws.

1003. You object to the existence of the patent laws upon general reasoning, that general reasoning being fortified by your own personal and practical experience?

It is a subject which I have not directed my particular attention to for any length of time, and therefore I only give an impression; I would correct myself thus far, that it seems to me a matter of some doubt whether the great vacuum-pan improvement would have been perfected but for the hope of the monopoly; it might have been so.

1004. Taking the whole subject in a general survey, the leaning of your mind and your experience is hostile to patent rights?

Decidedly so.

1005. Will you state to the Committee the grounds upon which you have come to that conclusion?

One of the grounds is, that after a discovery has been made and patented, other parties for 14 years are discouraged from making further improvements.

1006. I understand, from your preceding evidence, and from the evidence of Mr. Fairrie, in which you have declared your concurrence, that the main ground upon which you rest your opinion is, that the obstructions which the multiplication of patent rights creates to a progressive improvement in your processes predominate over the advantages you believe to arise from the great discoveries created under patent law encouragement?

Yes; and I think the patent laws are injurious in this respect, that they substitute a desire for money in the place of the more legitimate desire for doing good and earning a laudable distinction; they make every discovery a matter of money-value; people are led to say, I can turn this into money; I will not divulge it just now; I may sell it, or make use of it in a future patent.

1007. Do not you think the patent laws offer an incentive to discoveries and to inventions?

I think they must do so in certain cases.

1008. To that extent, is it your opinion that there would have been fewer discoveries and fewer inventions if there had been no patent laws?

To that extent, undoubtedly; but it is a question of preponderance, whether there would have been more in the absence of patents than there have been under the prevalence of patents. I am inclined to think that the absence of patents, by giving more freedom, would have caused an increase in the number of important improvements, at all events. With respect to discoveries, I do not think

Mr. R. A. Macfie.

16th May 1851.

think the prospect of reward has any connexion with them; I think they are fortuitous.

1009. You are not disposed to dispute that the patent laws have offered certain incentives both to improvements and to inventions; but you think that there are other advantages to be derived from the non-existence of patent laws, which overbalance the advantages derived from their existence?

Undoubtedly.

1010. The other advantages which you conceive would arise from the absence of patent laws being, as I have understood your evidence, the absence of the impediments which now are really found practically to obstruct the progress of improvements in processes of manufacture?

I quite agree with that.

1011. The conclusion which you have arrived at is, that it is desirable that the patent laws should be abolished; but if they are not to be abolished, that all classes of Her Majesty's subjects should be subjected to their operation?

We should like that, as refiners. Whatever may be ultimately resolved on, I think there ought to be some board of control to which patents should be referred. I would certainly abolish the monopoly which a patent gives. It might be that, in certain cases, there should be, as a reward, a privilege given of charging so much money for the use of the invention; but I conceive it intolerable that, by our own laws, we should prohibit British subjects from working important improvements in manufacture.

1012. Have you considered the Bills which are before the Committee in their details, with respect, for example, to the constitution of the proposed Commission?

I read over with some care the Bill, No. 1. The Bill, No. 2, I have only received since I came to London. In going over the clauses, I think I might be able to make some remarks; but they are not sufficiently before me now to do so. I highly approve of the clause in Bill, No. 1, that all patents should be published. I think, for the sake of the provinces, they ought to be so. On various occasions, I have had to go to Chancery-lane to read improvements in our own refining trade; whereas, if they had been published monthly with the Board of Trade Returns, we should have had them in all the public libraries in the kingdom. The result would be that Manchester, Birmingham, Liverpool, Glasgow and other places would all have the benefit of knowing of any improvements. With respect to the report of the Commission, which is suggested in Bill, No. 1, I felt that it would have been better if the object of the report had been stated. It did not seem to me that any change is proposed in the object of the present report, but it would be merely the question of novelty which would be reported on.

1013. What would you have the report to embrace?

I should like it to be very extensive. I should like it to report whether it would be wise on the whole to grant the patent, and under what restrictions, and for what length of time.

1014. The general merits of the invention you would have included in the report?

Yes. If it is a trivial matter, which would only annoy manufacturers, by exposing them to threats of actions, it should not be granted. I highly approve of that part of Bill, No. 1, in which it is said that no invention known abroad shall be patented.

1015. When you refer to granting patents, more or less of a frivolous character, being used as a means of annoying and obstructing you, does that observation upon your part arise from any practical experience which you have yourself had of such results?

We had a very troublesome matter once with a patentee. I do not know that I can speak of such occurrences from my own experience; but I fear it will be so when parties can get patents for 20 *l.*

The Witness is directed to withdraw.