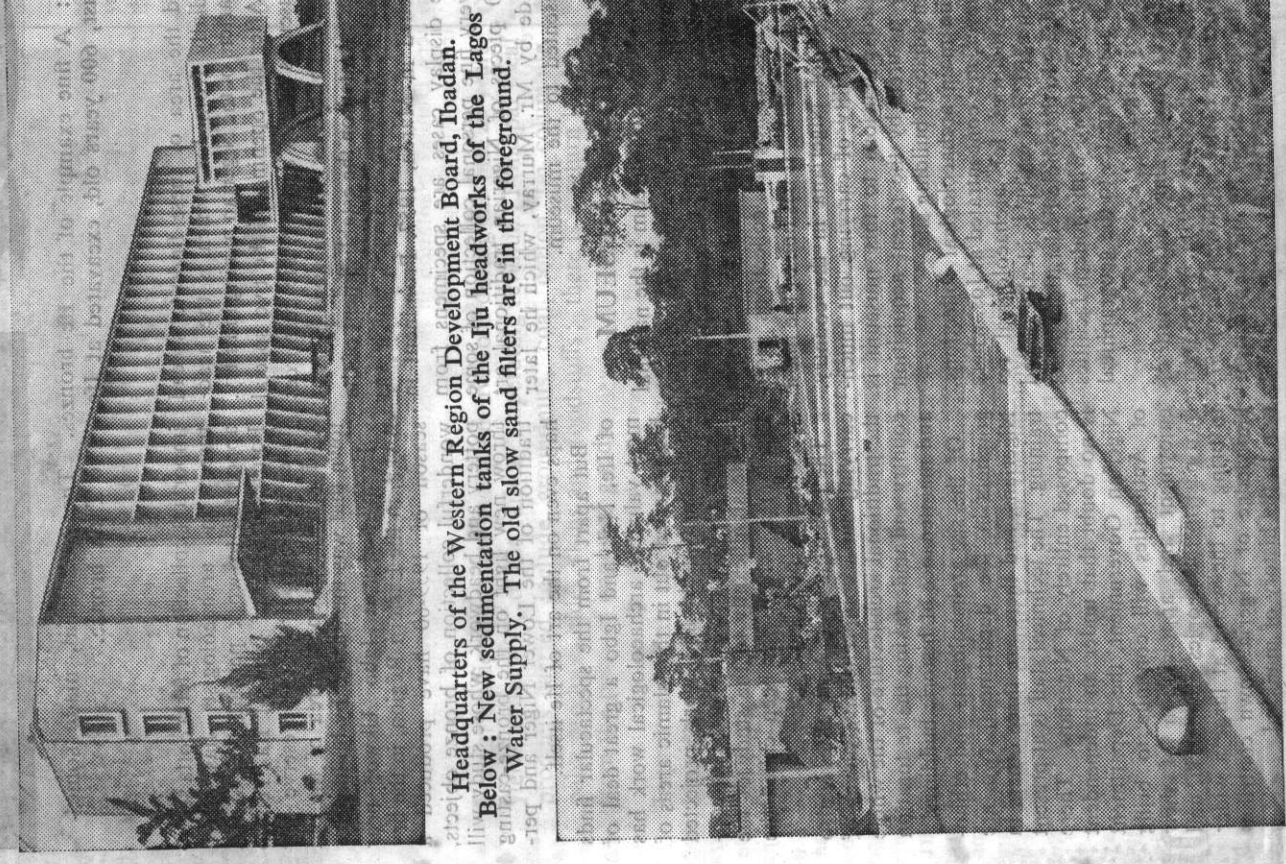
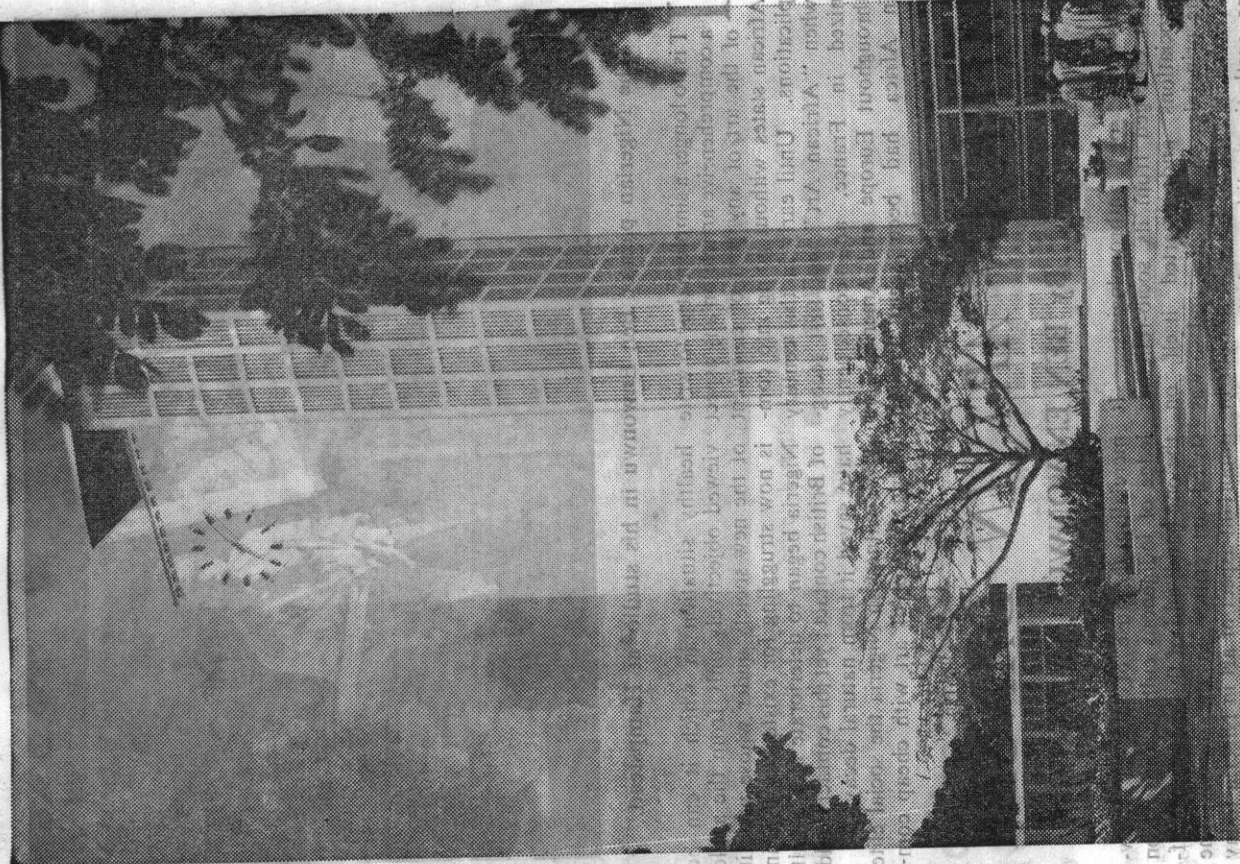


Headquarters of the Western Region Development Board, Ibadan. Below: New sedimentation tanks of the Lagos Water Supply. The old slow sand filters are in the foreground.



The Ijora Power Station at Lagos, with the Ido Overbridge in the foreground.



Pumping equipment at the Ibadan Waterworks. Below: Ibadan's water reservoir.



No Lack of Scope for Engineering Works

By J. W. PUGH
Director of Federal Public Works, Lagos.

THE story of civil engineering in Nigeria, begun in 1895 with the survey and construction of the railway from Lagos in stages northwards and from Baro on the River Niger to more than 200 miles inland. Later, another line was constructed from Port Harcourt to tap the coal discovered at Enugu. In 1916 the train ferry over the Niger at Jebba was replaced by major bridges, providing a through line from the Port of Lagos to Kano in the north. The establishment of British influence and the subsequent consolidation of the north of Nigeria could not have been achieved without these important lines of communication.

ROAD AND RAIL
Road development also began early in the twentieth century, but mainly to provide access roads to and from the railway as the country was opened up. This pattern greatly influenced trunk road development in later years, since it was the policy to avoid road/rail competition. The Lagos Water Supply was inaugurated in 1911 and such foresight was shown in the quantity and standards of purity produced that it was

Civil

Government; this involved many structural problems, particularly where foundations have proved difficult, as in Lagos, where buildings of up to 25 storeys are now under construction on soft ground.

To deal with the increased export and import trade, the ports of both Lagos and Port Harcourt have been extended at a cost approaching £10m., and the current construction of the six-mile Esravos Bar, costing some £8m., will protect the navigable entrance to the Niger-Benue River system. The railway system is also being extended in the Borno Province by a 400-mile extension from Jos to Maidugari at a cost of approximately £20m. Lagos and Kano airports with main runways of 7,590ft. and 8,610ft. were established in the war years and have been extended and reconstructed to meet international standards, with the result that Nigeria is now served by many airlines.

POWER STATIONS

The expansion of electricity supplies throughout the country has called for numerous new power stations and several have taken the form of engineering structures of advanced design, notably the Ijora station serving Lagos. As the date of independence approaches, attention has turned to a number of projects of outstanding importance. Two new bridges of prestressed concrete design were recently opened in Lagos, which help to ease the traffic problems of that city. The Ido Overbridge, with 90ft. beams, is