

Iron and Steel.

This industry, although not yet fully established in the Dominion, is possessed of great possibilities. The Onakaka Iron and Steel Company, Nelson District, has expended on land, plant, and buildings approximately £100,000 to date. It has leased 870 acres from the Government for fifty-five years from 1920, and this area is estimated to contain 30,000,000 metric tons of iron-ore of good quality. Large deposits of limestone, to be used as a fluxing-material, outcrop and adjoin the ore deposits, and ample water is available to provide hydro-electric power. Within a distance of eight miles from the ore deposits there is an area of 320 acres of land which has been secured by the company, and is reported to contain 1,280,000 tons of coal. In addition the company has purchased 80 acres of flat freehold land (alongside deep water) upon which the works are being erected, including a set of sixteen coking-ovens, workmen's cottages, laboratory, &c. A deep-water wharf has also been completed, and direct shipment to all ports of New Zealand can be arranged. The output of the company when work is commenced will approximate 10,000 tons per year, which is equal to the present requirements of the Dominion. The difficulties now facing the company in regard to competition from overseas, particularly from India, are being discussed with the Department. The directors are enthusiastic as to the prospects of the industry, and there can be little doubt that its establishment will be welcomed by Dominion manufacturers generally, who have already expressed to the Department satisfaction with the quality of the iron supplied.

SCIENTIFIC INDUSTRIAL RESEARCH.

During the past year manufacturers throughout the Dominion have been working on the preparation of a scheme for the establishment of a Bureau in New Zealand that will be helpful in the progress and development of our secondary industries by providing adequate scientific research organization.

At a recent conference of the Industrial Corporation, held at Auckland, a report was considered in which were embodied suggestions for the establishment of the desired institution for scientific industrial research. The proposals have been submitted to the Department for consideration by the Government.

According to the report received, it is estimated that a subsidy of £10,000 would be required to be provided by the Government for the establishment of the organization, and for the cost of working for the first year. The suggested institute would require the appointment of certain experts—viz., a director, two research chemists, two assistant chemists, and office staff. A library is also considered as an essential, together with apparatus and working-appliances. In view of suggested payments by parties benefited for successful work carried out by the Bureau, it is thought that the second year's subsidy would be reduced to £7,500, and that after three or four years this would again be reduced to £5,000, which latter sum is considered to be the general charge that the country would be called upon to pay to conduct that institution successfully.

The scope of the work of the suggested Bureau, of which it is proposed that the Minister of Industries and Commerce shall be head, might be embraced under the following main headings:—

- (a.) Instituting scientific researches at the request of any manufacturers' association, firm, or person.
- (b.) Supplying information upon the most scientific and economic processes of manufacture in any industry.
- (c.) Exploiting and instituting researches in connection with the latent resources of the Dominion, and testing material and apparatus necessary for the conduct of any industries which might result.
- (d.) Conducting investigations for Government Departments.
- (e.) To work in direct collaboration and in sympathy with all other like scientific institutions throughout the world for the purpose of procuring data and information that might be of industrial benefit to the Dominion.

The Department is of opinion that there is a very wide field of useful work to be performed in this connection. The co-ordination of research work which may at present be done by separate bodies and private investigators, and the dissemination of helpful information, are two very important phases of a work which is of national importance.

EXHIBITIONS—SECONDARY INDUSTRIES.

During the year several Exhibitions devoted to the display of manufactures of the Dominion have been held. A British and Intercolonial Exhibition took place during December, 1923, and January, 1924, at Hokitika, to commemorate the completion of Arthur's Pass Tunnel, and to celebrate the Diamond Jubilee of the Province of Westland. Considerable support was given to this Exhibition both by Government Departments and manufacturers of the Dominion, particularly Canterbury manufacturers, and it is pleasing to record that the enterprise was successful in every way.

In co-operation with the Auckland Agricultural and Pastoral Association Dominion manufacturers made a comprehensive display of New-Zealand-made goods at Auckland. The Exhibition opened on the 10th and closed on the 28th June, and was the largest of its kind yet attempted in the Dominion. Exhibits were made by manufacturers from all parts of the Dominion, and distinct progress was noticeable in the careful and artistic way in which the goods were packed and shown as compared with previous Exhibitions. The Auckland Harbour Board granted the use of two of their new sheds on the Princes Wharf for the purpose of the Exhibition, and the location and suitability of the sheds greatly added to the effectiveness of the Exhibition. Over 100,000 square feet of floor-space was