

PROGRESS

With which is Incorporated
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EDITORIAL COMMENT.

Compulsory Manufacture of Patented Articles.

THE more one thinks of the ministerial proposal for the compulsory manufacture of patented articles, the less necessity there appears for the innovation in the law. Apparently it is designed to take the place of a higher protective duty and to enable the colonial manufacturer to obtain the making of all inventions for which patents may be taken out in the colony. Now we believe that owing to our protective policy, practically every patent that can, with any hope of success, be manufactured within the colony is manufactured here. There is, however, a class of articles the manufacture of which is obviously out of the question. Of the latter a long list can be readily reeled off by any one who has some small degree of acquaintance with the subject. Typewriters, Monotype and Linotype machines, boot-making machines, cash registers, steel pens, printing machinery, weaving machinery—these are among the first to occur to the mind as the subject matter of a large number of patents. They cannot profitably be made here any more than iron-clad battleships or ocean liners, for the simple reason that the output of any factory or workshop that might be established for their production would be insufficient to justify the investment of the large amount of capital required. According to the proposal of the Minister, however, none of the articles on this list could enjoy, for more than four years, the protection of the patent laws of the colony. The rule of "No works no patent" would expose patentees, who have not available funds for patenting their inventions in all foreign countries, to the competition in the local market of imitations made in countries in which the invention is not patented. Our public certainly might get articles of similar character

but probably inferior quality at cheaper rates, but the only effect of the law intended to foster the industries of the colony would be the fostering of foreign industries to the prejudice of the meritorious inventor without any material gain to our working population. It would clearly be a retrograde step for the legislature of this country to inflict hardships upon the world's inventors to the aggrandisement of foreign manufacturers. If there are patents which can be worked here, and which are prevented from being worked by the greed of the patentee we are not familiar with them. If the Minister is better informed, he will not object to give a list of them to enable the public to adequately study this subject. If, after the discussion incidental to threshing out the matter, there remain any cases of hardship to the local manufacturer and his men, which cannot be met by the present compulsory licensing clause of the Patent Act, both sides can easily join in some attempt to amend the patent law. At present the available evidence is decidedly against the proposed change. The proposal appears to be based upon the assumption that the inventor is one who fattens without exertion, or has the tendency of the octopus to grasp everything within reach regardless of others. But is this so? Any one acquainted with inventors will know that they have enough difficulties without the added risk of losing the result of their ingenuity, perhaps at the moment when their hopes are about to bear fruition.

Wellington Graving Dock.

IF the success of the Wellington graving-dock corresponds in any appreciable degree to the long struggle that preceded its authorisation, it must have a memorable career. That struggle, however, may, in view of the bright future opening out before the dock, be dismissed as a mere memory, not to be revived by any financial consideration whatever. Directly, the dock may not pay. Nobody expects it to do that for years to come. But things which are necessary and profitable do not always pay at the start, or for some years to come. The railways, for example, do not pay—the State policy is not to let them pay anything more than three per cent on the cost of their construction. Streets and roads are neither of them in the category of things that pay directly. For many years no private firm could have financed the telegraph services of this country without spelling ruin many times over in capital letters. Yet all these things—and a whole category of others too numerous to mention, but which will occur so readily to the mind of experience—are of the kind that are both indispensable and most profitable in all ways but the directly remunerative fashion of the account book. Thus it is with a graving-dock. The prestige of the greatest distributing port in New Zealand requires one, and in the word all things else are included. The comfort of the merchant marine and the safety

of the King's ships are, beyond calculation, price less. Not an eye, therefore, that looks on the dock in the years to come but will lighten with pride and pleasure.

As tenders have been called for, some details of this fine work will be of interest.

The length of the centre line inside the coping is to be 683 ft., and on the bottom 671 ft. as measured from the face-line of the concrete retaining wall on the seaface. The breadth of entrance at the coping will be 84 ft., while 22 ft. down below high-water mark the breadth will be 80 ft. The coping level is to be 8 ft. above high water, and the sills of the entrance 32½ ft. below high-water for a width of 59 ft. The level of the finished bottom of the dock is to be 2 ft. below the sill level along the centre of the dock, and 2 ft. 6 in. at the sides. Inside the coping a width of 106 ft will be provided except at the caisson stops, where it is to be 84 ft. The caissons are to be 10 ft. in thickness and be placed respectively at 10 ft., 40 ft., 190 ft., and 300 ft. from the seaward outside face of the work. The southern end of the dock will be built in segmental form.

It is proposed to construct the dock, firstly by driving temporary piles to carry the staging to command the area of the dock, pumping station culverts, and the sea wall, to clear out the area and pump the culverts from all mud and spoil down to a uniform depth and hard formation. The area has already been dredged by the "Whakariri" to approximately the right depth. The next step will be to enclose the area, to be covered by concrete, in temporary timber casings supported from the staging piles. When each casing is cleared out a better concrete will be deposited to cover the whole bottom area. A similar course will be followed for the plumbing-house and the culverts leading therefrom. On that concrete foundation will then be erected other casings so as to form the walls of the dock. The concrete placed in the casings will form the rough first cast of the dock. When the casings are removed the next step will be to fill all round the rough concrete dock, so formed with clay fillings, to pump out and staunch from any leaks that might exist in the pumping-house, so as to enable the board to erect permanent pumping machinery. A coffer-dam across the mouth of the dock entrance follows.

It is probable that the pumping-out of the first cast of the dock will show a considerable quantity of leakage and runs of water which will have to be all staunched back so as to make the first cast dry or approximately so. The rough dock will by that time be in existence, and in it will be built the final face-work containing the altar steps, the caisson steps and all the work of the final dock. The reclamation will then have to be completed and the cofferdam removed. The present contract which has to be completed by 31st December, 1910 does not include the pumping machinery nor the floating caisson, which will be subject to subsequent contracts.