



N.Z. GOVERNMENT FROZEN PRODUCE CHAMBERS AT THE INTERNATIONAL EXHIBITION, CHRISTCHURCH, COOLED BY THE LINDE REFRIGERATING MACHINE (MESSRS. NIVEN AND CO.).

manufactured by the British Electric Company circulated the air over the coils and through the rooms.

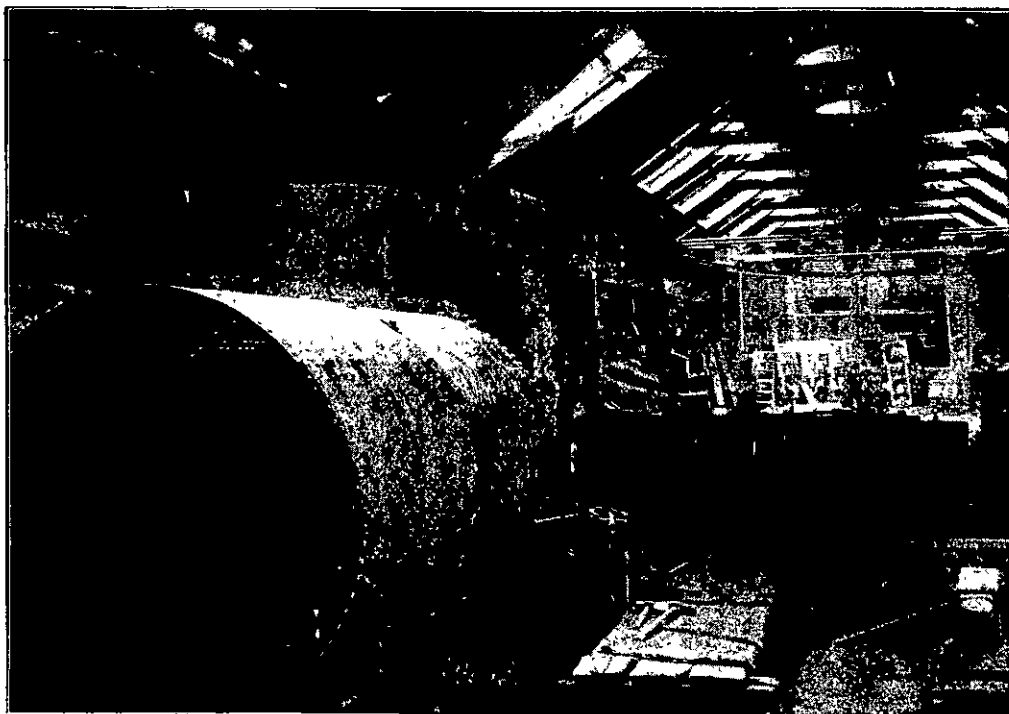
The motive power was derived from "National" Suction Gas Engines, and that gas plant worked with complete smoothness during the whole exhibition period, for a nine hours daily average, without a single hitch of any kind, we are assured, though in

the hands of a driver who was making his first acquaintance with a suction gas plant. There were two complete suction gas producer plants and engines working in this exhibit. One was a 20 B.H.P. plant and drove the four Linde freezing machines already mentioned. In addition it drove a 2-inch Gwynne centrifugal pump, raising water from a well to a height of 30ft. to supply ammonia con-

denser and gas plants. It also drove a 3in' and a 4-in. Gwynne centrifugal pump as exhibits, circulating water up to a tank and from it. The other plant included a 6 B.H.P. "National" engine direct coupled to a dynamo manufactured by the Electromotors, Limited, of Manchester. This supplied the current for an electrically illuminating sign of 90 lamps and two Brockie-Pell arc lamps, which most effectively illuminated the whole exhibit. We are assured that this plant did not cost more than one penny per hour for fuel. The slight attention it got and the cost of fuel were matters of general comment.

The well known Gwynne centrifugal pump was another of this firm's exhibits. The type, by the way, was chosen by the advising engineers at the exhibition for fire prevention purposes, and two specimens (of 4") were installed near the river bank in front of the exhibition, with a capacity between them of 1,000 gallons per minute. At Messrs. Niven & Co's court four were shown to great advantage. The work these pumps have done in connection with many irrigation schemes throughout the world is familiar to every engineer. We understand there are Gwynne pumps working now in New Zealand which have been working for over forty years without any repairs! Messrs. Gwynne's Limited., claim to have manufactured pumps during the past fifty years of an aggregate capacity of 80 million gallons per minute!

The firm also showed a fine eight H.P. stationary engine from the works of Messrs. Brown and May, the famous engineers of Devizes; it was a highly finished specimen mounted on a concrete foundation covered



A CORNER OF THE BOILER SHOP.