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SECTION SEVEN OF THE AMENDMENTS TO THE PATENT STATUTES.

In a recent issue we commented editorially upon a bill embodying certain amendments to the patent statutes of the United States which had been signed by the retiring President in the closing hours of his administration.

Our silence with regard to this section was due to a reluctance to make any criticisms which might have been based upon a misconception of its real scope and purpose; for we are free to confess that at the first reading it appeared to be a most foolish, ill-considered, and unnecessary measure.

We eagerly sought for enlightenment as to the interpretation of this measure, being unable to grasp its full meaning ourselves. We were unable to obtain any explanation of the meaning of the amendment at the Patent Office; the chairman of the committee which formulated the original bill was no better informed, and we were finally referred to the author of the section in question.

While we are satisfied that this amendment was drawn up with the best of intentions and a desire to protect the interest of the country at large, we think it possesses features which are strongly objectionable and which have probably been overlooked in the haste with which the bill was finally pushed through.

The amendment certainly seems to take the form of a vote of lack of confidence in the Commissioner of Patents and the work of the Patent Office. If the Commissioner of Patents is not qualified to prevent "the improper issue of a patent," who is? And, if he is not so qualified, it must be either because of his incapacity or partiality.

There is a further objection to the amendment in the fact that it places the head of a department in the anomalous position of being plaintiff and defendant at one and the same time. In one breath, as a supposed friend of the case, he urges that it be taken up for consideration, and in the next he is instructed to put obstacles in the way of the grant of a patent.

To appreciate this amendment at its full value, one has only to consider the history of the bill up to the time when section 7 was added. The bill was drawn up by a committee of the highest authorities and most distinguished practitioners of patent law—a branch of the law, be it said, which is admitted to be particularly complex and abstruse.

Looked at from any point of view, it is difficult to see what good this amendment can work to the government or to anyone else. It is certainly advisable that the heads of departments should be kept well advised as to the progress of invention in those fields with which the government is especially concerned; and it has been the custom of inventors to seek the advice of heads of department and their aid in hastening the hearing of such patent applications as might affect the interests of the various departments.

stood as the friend of the inventor and would be patentee.

Section 7 of the amendments, however, will change all this at a stroke, and inventors will in the future hesitate to disclose their plans to heads of departments who, if they considered that a patent would "impose a burden upon the government," would use every effort to secure its defeat.

THE UNDERGROUND TROLLEY IN NEW YORK CITY.

The street railroad commission of New York has granted the application of the Metropolitan Traction Company to operate its lines by the underground trolley system—a change which will affect some forty miles of railroad lines in New York City.

It is a well known fact that the problem of transportation in New York presents special difficulties which arise from the nature of the site upon which the city is built. All the elevated and surface systems of transportation run mainly in parallel lines from north to south along the full length of the island.

The present Eighth Avenue horse car line will be equipped throughout with the new system. Commencing at the Harlem River, the new line will run on this avenue to Fifty-ninth Street, where there will be a cross line of the same construction from First to Tenth Avenue. From Fifty-ninth Street the new line will continue on Eighth Avenue over the present route to a terminus at Canal Street and Broadway.

It will be seen that the proposed system will give a greatly improved service between the northern and southern portions of the city. It will give a parallel service on each side of Broadway which cannot fail to relieve the congestion, especially in the lower city.

It is the intention of the company to push the work through with all possible dispatch, and have the whole forty miles of line in operation before the close of the year. If they succeed in doing this, it will rank as one of the most remarkable feats of railway construction on record of any kind, and will be entirely without a parallel in the records of street railway construction.

It will be known to many of our readers that the Metropolitan Traction Company has been operating for some time several miles of underground trolley system on a branch known as the Lenox Avenue line. This was built largely for experimental purposes, and the designs for the present proposed extensions have been based upon the experience which has been gained in this way.

In its broad features the construction will be similar to the one mentioned, which was fully illustrated in the SCIENTIFIC AMERICAN for February 22, 1896. The main features of the new system are as follows: The conduit, which is placed in the center of the track, carries two conductors, one for the supply and one for the return current. It will be shallower than the one on Lenox Avenue, and from the interior of the conduit an open passageway, about 5 inches in width, will connect with the street surface and will be closed with the customary slot rails, leaving a narrow opening for the plow. The iron conductors will be of a T-shaped cross section