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THE EXPEDITION OF WORK IN THE PATENT OFFICE.

The new Commissioner of Patents, the Hon. John S. Seymour, deserves praise for his recent efforts to bring up to date the work now pending in the United States Patent Office. About May 1 he issued a circular letter to the examiners complaining of the condition of the work, especially upon the amended cases, and urging the bringing up of such cases either to date or to a period within ten days of date. As the effects of this letter were not apparent, on May 24 he issued Order No. 818, directing the same operation, and directing the examiners to give amended cases preference, even if it resulted in the falling behind of new cases. The general tendency of this, it will be seen, is to bring all pending matter more nearly up to an even level. In some of the examining divisions this order produced an excellent effect. To other divisions, where no considerable gain was apparent, the Commissioner wrote special letters calling attention to the above order, with the request for its observance. Probably one-half of the primary examiners received one of these special communications. Counting amended and new cases together, the Commissioner's efforts in the expedition of business since May 1, 1893, have been rewarded by a gain of probably 3,000 cases. A slight falling behind is noted at the middle of the present month, but this is due to the diminution of force in the office, owing to the taking of their annual vacations by the members of the examining corps.

RESUMPTION OF PUBLICATION OF THE PATENT OFFICE GAZETTE.

At last, after a considerable delay, the *Patent Office Gazette* may be said to have resumed publication. The issue dated July 4 is now out. In a few days we are promised the *Gazette* of July 11; the other *Gazettes* are to come out so that the issue of August 1 will be but a few days late, and unless some unforeseen accident occurs, the issues subsequent to August 1 are to appear on time. In the matter of the new contract we have ascertained the following facts: Last year the cost of printing of the official *Gazette* exceeded \$56,000. The old contractor, when the time came for making tenders for the work, presented the same bid as before, although the amount appropriated was less than the estimated cost as calculated on the bid tendered by him. The new contractors have contracted that the aggregate cost of the *Gazette* will not exceed \$45,000. This would indicate, if the proviso is carried out, a saving to the government of \$11,000 per annum, which is something well worth considering. We have, however, before this, had occasion to remark on the excellence of the work exemplified by the old publication. We are sorry to say that the new one is of very far inferior character. This is so true that the saving even of \$11,000 per annum could not for a moment be held to compensate for such pronounced inferiority both in the printing and the illustrating. In 1885 the work was taken from the old contractors for part of one issue, but the same company completed that issue and was eventually retained as the contractor. In a journal of such wide circulation as the *Patent Office Gazette*, there is one paramount interest to be considered, which is that of the public. Viewing the character of the printing and illustrating of the new *Gazette*, this interest now seems certainly overlooked, and the small and possibly uncertain economy does not justify the descent to a lower character of work.

THE EDISON ELECTRIC LIGHT SUITS.

A number of suits have within the past few years been brought by the owners of the Edison electric light patents against opposition companies, to enjoin the manufacture and use of incandescent electric lamps. Recently several decisions have been given by the courts, in which the general consensus of opinion was in favor of the Edison patent; but since the bringing of these suits new matter has been brought into the case and by special motions has been introduced into them. This matter is the claim of Henry Goebel, of this city, who is asserted to have anticipated Edison's inventions and to have made what is virtually an Edison lamp long before the date of Edison's invention or patent. Our readers will recollect that some months ago we published a description of Goebel's claims. The entire state of the case, both as regards the grounds on which the original Edison patent rests and as regards any modification of the scope of such patent brought about by the alleged Goebel structures, we find most ably presented in a decision handed down on July 20, by Judge Seamans, of the United States Circuit Court, sitting at Milwaukee.

The position that Edison occupies in the field of incandescent electric lighting is a peculiar one. The satisfactory subdivision of the electric light will be remembered by many as being one of the early difficulties encountered by the inventor in the early days of electric lighting. This difficulty was the most frequently quoted one. The use of incandescent carbon rods for electric lighting demanded a very heavy current with consequent increase of size of the conductors. This made electric lighting a commercial impossibility owing to the expense required for the street and house

mains and wires. It was here that Edison appeared with his invention. In the famous second claim of his patent he claims "The combination of carbon filaments with a receiver made entirely of glass, and conductors passing through the glass and from which receiver the air is exhausted, for the purposes set forth." Here we have a high resistance lamp at once described, for, as electrical resistances go, a carbon filament could not, if made according to the patent, be of anything but high resistance. But a high resistance carbon filament is subject to disintegration and combustion by the smallest possible trace of air or carbonic acid gas. In the sealed glass globe is found the chamber in which a perfect vacuum can be conserved.

It is also perfectly true that to give this claim as wide scope under the patent statutes as the invention would seem to deserve is difficult. Edison in his early work on the incandescent lamp pursued his experiments under such conditions as to impart a peculiarly meritorious character to his investigations. The wizard of Menlo Park, as he was then called, exhibited his laboratory so freely and conducted his work so openly that he established for himself a very specific character as the inventor of the subdivision of the electric light. It is for this reason the decisions in his favor appear peculiarly consonant with the equities of the case, although it is impossible to stretch the law to cover the popular conception of his invention. In Judge Seamans' decision this peculiar status of Edison seems very satisfactorily recognized. The doubtful authenticity of the Goebel testimony is insisted on, the rejection of Goebel's claims by various inventors and counsel prior to the bringing of the suit is spoken of, and an injunction is granted in favor of the Edison Electric Light Company against the Oconto Company, against whom the suit was brought. This decision is granted in the face of a decision but three months old, to the opposite effect, rendered by Judge Hallett in the Eastern District of Missouri. Judge Hallett apparently considered the Goebel claims of such moment as to refuse the injunction, provided a bond was tendered by the defendants. It is hard to read Judge Seamans' decision without believing that it is he who has taken the right course, although he tempers it by granting leave to the defendants to move for the requirement of a bond by the complainants to indemnify the defendants for any damages they may suffer if the patent shall be finally declared invalid.

THE FALL IN THE VALUE OF GENERAL ELECTRIC STOCK.

The recent fall in the prices of all securities in Wall Street has been attended by a great decline in the value of the General Electric stock, which represents the consolidation of the Edison General and Thomson-Houston companies. Since last October the stock has fallen from 120 to 81½; how much of this is due to panic and how much to any really valid estimate of the earning capacity of the company it is impossible to say. It is, however, something worthy of note, as the General Electric Company represents the leading electric syndicate of the country, and so phenomenal a change in the value of its stock in its relations to electrical development possesses a quasi-scientific import. It represents science and invention in Wall Street. The recent decisions in the Edison electric light case alluded to elsewhere have doubtless had their effect, as they have not been as sweepingly in favor as was to have been hoped. If the Goebel claims prove to be ill founded, it will seem that by their exploitation a great injustice has been done to investors in electric securities.

THE Engineers' Congress will be held during the week beginning July 31, and practically all of the arrangements for these congresses have been perfected. A large number of papers have already been handed in, and many more are promised in each division. Many of these papers will be presented in abstract, while others will be presented by title only. It would be quite impossible to conceive of a more attractive programme than this one, as papers will be presented by leading engineers, not only from all parts of the United States, but from all parts of the world, discussing leading engineering works of recent date. This is true of all the divisions, including mining engineering, metallurgical engineering, military engineering, mechanical engineering, etc. The subject of engineering education will have several meetings devoted to its consideration. Papers will be presented and discussed by leading teachers in engineering schools from all parts of the United States, as well as from Great Britain and elsewhere. The rooms of the Engineering Society at No. 10 Van Buren Street grow in popularity as their existence becomes more generally known, and the social meetings held Monday evenings have become an important event of the season with engineers in Chicago.

In New York City there are so many railway lines, steam elevated, cable and horse cars, that one may ride for six hours at a total cost of 50 cents.