ON

# THE COST

OF

# PATENTS OF INVENTION

IN

# DIFFERENT COUNTRIES:

A PAPER READ BEFORE THE

STATISTICAL SECTION OF THE BRITISH ASSOCIATION,

AT EDINBURGH, AUGUST 2ND, 1850.

BY W. NEILSON HANCOCK, LL.D.

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*On the Cost of obtaining Patents of Invention in different Countries.* By W. Neilson Hancock, LL.D., M.R.I.A. Archbishop Whately's Professor of Political Economy in the University of Dublin, and Professor of Jurisprudence and Political Economy in Queen's College, Belfast.

GENTLEMEN, In this paper I propose to direct your attention to some statistical information respecting the cost of obtaining patents or brevets of invention in different countries, which I have arranged in the following tabular form.

The authorities on which I have relied for the figures that I have thus arranged are the publications of Messrs. Robertson and Co., and Messrs. Newton and Son, intended for the information of parties seeking to obtain patents; and the average cost stated in the table is the cost of obtaining a patent or brevet of invention when unopposed and passed without extra fees.

To guard against any supposition of this table being incomplete, from the omission of some European nations in the list of countries, it is right to mention that in Denmark there are no patent laws, properly so called; protection being afforded to inventions under the laws respecting copyright; and in Switzerland, the Hanseatic Towns, and Turkey, the governments do not grant patents.

| Countries. | Species of Patent of Invention. | Average cost. | £ | s. | d. |
|---|---|---|---|---|---|
| United Kingdom | Copyright of ornamental designs (under 2 Vic. c. 17, and 5 and 6 Vic. c. 100) for from 9 months to 3 years | From<br>to | 0<br>4 | 6<br>11 | 0<br>0 |
| United Kingdom | Copyright of design in configuration of articles of utility (under 6 and 7 Vic. c. 65) for 3 years | From<br>to | 11<br>15 | 11<br>4 | 6<br>6 |
| Bavaria | Patent for 5 years | | 12 | 0 | 0 |
| United States of America | Patent for 14 years for an American | | 13 | 0 | 0 |
| Bavaria | Patent for 10 years | | 15 | 0 | 0 |
| Prussia | Patent for 5, 6 or 8 years | | 15 | 0 | 0 |
| Sweden | " 5 years | | 15 | 0 | 0 |
| Bavaria | " 15 years | | 20 | 0 | 0 |
| Belgium | " 5 years | | 23 | 0 | 0 |
| Holland | " 5 years | | 23 | 0 | 0 |
| Austria | " 5 years | | 25 | 0 | 0 |
| France | " 5 years | | 31 | 0 | 0 |

| Countries. | Species of Patent of Invention. | Average cost. | | |
|---|---|---|---|---|
| | | £ | s. | d. |
| Belgium | Patent for 10 years | 37 | 0 | 0 |
| Holland | " 10 years | 37 | 0 | 0 |
| Austria | " 10 years | 45 | 0 | 0 |
| Spain | " 5 years | 50 | 0 | 0 |
| France | " 10 years | 52 | 0 | 0 |
| Belgium | " 15 years | 70 | 0 | 0 |
| Holland | " 15 years | 70 | 0 | 0 |
| France | " 15 years | 73 | 0 | 0 |
| Austria | " 15 years | 75 | 0 | 0 |
| Scotland | " 14 years | 75 | 0 | 0 |
| United States of America | Patent for 14 years for any foreigner except a British subject | 77 | 10 | 0 |
| Russia | Patent for 1 to 6 years | From 20 to 80 | 0 | 0 |
| England | " 14 years | 110 | 0 | 0 |
| United States of America | Patent for 14 years for a British subject | 120 | 0 | 0 |
| Ireland | Patent for 14 years | 135 | 0 | 0 |
| United Kingdom including British Colonies, and including specifications | Patent for 14 years | 376 | 0 | 0 |

When we examine this table, the points which suggest themselves as most worthy of notice are the following:—

1st. That the cost of obtaining copyright for ornamental designs, or designs in the configuration of articles of utility, in the United Kingdom, under our recent legislation, is less than the cost of obtaining similar privileges in any other country. 2nd. That the cost of obtaining a patent in England is greater than in any other European state. 3rd. That the cost of obtaining a patent in Ireland is greater than in any other country in the world. 4th. That the cost of obtaining a patent for the entire British dominions is more than three times the cost of a similar privilege in any other collection of territories under one government.

From these results we are naturally led to the inquiry whether there is any good reason for maintaining in the British dominions the extraordinary high cost of obtaining patents which is thus shown to exist; and whether this cost can be diminished without any injury to the community. For the purpose of conducting this inquiry, I propose to direct your attention to the consideration of the following questions:—1. Should separate patents be required for each portion of the United Kingdom? 2. Is the expense of English patents caused by wise arrangements for affording to the public facilities for searching for previous inventions? 3. Is the great expense of British patents caused by arrangements for affording security to the inventor in the enjoyment of his property?

4. From what causes does the great expense of British patents arise? 5. What are the benefits which patents of invention confer on the community? 6. By what means can the cost of obtaining British patents be diminished?

To proceed, then, with the first question, Should separate patents be required for each portion of the United Kingdom? This extraordinary provision of our patent laws took its rise from the circumstance that the act of parliament under which her Majesty grants patents was passed in the reign of King James the First, at a time when Scotland and Ireland were separate kingdoms, having perfectly distinct governments. The privilege of granting patents secured to the crown by the act of James, was always exercised by granting letters patent under the great seal; and as there was a separate great seal for England, for Scotland, and for Ireland, separate letters patent became necessary. At the time of the union between Scotland and England, although the parliaments were united, the great seals were kept separate; and hence there is a lord keeper of the great seal of Scotland, and a lord chancellor, or lord keeper of the great seal of England. At the Irish union, in like manner, the Irish parliament was discontinued, but the great seal of Ireland was preserved in the custody of the lord chancellor of Ireland.

So that at the present day an inventor has to get three patents instead of one, because the mode of granting this important privilege has been by letters under the great seal; and because, for reasons not at all connected with inventions, there are three great seals instead of one. The greater part of the documents that are issued under the great seal are of a local character, and with regard to them it may be convenient to have them enrolled in the portion of the kingdom to which they relate; but inventions are of an imperial character, and the convenience, both of the public and of inventors, would be best served by having one office for the enrolment, or registration, of inventions. This is shown by the policy on which the recent acts are framed for granting copyright for ornamental designs, and designs of configuration. Under these acts, one registration in one office in London confers the privilege for the three kingdoms.

By extending the principle thus sanctioned by the legislature in two important instances, to all inventions for which patents are now granted, the cost of obtaining a complete privilege of invention for the entire United Kingdom would be at once reduced from £376 to at least one-third of that amount, and the greatest anomaly in our patent laws would be removed.

Having thus disposed of the first question, we have next to consider whether the expense of English patents is caused by wise arrangements for affording, to the public, facilities for searching for previous inventions? In examining this question, I will confine your attention to the patent for England, which is the one most commonly taken out, and which costs £110.

The importance of having inventions registered in the way to afford the greatest facilities to the public for searching for previous inventions, is manifest from the very principle on which every patent of invention is granted, namely, that of securing to the inventor a reward for his ability and industry, in consideration of securing to the public the fullest disclosure of the invention; and so strictly is this principle enforced in our laws, that unless the enrolled specification contains a full disclosure, the patent will be cancelled. But what is the use of this disclosure, unless the public have free access to the enrolled specifications? So that, from the very principle on which patents of invention are granted, it follows that the public ought to have the most complete and simple means of searching for inventions. The obvious way of securing this would be to have one office where all inventions should be registered. And now we come to consider the method adopted in England, in order to see whether, in the excellence of the arrangements on this essential point, there is any return for the great cost of English patents.

I find it stated that "there are in London three different offices in which the specifications of English patents may be legally enrolled; namely, the Rolls Chapel Office, which contains the records from a very early date; the Enrolment Office; and the Petty Bag Office."* Now, when it is borne in mind that the sole object for which enrolments are made is to afford means of search, it is not easy to conceive anything more absurd than to have three offices for enrolment, so as to impose on the public three searches instead of one. As to the form of enrolment, it is unnecessary in this paper to say much. The best way of testing the English system is by the facilities it affords to those anxious to ascertain whether a discovery be really new or not, and on this point I may quote the opinion of an experienced patent agent, who states, "that it is always a very difficult thing to determine, by search, whether an invention has been patented before or not." So that, in answer to the second question, we find that the expense of English patents is not caused by wise arrangements for affording to the public facilities for searching for previous inventions.

We have next to consider the third question, Is the great expense of British patents caused by arrangements for affording security to the inventor in the enjoyment of his property?

The whole process of granting a patent in England, Ireland, or Scotland, amounts simply to conferring a certificate of registration of the date of the sealing of the patent. For the inventor takes out the patent entirely at his own risk; there is no previous

* By "*the Petty Bag Office and Enrolment in Chancery Amendment Act*, 1839," (12 and 13 Vic., c. 109), section 15, all *future* specifications must be enrolled in the Enrolment Office only; and by section 40, the master of the rolls is enabled to make orders with respect to the transfer and custody of records and enrolments. So that this defect of the English system of enrolments is in process of being removed.

decision on his right to property in the invention. The true nature of a patent, in this respect, is put forward in the usual report of the attorney-general or solicitor-general, on the reference previous to the issue of the patent, as the grounds for granting it, on the mere declaration of the inventor. Thus the common form of report of one of the law officers, after stating the reference of the petition, and the declaration of the inventor, proceeds thus:— "Upon consideration whereof, *and as it is entirely at the hazard of the petitioner, whether the invention is new, or will have the desired success,* &c., I am humbly of opinion that your Majesty may, by your royal letters, &c., grant to the petitioner the sole use of his invention, &c."

So that the granting of a patent does not afford any security beyond what would be afforded by the simple issue of a certificate of registration at the risk of the inventor, and the great expense of British patents is not caused by any arrangements for affording security to the inventor in the enjoyment of his property.

Having thus shown that the cost of obtaining British patents does not arise from any arrangements for the benefit of the public, or of the inventor, we are naturally led to the fourth question, From what causes does the great expense of British patents arise?

A very slight investigation of the subject will show that there are three distinct causes of this expense.

1st. The prolix and complicated forms of procedure for obtaining patents.

2nd. The fees of the attorney-general, and other public officers, on these forms of procedure.

3rd. The stamp duties on patents, and on the specifications required from patentees.

As to the forms of procedure: the inventor has first to make a declaration before a master in chancery, then to present a petition to her Majesty. This petition is referred by the secretary for the home department to the attorney or solicitor-general. He makes a report in the common form I have referred to. Then there is a warrant from her Majesty, signed by the secretary for the home department, to the attorney or solicitor-general, to prepare the letters-patent. Then the letters-patent have to go through a number of officers, until they are finally sealed by the lord chancellor.

All these forms of procedure, and the fees consequent on them, do not arise from any statute, but from custom and immemorial usage. They had a very natural origin in the jealousy with which patents of invention were looked upon at the time of the passing of the famous statute of monopolies, (21 James I, c. 3), which put an end to the abuses of the prerogative of the crown, which had taken place in previous reigns, by limiting patents to new inventions. But at the present day, when there is no danger of the prerogative of the crown being abused, when patents of

invention are mere certificates of registration, it seems very unwise to require the intervention of a master in chancery, a secretary of state, an attorney-general, and a lord chancellor, to the issue of such a simple document. The whole business could be better transacted, without complication, trouble, or delay, by one public officer, just as the certificates of registration of designs are now granted by the registrar of designs.

The second cause of the great expense of British patents arises from the fees paid to certain public officers on the different forms of procedure. Thus the attorney-general receives a handsome fee for putting his name to a mere form, and there is a list of minor officers, each of whom receives a fee on every patent. The general policy of paying public officers by salary, and not by fees, had been recognised and carried out to some extent in most departments of the state, but the fees of minor officials have in many cases remained untouched.

If the different officers to whom these fees are paid are not otherwise adequately remunerated for the services which they perform for her Majesty, they should be paid directly out of the general taxes. It seems a roundabout way to provide her Majesty with legal advice, by a tax on the inventive genius of the community.

The third cause of the expence of British patents is the tax levied upon them in the shape of stamp duty on the patent and on the specifications.

As to the policy of this tax, it is opposed to two of Adam Smith's maxims of taxation; it is *unequal*, and it is imposed *at the time most inconvenient for the inventor to pay it.* The tax on the specification is 5*l.* for the first skin of parchment, and 1*l.* for every subsequent skin; so that for specifications of equal length the tax is the same, no matter what may be the value of the invention, or the income which the inventor derives from the patent. The most perfect system of taxation on this subject would be to follow the example of Prussia, and exempt the registration of inventions from taxation, and then, by a complete and perfect income-tax, to make the inventor pay his fair share for any income that he derived from the patent.

But the tax on inventions is imposed at the time that it is most inconvenient to the inventor to pay it; namely, at the first moment of invention, before he can by possibility have derived any profit from it. On this point, too, we may take a lesson from other European nations. In Belgium there is only a very small portion of the tax paid at once, from 50 to 100 francs; and the rest of the tax is allowed to remain unpaid for two years, and, should the invention turn out unprofitable in that time, need never be paid. In France, the greater part of the tax has only to be paid annually during the continuance of the patent, so that should the invention at any time turn out unprofitable, the payment of the remainder of the tax may be avoided.

Having shown that the great expense of British patents really

arises from prolix, complicated, and unnecessary forms of procedure, from fees to public officers, and from taxation, I proceed to the consideration of the fifth question, What are the benefits which patents of invention confer on the community? The most obvious benefit is that of encouraging inventive genius, by giving parties a fair reward for their labours, and by supporting them during their exertions.

The next obvious benefit is to secure a complete disclosure of all the discoveries that inventors think it desirable to obtain a patent for. Whenever the great cost of obtaining a patent prevents its being taken out, this benefit is to a great extent lost to the community, and hence the impolicy of any tax or unnecessary burden on the registration of inventions, or, in other words, on the means of securing their disclosure.

There is a third benefit which is very commonly overlooked; namely, that of economising the use of the inventive genius of the community. Where patents are not granted, parties seek to protect themselves by secreting any invention they may discover, and a great part of their time is spent in trying to sell the results of their inventions without disclosing the process. Those who pirate inventions, on the other hand, under such a system, take the result, and endeavour to re-discover the secret process by which that result is produced; in other words, endeavour to rediscover what is already known. Under a perfect system of registration, parties would disclose their inventions without resorting to secrecy; and other parties, instead of wasting their time in re-discoveries, would have an opportunity of learning, and would be compelled to learn what was already known, and thus would be forced to exercise their inventive genius in new discoveries.

So that a perfect system of registration of inventions, with a privilege of exclusive property, secures the most economic use of that most precious of human gifts, inventive genius.

From the consideration of the benefits arising from property in inventions, it follows that, so far from any impediment being placed in their way, every encouragement ought to be given to obtain them. And this consideration brings me to the last question, By what means can the cost of obtaining British patents be diminished?

From what has been already said, it is obvious that the cost of obtaining British patents can be readily reduced;

1st. By having only one patent or certificate of registration for the United Kingdom.

2nd. By adopting for all inventions the simple forms of granting certificates of registration now used with respect to ornamental designs and designs of configuration; and so rendering unnecessary the prolix and complicated forms now required in obtaining patents.

3rd. By substituting, with respect to all inventions, the moderate fees and stamps on registration of designs, for the official fees and stamps on patents.

Were these changes adopted; and they are changes at once conformable to the policy of recent legislation on the subject, and to the teachings of common sense; the cost of obtaining a patent, or privilege of property in inventions, for the entire British dominions, would be at once reduced from £376 to £15; and Great Britain, instead of being inferior to every other country in this important branch of human legislation, would occupy her natural position, in showing the greatest care for the most noble and valuable species of human property.

# DUBLIN STATISTICAL SOCIETY.

THIS society was established in November, 1847, for the purpose of promoting the study of Statistical and Economical Science. The meetings are held on the third Monday in each month, from November till June inclusive, at 8, P. M. The business is transacted by members reading written communications on subjects of Statistical and Economical Science. No communication is read unless two members of the council certify that they consider it in accordance with the rules and objects of the society. The reading of each paper, unless by express permission of the council previously obtained, is limited to half an hour.

Applications for leave to read papers should be made to the secretaries at least *a week* previously to the meeting.

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The subscription to the society is one pound entrance, and *ten shillings* per annum.

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