

1th YEAR

NOVEMBER 1926

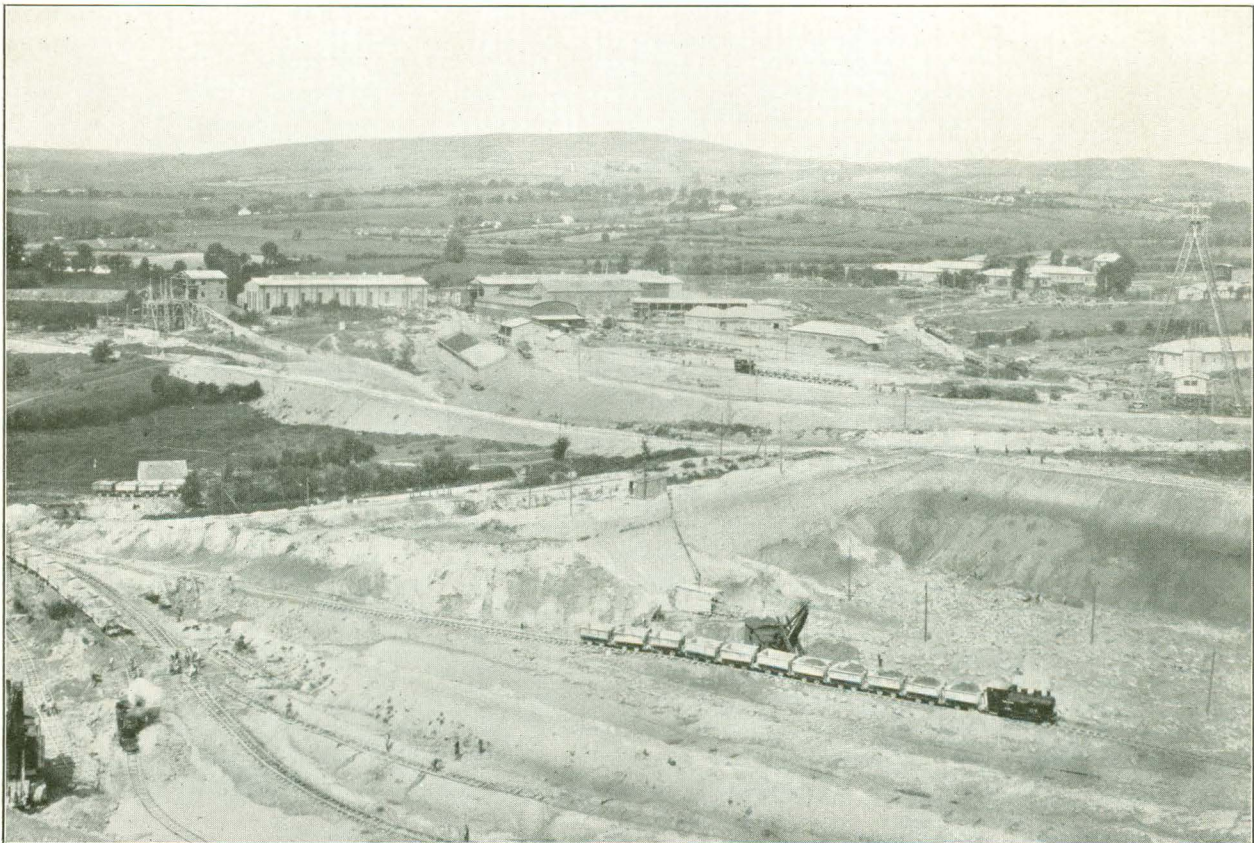
NUMBER 2

Civil Engineering on the Shannon

The Shannon Scheme has now reached a stage when many features of interest can already be seen. The preparatory work can now be considered at an end and regular work is getting into its stride. Many technical and commercial organizations come to visit the Shannon Works, which have also

become very popular with the general public, and visitors from all parts of Ireland and many from other countries are continually arriving at Limerick.

A new village has sprung up near Ardnacrusha, where the site of the future Power House is situated. Anyone who was previously acquainted



General Picture



General Picture

with this locality, would not recognize it now. Many buildings have been erected round this site, partly with the object of economically using the current generated by the temporary Power Station, and partly with the idea of centralizing the supplies for the building sites.

The electrically driven repair shop, where loco-

motives, trucks and various parts of machines are being repaired, is situated here. The importance of this shop can be realized when one considers that 58 locomotives, 372 tipping wagons for earth transport with 5,3 cbm. capacity and 145 special selfdischarging wagons for rock transport are used on the building sites. The shop is really a small



Oil Tanks for Diesel Motors of Temporary Power Station.

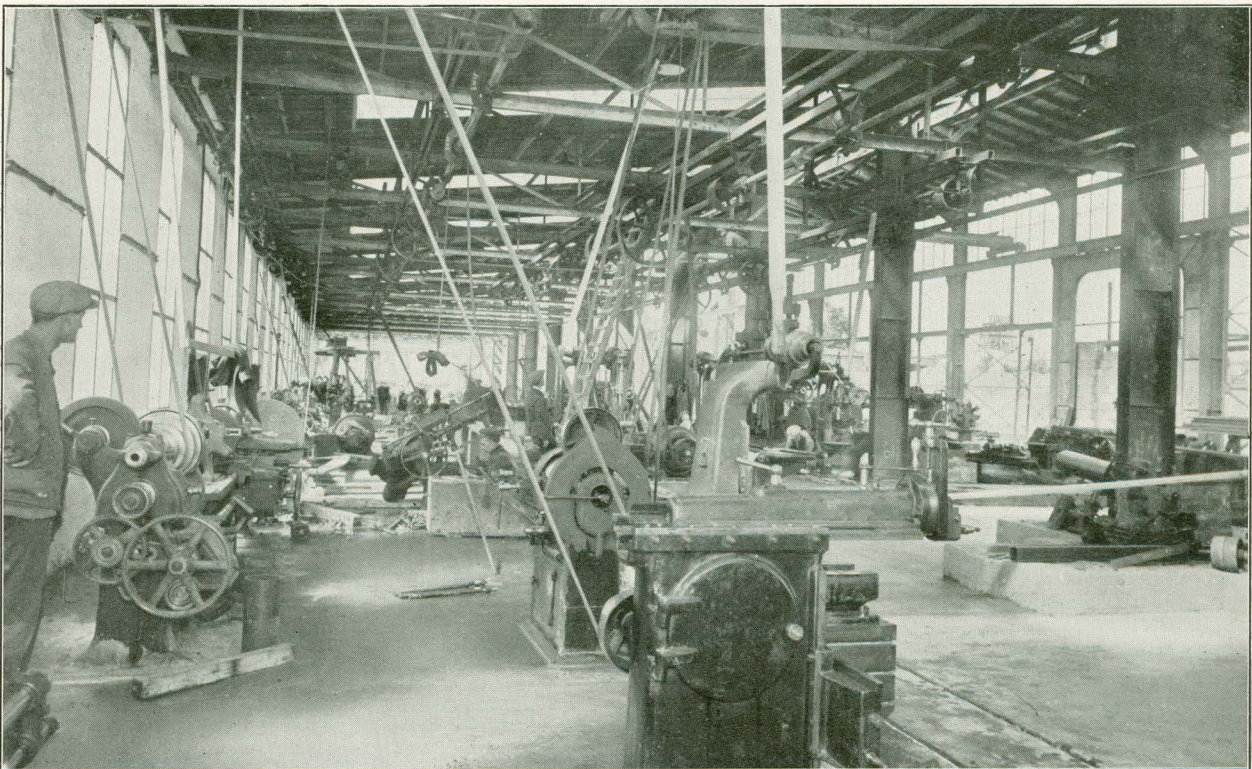


Carpenters' and Joiners' Shop

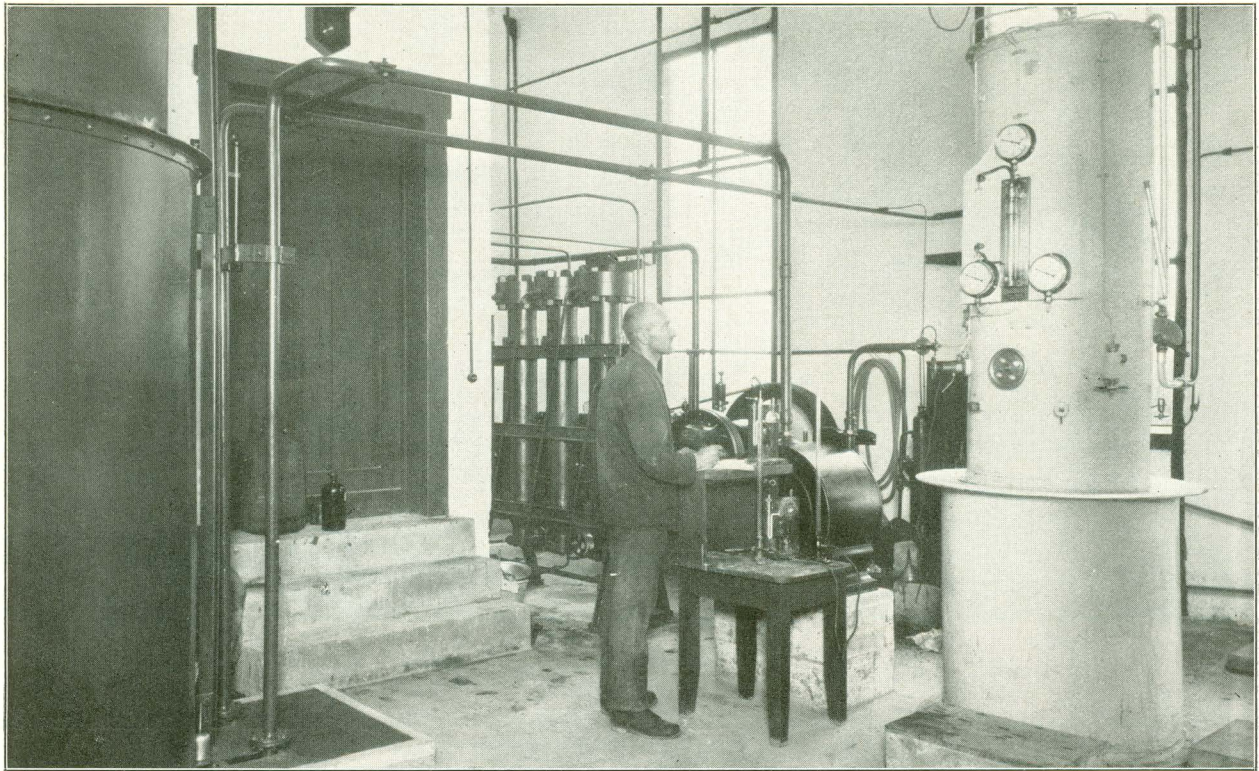
factory where the most modern types of machinery are used and 110 men are employed. It contains a main smithy, a metal foundry, turning, fitting, welding, tool makers' and saddlers' shops; the repair shop is equipped in such a way, that it is capable of executing all repairs for machinery and plant. Even important spare parts for the

locomotives, dredgers and other machines can be made in the shop.

The building sites require coal in considerable quantities as the locomotives and some of the dredgers are steam driven. Before the coal strike in England the Siemens-Bauunion purchased their coal from that country. Since the strike it has



Repair Shop



Oxygen Plant

been necessary to replace British coal by German coal which is shipped directly from German ports. The boats are unloaded in Limerick harbour from where the coal is conveyed in lorries to Long-pavement Station. Further a narrow gauge railway takes it to a coal dump at Ardnacrusha where from 800 to 1000 tons can be stocked. With the aid of a special appliance the coal can then be dipped into the trucks as required and conveyed immediately to the respective building sites. The daily requirements of these is approximately 40 tons.

To assure the required supply of fuel for the Diesel engines of the temporary Power House, 4 large tanks, with a capacity of 50 tons each, have been installed. These can be seen in one of our pictures.

The stores for spare parts as well as the general stores containing the innumerable articles needed for the erection of transmission lines and for the building sites in general can be seen close to this workshop. The electrically driven saw-mill and the carpenters' and joiners' are close by. Visitors will notice the cement stores and a special small building which contains a modern laboratory for testing cement and all other materials which are used in making concrete.

For supplying water for the workshops and the temporary Power Station, an electrically driven pump has been installed to pump the water from the Blackwater River a mile away. To reutilize part of the water which is used for the Diesel engines, a water tower for cooling purposes has been erected.

A feature of interest which can also be seen at Ardnacrusha is the electrically driven oxygen plant. Air is compressed until it attains a liquid state and a temperature of -382°F . The nitrogen is then allowed to evaporate and the remaining oxygen is pumped into special cylinders ready for use. The oxygen is invaluable for welding and for cutting steel, as it speeds up these processes and simplifies them.

A little way off the visitor can see a regular camp where 750 Irish and 200 German workmen belonging to the Ardnacrusha building site are accommodated in huts and enjoy all possible conveniences which can be attained in camp life. Some of the Germans have got their families with them and live in special married quarters. Two canteens have been opened, one for the Irishmen and one for the Germans, as the cooking requirements and tastes are not identical. Some of the engineers in charge of the building site also live at Ardnacrusha in wooden houses which have been put up for this special purpose. The offices of these engineers as well as the offices of the Government engineers are also on the spot. Local tradesmen have not been slow to serve the needs of the working population of Ardnacrusha and a number of shops have sprung up in an extraordinarily short time. One sees inscriptions like "Ardnacrusha Tea Gardens", "Boots repaired", "Hairdresser" etc. A new road connects the camp with the main road leading to Limerick.

In a later article we intend to give a detailed description of the huts and the camp in general.