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THE ANNUAL REPORT OF THE COMMISSIONER OF PATENTS.

The annual report of the Hon. Benton J. Hall, Commissioner of Patents, to the Senate and House of Representatives, dated January 31, 1887, has been published. It appears in the *Official Gazette* of Feb. 7, 1888. The report is rather longer than usual, and bears the mark of much careful work and thought. It begins by a statement of the need of additional room for the working force of the Patent Office. Additional employees, the Commissioner states, are not required; with the increased facilities that more space would give, the present force could satisfactorily perform the work. A laboratory is also asked for.

The Commissioner considers at some length the propriety of altering the statutes. He suggests an amendment of section 4,885, which at present gives the inventor six months within which to pay his final fee, the patent bearing date of the day of issue. He proposes that the term of a patent shall begin with the date on which the application was passed and allowed. This would do away with the inducement presented to draw out the term, practically speaking, for six months.

He would also have statute 4,887 amended so that a foreign patent would be without influence upon an American patent to the same inventor. He would have an American patent grant the seventeen years of protection to the patentee without regard to the expiration of any foreign patent he might take out. This statute also interferes with any advantage patentees of inventions might obtain from the "International Union for the Protection of Industrial Property." The Commissioner is very decided in his views as to the expediency of expunging this section from the statute books, or of modifying it materially.

The subject of assignments of patents is considered. At present such instruments must be filed in the Patent Office within three months of the date thereof. The Commissioner recommends that the statute should be amended so that filing at a later date shall be valid against subsequent purchases or mortgages. The correction of errors in payment of fees, it is recommended, should be in the hands of the Commissioner, even after such money has been paid into the treasury.

The abuse of the period of two years allowed for completion of the application for a patent is spoken of. It is perfectly possible under this rule (section 4,894) to prolong an application for a number of years, and this is sometimes done. A granting of discretionary power to the Commissioner is recommended, by which he shall be able to declare cases closed for want of prosecution.

Other points of less interest are treated, and toward the end of the report the "destruction of some of the coils of the patent system" is spoken of. The Commissioner supports the patent system as productive of great good, admitting that it would seem entirely proper for the government to have the power of extinguishing a patent by paying a proper sum to the owners thereof.

During the year 1887, 21,378 patents for inventions and designs were issued; 34,420 applications for such patents were received. The total receipts were \$1,144,509.60; excess of receipts over expenditures, \$150,037.38; total balance in treasury to credit of Patent Office, \$3,257,490.91.

Underground Wires in New York.

A law for placing electric wires under the streets and removing the poles is now in operation. It is in charge of the Board of Electrical Control, consisting at present of Mayor Hewitt, Jacob Hess, Theodore Moss, and Henry S. Kearney. It appears from their first annual report that a construction company (the Consolidated Telegraph and Electrical Subway Company) is authorized to construct the subways designed by the commission, and to permit the use of them by electrical companies upon fair and impartial terms.

Over the excavations of this construction company in the streets, the local authorities, represented by the commissioner of public works, have full control.

Its profits are limited to ten per cent on the money actually invested by it in carrying out the directions of the commission—the excess going to the city; and to all its books and accounts the local authorities, represented by the comptroller, have access.

A provision of law makes it incumbent upon the board to give to companies operating conductors overhead ninety (90) days of notice for the removal of their overhead wires after a sufficient construction of subways has been made ready in any street or locality—reference being had to the general direction of the wires in use; and in the event of the companies so notified not removing their poles and wires from the street before the expiration of the ninety days of notice, it is provided that the local authorities shall thereupon remove them.

The total length of trench excavated for the laying of subways since July, 1887, is 189,918 feet.

The total construction of single duct for telephone and telegraph service is 903,180 feet, to which must be added 4,050 feet for distributing service and connections to central stations.

Estimating 80 wires per single duct, the total capacity for telegraph and telephone service is 72,254,400 feet or about 13,700 miles of wire.

The total construction of single duct conduit for are lighting and power service is 254,250 feet, and the capacity of this conduit may be estimated as sufficient for 2,542,500 feet, or nearly 500 miles of wire.

In addition to the above, the number of feet of conduit for incandescent lighting is 186,745, containing 560,235 feet of conductors.

The capacity of conduit provided in the city of New York during the existence of the Board of Electrical Control is considerably greater than there is in any city in the world, so far as the information of the board extends; and notwithstanding the great difficulties which surround this whole subject in this city, which has a greater mileage of wire than any other, and where the circumstances of underground construction are as difficult as in any other, the conversion of the present overhead to an underground system is a fact about to be accomplished, to a very great extent at least, in the near future.

Already the Western Union Telegraph Company is occupying the conduits which have been constructed, with some five hundred miles of wire. The Metropolitan Telephone & Telegraph Company has some one thousand miles of wire in the subways; and the Edison Illuminating Company, whose conductors were laid in the trench at the time of construction, has, as has already been said, more than one hundred miles underground.

The Metropolitan Telephone & Telegraph Company, the Western Union Telegraph Company, the Brush Electric Light Company, and others, are preparing to enter the subways at many points, and should the efforts of the board be seconded by energetic action on the part of the local authorities when the ninety days of notice has expired, many of the streets must necessarily be freed from the dangerous and unsightly pole systems.

The policy of the board is to insist upon the electrical companies converting their overhead systems to underground systems as rapidly as is consistent with the convenient use of their service by the public, and where companies in good faith are making preparations to enter the subways, no harsh measures seem desirable.

So many considerations of preparing proper conductors, drawing them in, making connections, and testing their efficiency, enter into the problem of removing overhead wires from any particular street or locality, that in very many cases the ninety days allowed by law may very properly be extended, and must be extended, to avoid serious injustice to the companies and inconvenience to their customers.

The electric light conductors are very dangerous both to life and property whenever improperly insulated; and improper insulation of these dangerous and deadly wires is to be found almost everywhere throughout the city. The only regulations affecting the use of electrical conductors in the city of New York prior to the organization of this board were a few resolutions of the board of aldermen which have never been, so far as this board is able to ascertain, at all regarded or complied with; and the provisions of the fire underwriters in reference to the insulation of the are lighting and power wires, which, though probably sufficient to protect property if strictly adhered to, are of little avail, owing to the absence of proper inspection and supervision of the wires from time to time, as their insulation becomes affected by the elements and by natural decay and deterioration.

DECISIONS RELATING TO PATENTS.

Supreme Court of the United States.

LAWTHER vs. HAMILTON et al.

Mr. Justice Bradley delivered the opinion of the court.

Letters patent No. 168,164, granted to Alfred B. Lawther, September 28, 1875, for improvements in processes for treating oleaginous seeds, declared valid and to have been infringed.

The omission of one step of an old process with an improved result constitutes a new process.

Where the new process requires greater care, or even greater skill, on the part of the workman than formerly, it does not change its character as a process or materially affect its utility.

A patent sufficiently describes a process when by the aid of the knowledge derived from the state of the art the same may be carried out from the description in the patent by those skilled in the particular manufacture.

A claim for a process consisting of several steps may be limited by the state of the art and the description in the patent to the instrumentalities or their equivalents as thus described, which are essential in the carrying out of the process claimed.

Supreme Court of the United States.

DREYFUS et al. vs. SEARLE.

Letters patent No. 48,728, granted to John Searle, July 11, 1865, for a process for imparting age to wines, declared invalid for lack of patentable invention.