

It is proposed to erect a museum building at the University of Texas. Plans for the first unit have been approved by the Board of Regents, which serves as the executive committee for the museum. The building will cost \$750,000, of which \$300,000 has been appropriated by Congress and \$225,000 by the Texas legislature. The balance will be raised by private donations and by the sale of centennial coins.

CONSTRUCTION of the Rothschild-Hadassah-University Hospital on Mount Scopus, overlooking Jerusalem, according to *The New York Sun*, probably will begin late this summer. Dr. Jacob J. Golub, director of the Hospital for Joint Diseases, New York City, is consultant to the building committee of the hospital. It will be the first medical center in Palestine and will cost about \$750,000. On a twenty-five-acre plot will be three units of buildings, each three stories high; a 260-bed hospital, a graduate medical school, with complete laboratories and a nurses' training school and residence. The school has been named the Nathan Ratnoff Medical School, in honor of the chairman of the American Jewish Physicians' Committee, which has for a long time sought to add a medical department to the Hebrew University in Palestine. The nurses' school will be the Henrietta Szold School, named in tribute to the founder of Hadassah, the women's Zionist organization which is cooperating with the American Jewish Physicians' Committee in building the medical center. Erich Mendelsohn, architect, who is a refugee from Nazi Germany, designed the buildings.

THE establishment of a Tropical Medical Research Committee is announced by the *British Medical Journal*. The decision to appoint this new body has been taken by the Medical Research Council in consultation with the Colonial Office. The new committee will advise and assist in the direction of such investigations as the council may be able to promote, whether at home or abroad, into problems of health and disease in tropical climates, and make suggestions

generally as to research in this field. The committee will be a purely scientific body. It will include representatives of the Colonial Office and of the Liverpool and London Schools of Tropical Medicine, with other members appointed as individual experts in tropical medicine or in different branches of medical science. The following will serve in the first instance: Professor J. C. G. Ledingham, (chairman), Professor A. J. Clark, Dr. N. Hamilton Fairley, Professor W. W. Jameson, Dr. Edward Mellanby, Dr. Muriel Robertson, Major-General Sir Leonard Rogers, Dr. H. Harold Scott, Sir Thomas Stanton, Dr. C. M. Wenyon, Professor Warrington Yorke and Dr. A. Landsborough Thomson, secretary. The *Journal* writes: "Research in tropical medicine has always been of concern to the Medical Research Council, whose constitutional position under a Committee of the Privy Council leaves its work unrestricted by territorial limitations. The responsibility was explicitly recognized when the Secretary of State for the Colonies was added to this committee of the Privy Council on its reconstitution in 1926. The council has, however, not hitherto been able to assist investigations in the tropics except on isolated occasions, although it has regularly made grants for work at home in relation to tropical problems. The step now announced indicates an intention to take a more active part in work in this field."

THE Carnegie United Kingdom Trustees have allocated £5,000 for grants to museums in Great Britain for reorganization and development during the period 1936-1940. Grants will normally not exceed £500, and may be used only for carrying out definite schemes of bettering exhibition, labeling, etc. Applications for these grants are handled through the Museums Association. The trustees have also set aside funds for establishing two or three experimental schemes for extending museum services to rural areas, and for travel grants to museum curators. Grants for these experiments will be about £1,000 each.

DISCUSSION

ANTARCTIC FOSSIL PLANTS

RECENTLY the Geological Museum of Harvard University obtained the specimens of rocks and fossils collected by the Admiral R. E. Byrd Expedition to Little America. The fossil plants and coal have been transmitted to the writer for study and description.

The material was collected on Mt. Weaver, 10,000 feet above sea-level, south latitude 86° 58' and west longitude 152° 30'. This occurrence is located more than 20° further south than the only described extensive Antarctic collection. The Swedish South Polar

Expedition¹ of 1901-03 found a luxuriant flora on Grahamland, Hope Bay, south latitude 63° 15'. Grahamland lies south of South America and north of Antarctica. Mount Weaver, scarcely 3° from the South Pole, lies south of New Zealand. The British Antarctic expeditions² of 1910-1914 collected a Triassic florule from south latitude 85°.

¹ T. G. Halle, "Mesozoic Flora of Graham Land," Schwed. South Polar Exped., 1901-03, Bd. 3, lief. 14, 1913.

² A. C. Seward, British Antarctic Expedition Natural Hist. Rept. Geol. v. 1, No. 1: 1-49, 1914.

The paleobotanical collection is very meager and is interesting chiefly because of its geographic remoteness. There are recognizable species of *Taeniopteris*, *Sagenopteris* and *Araucarites*. Their age is most probably Jurassic. The presence of large Taeniopterids shows a relation to the contemporaneous Australian flora and indicates a point of difference from the Grahamland Flora, which is regarded to be of Upper Jurassic age. More abundant material might reveal the age of the Mount Weaver florule to be Upper Triassic (Rhaetic). *Sagenopteris* is a member of the Caytoniales. The two forms attributed to this genus may belong to a single species close to *S. plurifolia* (*phillipsi*), but no complete compound leaf has been found. *Sagenopteris* is more abundant in the Jurassic than the Triassic.

Taeniopteris is an artificial genus which includes a diverse lot of similar leaves probably belonging to various cycadophytes. Leaves attributed to *Taeniopteris* first occur in the uppermost Carboniferous and extend to the Lower Cretaceous. However, the finely-nerved, broad mid-ribbed forms are characteristically Mesozoic.

The general aspect of the florule recalls that of a typical "Oolitic" flora of England, Australia or Japan.

The occurrence of a well-developed vegetation during Mesozoic times at a polar region deserves an explanation. Either the land-masses were located differently during remote antiquity or there was a marked difference in climate. The Wegenerian hypothesis of continental drift has found no support among American geologists, but it would offer an apparent explanation. Nevertheless, similar conditions of climate can be explained by other hypotheses which involve fewer difficulties.

According to the simplest statement of Wegener's theory, during the late Paleozoic the various "continents" began splitting apart and drifting westwardly. During the early Mesozoic, Australia, Africa and Antarctica severed their connections, but even Antarctica remained north of the Antarctic circle. Consequently a hospitable temperate climate would have existed. Few students of earth-processes deny all continental shifting, but few accept Wegenerism fully. More probably irregularities in earth motion, of astronomic cause, altered climate by "shifting poles."

Perhaps of more significance than the occurrence of fossil plants is the presence of good, relatively thick, coals on Mount Weaver. The coal is a dull, black, humic, bituminous material. Microscopic preparations are being made by collodion peels, maceration and grinding. Coniferous wood of araucarian type is present in the "bright bands" of the coal.

The fossil plants and coal will be fully described and figured in the near future. The collection will be exhibited in the galleries of the Geological Museum of Harvard University.

I am indebted to Professor Kirtley F. Mather for the opportunity to study these specimens.

WM. C. DARRAH

BOTANICAL MUSEUM
HARVARD UNIVERSITY

LAKE VEGETATION AS A POSSIBLE SOURCE OF FORAGE

COMMENTING upon the article by Dr. Ross Aiken Gortner, of the University of Minnesota, published under the above title in SCIENCE, No. 2084, of December 7, 1934, I should like to point out that in Yugoslavia it is a general custom among the peasants to use water plants as forage in districts subject to drought in summer and where there is an abundance of vegetation in the waters. For example, one district where this use is made of water plants is that of the Gacka river near Otočac in the Lika region, which is part of Croatia. The Gacka is a ponor-river about 20 kilometers in length and contains a great many springs rising from the floor of the river bed. It has an even temperature all the year round, which does not fall below 9° C. in the winter nor rise above 20° C. in the summer. The course of the river is not very steep, and the water flows gently on in an even deep bed. For this reason it produces luxuriant vegetation throughout the year. The most common plants found in it are miriophyllum, potamogeton, ranunculus and callitriche, while nasturtium grows near the springs and sphagnum in the lower course of the river, which forms a lake at certain times of the year. The country through which the river flows is rocky, with only a shallow layer of vegetable soil, which often dries up completely during the hot summer months, and only produces sufficient fodder for the cattle in the spring and autumn. In that district the peasants may be seen using the river vegetation as fodder throughout the whole year, but particularly during the hot summer months and in the winter. Every day they cut the water plants just above the roots with a kind of long-handled scythe or simply drag them up with long rakes. Then they collect the plants on the surface of the water and load them onto a primitive kind of canoe hollowed out of the trunk of a tree. The plants are only dried for a short time, long enough to drain off the water, and are then used as fodder while still *fresh*, that is to say, in the green state. The cattle like this fodder and digest it as easily as the ordinary green fodder. From this, it is obvious,