

Report of the Commissioner of Patents for the Year 1855.

U. S. PATENT OFFICE, Jan. 31, 1856.

SIR—In obedience to the requirement of the 14th section of the act of March 3d, 1837, entitled "An act in addition to the act to promote the progress of science and useful arts," I now proceed to report the facts therein required, showing the transactions of this Office during the past year, and its condition at the commencement of the present.

The total number of applications for patents during the year 1855 is 4435; the entire number of patents issued, 2024; the whole amount of fees received, \$176,380.57; the aggregate of expenditures, \$179,540.33; excess of expenditure over fees, \$3,159.76.

But by the act of March 3, 1855, the money which had been previously taken from the Patent Fund for agricultural purposes, amounting to \$40,078.78, was refunded. Adding this to the amount of fees received shows the whole amount of income during the year to be \$216,459.35, which exceeds the total expenditure \$36,919.02.

The receipts and expenses of the Office for the past year, together with the present condition of the Patent Fund, will be seen by reference to the following statements:

Statement of moneys received at the Patent Office during the year 1855.

Received on applications for patents, re-issues, additional improvements and extensions, and on caveats, disclaimers and appeals.	\$162,120 00
Received for copies and for recording assignments.	14,227 57
Received for old sash.	33 00
Total.	\$176,380 57
Amount reimbursed to Patent fund, per act of 3d March, 1855.	40,078 78
	\$216,459 35

Statement of Expenditures from the Patent Fund during the year 1855.

Salaries.	\$67,629 03
Additional compensation per act of 22d April, 1854.	2,229 50
Temporary Clerks.	31,938 19
Books for the Library.	830 45
Contingent Expenses.	36,764 82
Payments to Judges in Appeal Cases.	450 00
Refunding money paid into the Treasury by mistake.	225 00
Refunding money on Withdrawals.	39,473 29
Total.	\$179,540 33
Excess of Receipts over expenditures.	\$36,919 02
Excess of Withdrawals this year over last.	\$5,333 33

Statement of the Patent Fund

Amount to the credit of the Patent Fund, January 1, 1855.	\$25,593 52
Amount paid in during the year, including \$40,078 78 reimbursed to the patent fund by the act of 3d March, 1855, being the amount heretofore paid out for Agricultural Statistics, &c.	216,459 33
Total.	\$242,052 87
From which deduct amount of Expenditures during the year.	179,540 33
Leaving in the Treasury 1st January, 1856, the sum of	\$62,512 54

From the following table it will be seen how rapidly the business and revenues of the Office have increased during the past fifteen years.

Table exhibiting the business of the office for fourteen years, ending December 31, 1854.

Years.	Applica- tions filed.	Caveats filed.	Patents issued.	Cash rec'd.	Cash exp'd.
1841	847	312	495	\$40,413 01	\$23,065 87
1842	761	291	517	36,505 68	31,241 43
1843	819	315	532	35,316 81	30,776 96
1844	1,045	380	592	42,509 76	36,844 73
1845	1,246	452	592	51,076 14	39,395 65
1846	1,272	448	619	50,204 16	46,158 71
1847	1,531	533	572	63,111 19	41,878 35
1848	1,623	607	660	67,576 69	58,905 84
1849	1,955	595	1,076	80,752 78	77,716 44
1850	2,193	692	995	86,927 05	81,109 95
1851	2,283	760	869	95,738 61	86,016 63
1852	2,639	905	1,023	112,058 34	95,016 91
1853	2,673	901	953	121,527 45	132,469 83
1854	3,324	868	1,902	163,789 84	167,146 32
1855	4,435	906	2,024	176,380 57	179,540 33

INCREASE OF PATENT BUSINESS.

The augmentation of the number of applications has been greater during the past year than at any previous period. That the increase in the number of patents is not proportionably great is due to the fact that at the commencement of the year 1854 there were 823 cases undisposed of in the Office, so that the whole number of cases acted upon during that year exceeded four thousand. At the beginning of the year 1855 there were but 89 cases on hand, and on the first day of the present year only 66.

There are papers in the Office to show that less than fifty years since the annual income of the Office was only about \$1500, and that for the seven years previous to 1826 the aggregate amount secured was about \$42,000, or an average of \$6000 per annum. These facts, taken in connection with the last of the above statements, will show with what a constantly accelerated rapidity the march of invention has been progressing for the last half century.

Hereto will be found appended a classified list of all the patents which have been granted during the past year, together with an alphabetical list of the patentees and their places of residence; also a list of all patents which have

become public property during the same period.

ILLUSTRATED REPORT.

In addition to the classified list of the patents granted within the year it has long been the practice to furnish in the report a brief description of each of those patents, so as to present a general idea of its nature and purpose. To render these descriptions more intelligible, illustrations have been added in the reports for the two past years. This seems to have met with general favor, and the present report is prepared in the same manner. I trust it will also meet with the approval of Congress.

OFFICERS OF THE PATENT OFFICE.

The act of the last session authorizing the appointment of six additional principal examiners, limited the continuance in office of two of that number to the end of the present session unless further extended by a new law. I deem it indispensable to the prompt transaction of the business of the Office that the present force should not be diminished.

The number of applications in 1854 were twenty-five per cent. greater than in 1853, and the increase during the past year is more than thirty-three per cent. of the whole number of applications of the year previous. This increase during the past year alone is sufficient to furnish employment for three principal examiners and as many assistants, reckoning by the average number heretofore acted on by each set of examiners. If anything like the same ratio of increase is to be continued hereafter, the present number of examiners will, before the end of the present year, be found inadequate to the discharge of the duties which will devolve upon them.

Still, there are grave objections to a further increase of the number of principal examiners. The system is already overgrown in that respect, and seems almost imperatively to demand some modification to give it a proper harmony and uniformity of action.

Each of the twelve principal examiners has charge of certain prescribed classes of cases. They necessarily act, to a considerable extent, independently of each other, and possessing very different minds and views they follow different rules of action and of decision.

EXAMINATIONS AND REJECTIONS.

The multiplicity of business in the Office renders it wholly impossible for the Commissioner to exercise a personal supervision over the decision in each of the numberless cases presented for official action. When the Examiner reports in favor of granting a patent it is issued without further question or examination.

In case of the rejection of an application the law and the practice of the Office permit an appeal to the Commissioner and finally to one of the Judges of the Circuit Court of the district. But such appeals are attended with much trouble and expense, so that in most cases—especially when the applicant resides at a distance—a rejection by the Examiner is in point of fact final. Under such circumstances the importance of correctness and uniformity of decision upon the first examination can hardly be too highly appreciated. This cannot reasonably be hoped for under the system now in operation, and the more that system is extended the greater the evil becomes.

PROPOSED APPOINTMENT OF AN EXAMINER-IN-CHIEF.

To remedy this difficulty several plans have been suggested, but they generally resolve themselves into one of the two following or modifications thereof:—

1st. The appointment of an Examiner-in-Chief, whose sole duty would be to review the actions of the present Examiners, with a view to introducing correctness and uniformity of decision. As a modification of this plan it has been sometimes proposed to increase the number of Examiners-in-Chief to three—some one of whom should make a final decision upon each of the various questions, which should first be fully and clearly presented by some of the members of the corps of Examiners as now constituted, and who might, all three, act conjointly on appeals and other cases of unusual difficulty.

PROPOSED INDISCRIMINATE ISSUE OF PATENTS.

2d. To return to the former practice of the

Office—making the duties of the Examiners simply advisory, and allowing a patent in all cases, provided the applicant should finally insist upon it, notwithstanding the opinion of the Office as to its invalidity.

DIFFICULTY OF FINDING SUITABLE OFFICERS.

The main objection to the former of the above plans grows out of the difficulty of obtaining competent and suitable persons to fill the chief places. I doubt whether there is a situation under the government for which it would be more difficult to find a suitable incumbent. Qualities would be required for the satisfactory discharge of such a duty which are rarely found united; a well-trained capacity for comprehending and investigating all subjects connected with natural and mechanical philosophy, and a high order of legal acumen and experience. The difficulty is still further increased by the fact that very few of our lawyers have ever turned their attention in this direction. The law relating to patents is less understood by the profession than any other branch of that noble science. And as the cherished rights of inventors are to be submitted to the sound discretion of these officers, habits of patient and laborious investigation and the high moral qualifications of integrity and impartiality are quite as indispensable as those of an intellectual character.

If the difficulty of securing the services of persons possessing a union of all the above-mentioned qualities could be overcome, the plan we are now contemplating would probably be the readiest and most judicious mode of effecting the desired improvement of the present system; but the doubt of success in such an effort is so great, that something in the nature of the second plan, as above stated, seems worthy of some consideration.

That plan, however, would necessarily be subjected to some important modifications before it would be admissible. When a meritorious inventor has obtained a patent which proves of high value, there are not wanting unscrupulous men who are willing to trespass upon his well-earned rights. To permit a person of that character to take out a patent—valid on its face—for precisely the same invention would be not only countenancing intentional wrong, but the Office would almost become a participant in a design to impose upon the public. Persons taking assignments of either patent would have no sufficient means of distinguishing between the spurious and the true, and would be as likely to purchase property in the invention from the infringer as from the real inventor—both being armed with the same evidence of legal ownership. This would be nearly akin to authorizing forgery, and counterfeiting by law.

GRANTING INVALID PATENTS.

But if every patent granted contrary to the opinion of the Office were required to bear conspicuously upon its face the evidence of that fact; or if the option of the applicant to demand a patent were limited to cases which would authorize no infringement of any pre-existing American patent, the difficulty above intimated would, to a great extent, be obviated. Perhaps even where an application was held by the Office to conflict with the rights of a previous patentee, the applicant might be permitted to insist upon his patent after due notice to the patentee, and a full opportunity given him to contest, in some proper Court, the validity of the patent sought by the new applicant.

Should anything of the kind above intimated be adopted it would doubtless be proper to provide a means by which any patent wrongfully claimed and granted might be invalidated and cancelled. In fact, some provision of this nature would seem eminently proper and valuable under any system of patent laws.

The modifications we have last been considering would relieve the Office from much of the judicial labor now devolving upon it, and would render the same high order of qualifications and experience less absolutely essential in the Examining corps. Most of the legal controversies now arising in the Office would be turned over to the courts of law, which are not only so much better qualified to adjudicate, but which possess the requisite machinery to investigate and conduct such matters, so as to lead to a result more satisfactory than can be done here.

RIGHTS OF INVENTORS.

All our republican notions of propriety revolt at the idea of making the substantial rights of property of any citizen depend upon the mere discretion of an executive officer.—Such a system seems rather Asiatic than Anglo-Saxon in its type and origin. The present Patent Laws are certainly, to some extent, liable to this objection. It is true, they provide, in some manner, for bringing many of the decisions of the Office before the regular judicial tribunals; but when an application which should be patented is rejected by the Office, no opportunity is allowed the applicant for showing the justice of his claims before a Court or jury. If he has a natural right to what he has created, may he not, in such circumstances, be regarded as having been "deprived of his property without due process of law," and without the intervention of that great constitutional bulwark which he regards as a birth-right—a fair trial before a regular judicial tribunal?

That he has now the privilege of appealing to the Judge of the Circuit Court does not change the case essentially. That Judge is only (for the occasion) a part or parcel of the Patent Office; he does not hear the case anew, but founds his opinion upon the necessarily imperfect facts and statements which are presented to the Office.

The question of patentability is often one of the most delicate and difficult that can ever arise before any tribunal. A resort to the testimony of experts is frequently essential to a just and correct decision. The law now makes no provision for this or any other kind of testimony. No witness is obliged to appear or to give testimony unless he does so at his own option, and even if he swears falsely there is no statute penalty.

Without the means of proving the practical working of his machine, or without any other legal testimony, the inventor sometimes provides himself with a few certificates, or ex parte affidavits, sometimes of doubtful authenticity, and always regarded with suspicion, and presents himself before the Office; is rejected; appeals to the Judge—who has no adequate means of arriving at a correct conclusion—and thus is frequently deprived of his rights without an opportunity of establishing them in the manner guaranteed to all other citizens.

Nor ought it to be supposed that these are matters of trivial moment; at least, they are not so to the individual most immediately interested. To him, the offspring of his mental energies are something more than property; they are his children, for whom he has labored through much of the fairest portion of life's meridian, and on whom he relies for consolation and support in the evening of its decline.

That he has now no sufficient opportunity of establishing his rights before a properly constituted tribunal, is doubtless a great defect in the present system. Whether that defect shall be remedied, and if so, in what manner, will be for Congress to determine.

The above suggestions are not intended as proposing any definite plan for modifying the present laws, but merely as presenting the difficulties experienced, and furnishing some hints which may serve as a basis for future consideration by the body to whom the matter is submitted.

[The remainder of this interesting Report will appear next week.]

Death of an Inventor.

John H. Manny, of Rockford, Ill., the well-known inventor of improvements in reaping machines, died at his residence on the 26th ult., of consumption. His death, it is said, occurred on the very day when the news reached his residence of the successful issue of the suit in his favor against McCormick. A grand prize medal was awarded to Manny's reaper at the Paris Exhibition, and Prince Napoleon, it is stated, commended it over all others.

Correction.

Our attention has been called to an error of misplacement in the article "Zinc and its Uses," on page 162. The thirteenth line in fourth column, down to the first paragraph, should be placed at the top of the column.

The steamer *Canada* had arrived at Halifax when we went to press, but brought no news of the missing steamship *Pacific*.