

law proceedings in cases of infringements of patents, assignments, &c., which we do not propose to discuss; there appears to us, however, to be one very important omission in the draft of Bill, in not providing for a six months "provisional protection," so as to allow inventors to experiment on their machines with a view to perfecting them before depositing a complete specification. The absence of this provision in the present law causes the greatest dissatisfaction, and accounts to a great extent for the many crude machines patented in the Province, as the inventors dare not put their utility and completeness to a practical test for fear of others witnessing and pirating their ideas, and, as has been done in too many cases, taking out patents before the real inventors are fully prepared.

In the United States the inventor is allowed to file a caveat which protects him for twelve months, unless another person applies for a protection for a similar invention, when notice thereof is given the person filing the caveat, and he is required within three months of the date of such notice to file his complete specification, model, &c., and make his final application for the patent. In Great Britain the inventor is allowed to file a "provisional specification" which protects him for six months, on payment of a small fee; and if he proposes to proceed with his application for a patent, having satisfied himself of the novelty and utility of his invention or discovery, notice thereof must be given to the Commissioner not less than eight weeks before the expiration of the term of provisional protection; and at least eight days before the expiration of such provisional protection, he is required to file his complete specification, and make application for the issue of the letters patent. We strongly urge the introduction of somewhat similar provisions in any amended Act that may be passed in this Province.

A clause should also be introduced into the Bill requiring inventors to furnish four copies of specifications and drawings with their applications, on sheets of uniform sizes for binding in books, so that on the issue of the patent one copy might immediately be forwarded to each of the Boards of Arts and Manufactures for the Province, where they would be free for reference by all parties desirous of examining them. The advantage to patentees in thus giving publicity to their inventions and discoveries would far more than recompense them for the extra trouble and expense in furnishing the two additional copies, and intending applicants for patents would have increased facilities for ascertaining the nature of previously patented inventions, with which theirs might possibly clash, and thus be saved the expense and

annoyance of making fruitless applications for patents. The public would also be promptly informed through the columns of this Journal of the nature of all inventions and discoveries patented, and would have an opportunity of examining and judging for themselves as to their utility.

It would also tend to prevent the setting up of false "claims" by patentees, and be of great assistance to inventors, if the issue of letters patent were announced weekly, or at any rate monthly, in the *Canada Gazette*, with the short "claim" registered by each patentee, in the same manner as these are published in the United States, and of which we give two examples for illustration:—

41,141.—Machine for making Horse-shoe Nails.—Daniel Dodge, Keeseville, N. Y.:

I claim, first, the employment in a machine for making forged nails, of cutters so constructed, arranged and operating as to serve the purpose of cutting metal from the side to reduce the thickness and produce the desired form of the point of a nail, substantially as herein specified.

Second, the finger, f, or its equivalent operating in combination with the upper cutter, b, and with a fixed guide or gage, substantially as and for the purpose herein set forth.

41,142.—Washing Machine.—Samuel Davis, Providence, R. I.:

I claim the combination and arrangement of the dasher, B, and upright, C, with the deflector, D, lever, E, standard, I, rest, e, and shelf, f, substantially as described.

The Board of Arts and Manufactures for Upper Canada have again petitioned the Government and Legislature for amendments to the law, in accordance with these views.

IMPROVEMENTS IN STEAM ENGINES.

Of the many reputed improvements in Steam Engines made during the last 30 years, that one of two cylinders, a high pressure and a low pressure cylinder combined, has made the least headway. This construction of engine has been before the public during the period named, giving ample opportunity to those using steam engines for its adoption; yet it has not found favor with the manufacturing community—those most deeply interested in it. Had there been any material advantage, such, for instance, as to compensate for the large additional first cost and subsequent maintenance, there would probably have been more of them in use at the present time. The alleged saving in fuel is in most cases looked upon as a canard, and is always received with more or less of distrust. Some engine builders can get as much useful effect from one cylinder as other builders can get from two, the construction being so widely different. We have heard of a case where a second entire engine of low pressure has been put