was suitable and so a clerk in the office had to act as a human 'repeater'. He repeated word by word the messages he received into a microphone connected with three small loudspeakers in the street. The police objected as the crowd blocked the thoroughfare, and so this early forerunner of broadcasting had a short life. Broadcasting began early in 1923, when a 500-watt station was installed at Oslo. In those days the ether was not, as now, jammed by high-power broadcasting stations and so the reception was excellent. It was at first proposed to put a tax on all receiving sets sold, but this was modified into an annual tax of 2–5 kroners on every set installed. As early as May 1923 it was demonstrated that it was possible to broadcast to the fishing fleet from the northern part of Norway. In the very early days, to receive a portion only of what was broadcast was considered satisfactory. Now not only is the complete message intelligible but the finer nuances of speech and music are transmitted over great distances without audible impairment. The small station at Oslo has been replaced by one of 100,000 watts. Marvellous progress has been made during the last ten years.

Archæological Research in the Indus Valley

ON December 8, Dr. E. J. H. Mackay delivered the Sir George Birdwood Memorial Lecture before the Royal Society of Arts. Dr. Mackay pointed out that until we are able to outline the history of the intervening centuries of darkness, the influence of the Indus Valley civilisation upon later times can only be tentatively discussed. He, therefore, preferred to indicate its relationship with other contemporary centres of culture. He welcomed the rejection of the earlier title 'Indo-Sumerian'. Commercial relationship almost certainly existed between the Indus Valley and the Middle East, but the culture displayed at Mohenjo-Daro must be regarded as distinct. He also supported the rejection of the title 'Chalco-Lithic'. Dr. C. L. Woolley, in seconding the vote of thanks to the lecturer, expressed the hope that Dr. Mackay will soon be able to resume his work, now that the Government has made it possible to obtain permission to carry out archæological researches in India.

Egyptian University's Excavations at Ma'adi

AN account of the excavations carried out last season at Ma'adi, the third season of excavation on the site, by the Geographical Department of the Egyptian University, is given in *Ancient Egypt* (pt. 4; 1932) recently issued. The excavations were conducted by Prof. Oswald Menghin and Prof. Mustafa Amer. More than 5,000 square metres were excavated. Among the more important finds was a complete square hut foundation, which throws light on Neolithic house construction in Egypt. A hoard of seven basalt vessels in a deep cellar hole cut in virgin soil is said to be "the biggest coherent find of prehistoric stone vessels made, so far, in Egypt". A vase of limestone had had red colour applied to it so that it resembled pottery. A large number of exceptionally fine worked flints included several big, oval and exceptionally thin scrapers, and a fish-tail lance. Among a group of wooden objects was a boomerang. Personal ornaments included a comb made of ox horn, the first of this material to be found at Ma'adi. A very large amount of pottery was found, more than a hundred vases being complete, many of them new types and bearing likeness to the ceramics of the Syrian third millennium B.C. No complete vessel of painted pottery was found, though a big fragment painted inside and out was saved. The painted pottery of Ma'adi has a peculiar style quite independent of any painted Egyptian ware. The importance of this Neolithic site, especially as a source of information bearing on the early relations of Egypt with Palestine and Syria, is becoming increasingly apparent and makes its complete excavation a matter of considerable moment.

Salmon Fisheries Research

IN the Ministry of Agriculture and Fisheries Report of the Salmon and Freshwater Fisheries for the year 1932 (London: H.M. Stationery Office. 1*s*. 6*d*. net), it is stated that the catch of salmon and migratory trout showed a still further increase over the very poor catches that were made in 1930. It is also satisfactory to read that in 1932 there was no considerable outbreak of furunculosis, a disease concerning the determining factors of which we need much more information. Thanks to the preliminary work which has already been carried out, it has now been shown possible to disinfect ova with acriflavine, which if carried into practice should eliminate one possible source of spreading infection. The need for continued and increased research into the life-history of the salmon is stressed as bearing on the formulation of fishery laws. It is not yet known how great a part is played by heredity in the determination of whether a fish shall be early- or late-running; if indeed, as some apparently believe, this characteristic is carried on from one generation to the next, it would be advisable to cease protecting those fish which ascend the rivers after the close season and are thus of no commercial value. The clearing up of this question would indeed be of far-reaching interest in the racial study of fishes in general. The salmon is a fish on which such an investigation can be carried out in practice, and information thus obtained might throw light on similar phenomena among our sea fishes, such as spring- and autumn-spawning herring. It is all the more regrettable therefore that the recommendations of the Committee appointed in 1930 by the Minister and the Secretary of State for Scotland on artificial propagation of salmon have had to be regarded as not feasible at the present on the grounds of economy.

The Qattara Depression and Water Power

THE Qattara depression in the north-east of the Libyan Desert has an area of 19,500 square kilometres, an average depth of floor of 60 metres below sea-level, and a maximum depth of 134 metres. Rather more than a quarter of the floor is covered