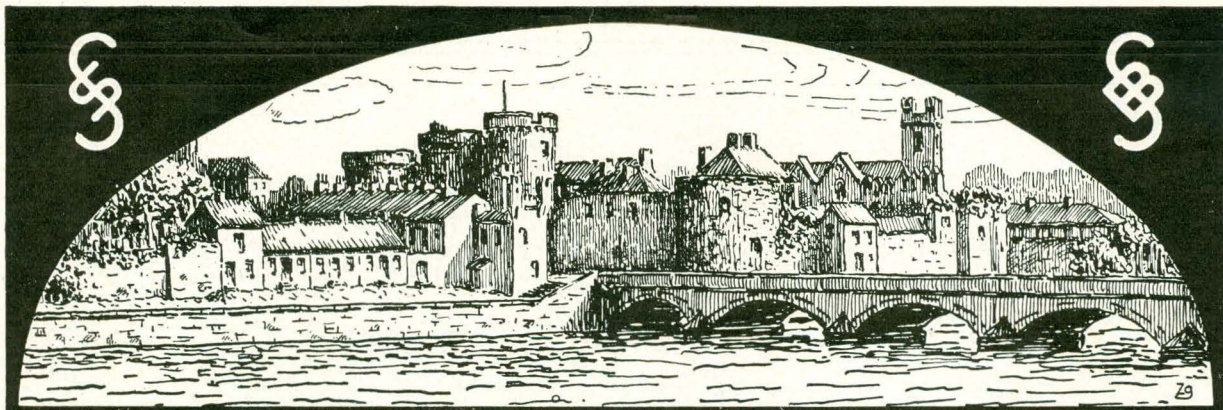




Siemens-Schuckertwerke
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PROGRESS ON THE SHANNON

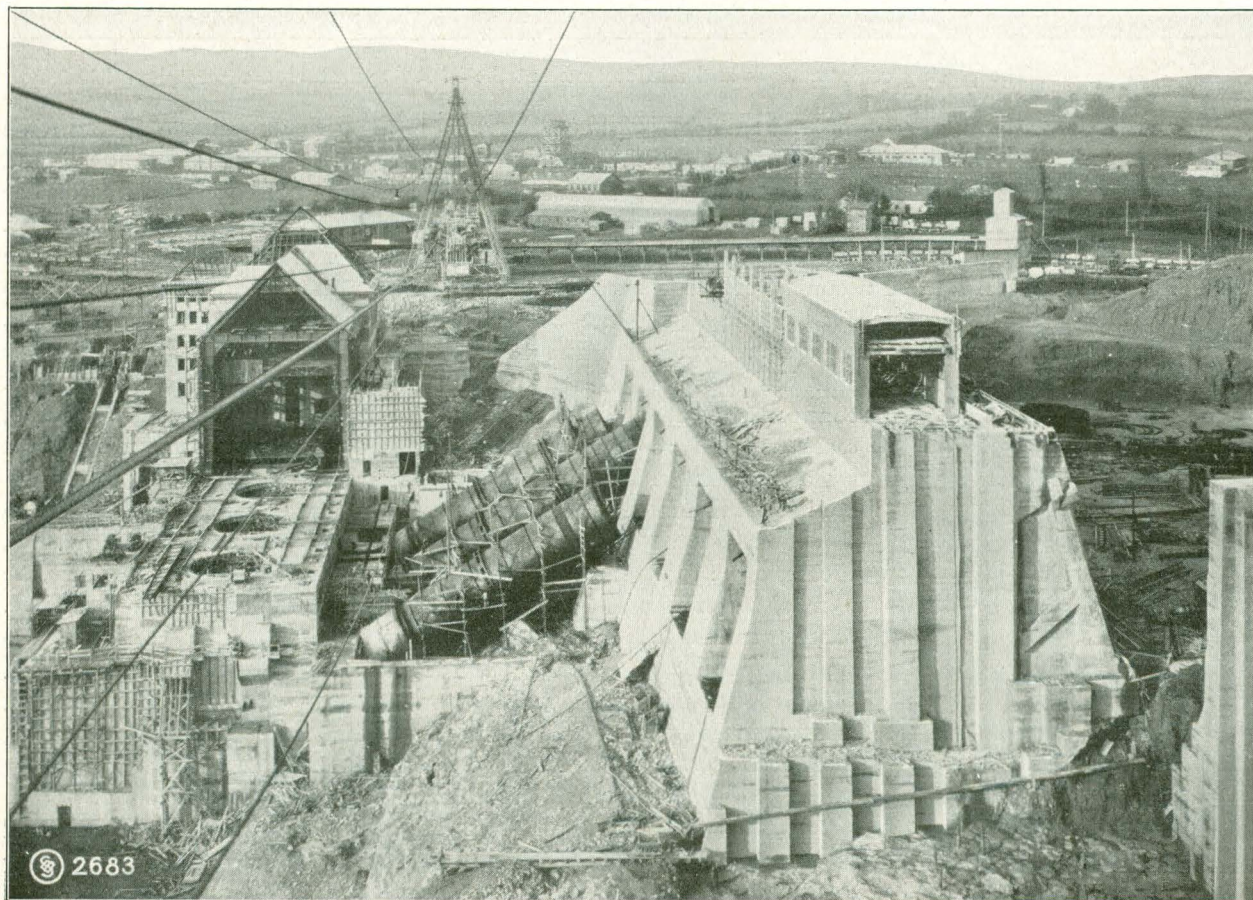
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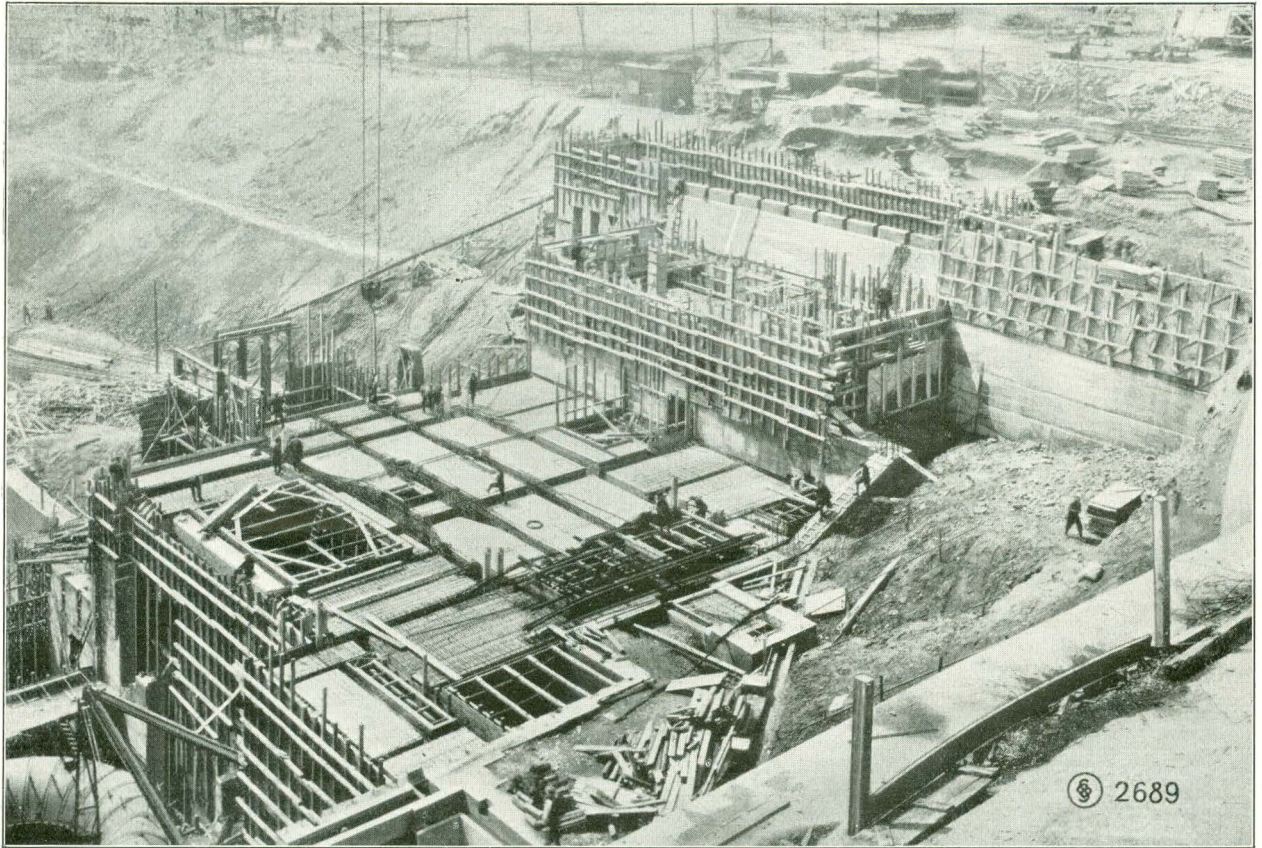
Progress on the Power Station

Part II

In our December issue we described the Generator Hall with its immediate annexes; we will now give an outline of the remaining adjacent buildings which, as already mentioned, are all closely related to it.



General view of the Power Station and Intake Building under construction



The placing of form work and reinforcement at the 38 KV-Switch House

The 38 KV-Switch House, on the right side of the Generator Hall when looking down the Tail Race, is now almost completed except for the slating of the roof and inside fittings. The whole structure is of reinforced concrete throughout, the roof only being of steel and of a similar construction to that over the Generator Hall already described. This building measures some 550 sq.m. in area

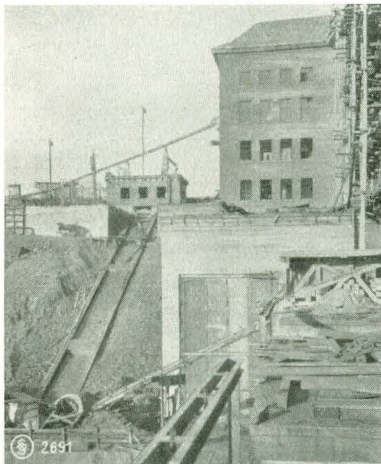
and has 3 floors connected by staircases as well as by a lift. There are in it, transformer rooms, switch rooms, cable tunnels, battery rooms, stores, a smithy, workshop, office rooms, etc. It is from here that most of the power cables will emanate, holes for which have been provided in the north-east wall of

the building. In the top storey and adjoining the lift the central switchboard room is situated. Through here all the cables go and are connected to a switchboard. The room is lit by a skylight as well as by several windows. The switchboard is now under erection, and, when completed, will control the distribution of current to the whole system of power lines over the country.

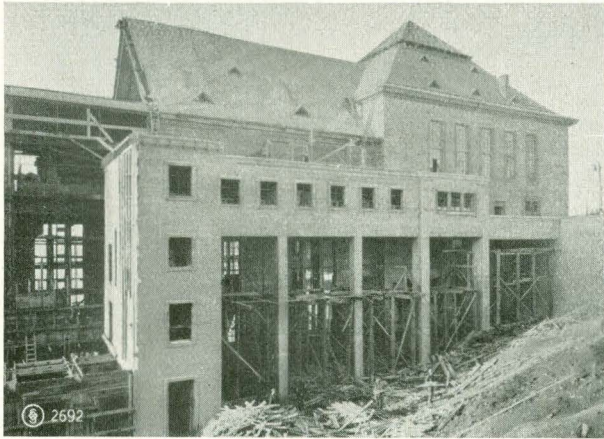
The 10 KV-Switch House situated behind the Generator Hall is not yet completed to the roof. This building is of reinforced concrete throughout, including the flat V-shaped roof, measures in area 350 sq.m. and has four storeys.

One might mention here that all windows from the smallest to the largest are made of steel frames, and all the doors, except for a few in office rooms, are entirely of steel to obviate the danger in case of fire.

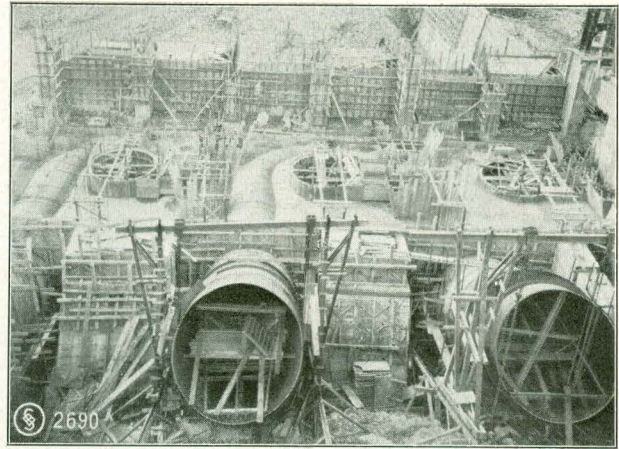
There are altogether in the Power House including the 38 KV- and the 10 KV-Switch Houses etc. 90 steel doors, varying in size from 7.50×4.60 m. to 1.65×0.50 m., 16 timber doors and 200 windows, the latter requiring about 11,200 sq.ft. of glass, a considerable amount of which has already been placed. The largest doors are in 4 panels and mounted on special rollers to facilitate their opening and closing. Practically all the doors and windows of the Power House are already in position.



Inclined Elevator



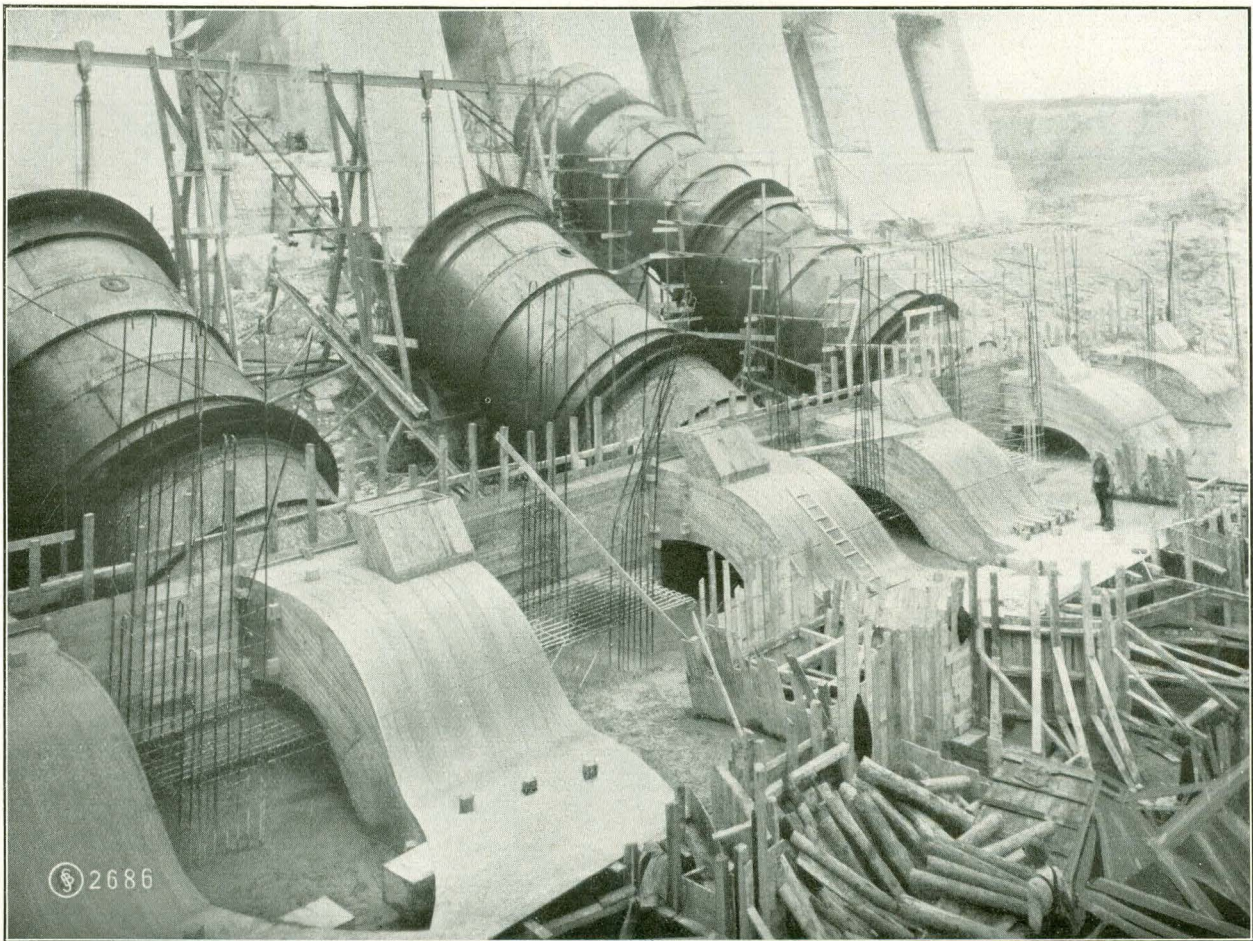
View of the 38 KV-Switch House from Head Race side



Concreting of the Spiral Casing

The concrete for all these buildings was poured by the cable crane, the concrete being cast concrete. In the case of the staircases, the supporting slabs only were at once concreted; the steps were precast nearby in special steel forms and later erected on the supporting slabs.

Some 20 m. from the south-west side of the 38 KV-Switch House is situated the inclined elevator. This structure lies on the slope of the cutting for the Great Southern Railway and connects this line with another one on top running between



Concreting of the cold air ducts for the Generators



The Government and Siemens-Bauunion-Engineering staff of the Power House Building Site.

the outdoor station and the 38 KV-Switch House, and will thus enable all machine and transformer parts for the outdoor station and the 38 KV-Switch House to be lifted straight to the top of the cutting in the railway company's cars without unloading them and having a special rolling stock for the top line only. This structure consists essentially of 2 concrete beams, 2.50 m. apart centre to centre, laid straight on to the slopes of the cutting, and each supporting two rails for the trolley of the elevator to run on. At the top there is an electric winch for pulling the cars up, at the bottom a concrete pit to accommodate the trolley into which the cars will be shunted, locked into position and pulled sideways up the slope to the level of the railway on top. The steel trolley is of such a construction that, though the wheels are on a slope, the platform supporting the railway trucks is horizontal.

The Intake Building is also nearing completion. The superstructure is up over part of the building;

this is of reinforced concrete throughout including the flat V-shaped roof of a similar construction to that over the 10 KV-Switch House. Inside it measures 123.5 m. $\times$ 7.20 m. by 7.35 m. in height, and accommodates the motors and winches for operating the sluices in front of the inlets to the pipes. An overhead crane running the whole length inside the Building is provided. On the Head Race side of the structure a number of the reinforced concrete stays supporting the strainer are completely finished, and the steel strainer is being fitted over them; the remaining stays are being concreted. The reinforced concrete terrace, running along the building over the above stays and supporting the track for the strainer cleaning machine, is also almost completed, while the gates in front of the inlet openings to the pipes are under erection.

The excavation work for the lower navigation lock and the overflow channel is finished, and the concreting is in progress.