

DINOSAUR HALL, said to contain the finest collection of prehistoric reptilian remains in the world, was opened formally on March 9 at the American Museum of Natural History. The hall is on the fourth floor of the new southeast wing of the museum, built with a \$1,500,000 appropriation made by the city during Mayor Hylan's administration.

FIVE hundred specimens of mammals, reptiles, frogs, birds, fishes and insects have been received by the Field Museum from the Field Museum-Conover-Everard expedition to Central Africa, according to an announcement by D. C. Davies, director of the museum. The expedition was financed jointly by H. B. Conover, associate in ornithology at the museum, and Robert T. Everard, Detroit sportsman. They were accompanied by John T. Zimmer, assistant curator of birds at the museum. Leaving Chicago last April the party spent approximately eight months collecting in Central Africa.

AN outdoor museum, which will display under natural conditions examples of every tree, shrub and herb found growing in the Harriman State Park, New York, and a menagerie, showing in natural environments all the animals native to the Hudson Highlands region, will be developed at Bear Mountain in the park. Announcement to this effect was made on February 21 by the commissioners of the Palisades Interstate Park, which will carry out the plan in co-operation with Henry Fairfield Osborn, president of the American Museum of Natural History. The museum will be built with funds granted by the Laura Spelman Rockefeller Memorial at the request of the committee on outdoor education of the American Association of Museums, of which Chauncey J. Hamlin, of Buffalo, is chairman. The cost of the building will be about \$7,500.

DURING the past two years the Oklahoma Geological Survey, under the direction of Chas. N. Gould, has held a series of field conferences in Oklahoma and adjacent states, for the purpose of studying and correlating the different geological formations of the region. While these conferences are held primarily for geologists, the interested public is welcome. More than 200 geologists have participated in these various conferences. Two other conferences are scheduled for the coming months. On March 28 and 29, following the annual meeting of the American Association of Petroleum Geologists at Tulsa, there will be a conference in the Arbuckle Mountains and the Ardmore Basin. Among the points of interest to be visited will be the porphyry monadnock known as East Timbered Hills, Turner Falls, Price's Falls, the asphalt mines, White Mound, Burning Mountain, Caddo Anticline and Criner Hills. Later in the season, probably in

May, it is planned to hold a field conference in the Panhandle of Oklahoma, studying conditions near the Ramsey well in Cimarron County, together with the volcanic rock on Black Mesa and the various Cretaceous exposures in that area.

THE cancer commission of Harvard University and the Collis P. Huntington Memorial Hospital have received contributions amounting to \$34,619 for the cancer fund.

UNIVERSITY AND EDUCATIONAL NOTES

ILLINOIS WOMAN'S COLLEGE, Jacksonville, Illinois, is to have a new science hall which will cost about \$200,000. It will be a three-story brick and stone building of the Georgian type of architecture and will contain laboratories and classrooms for the departments of chemistry, physics and biology. It will be ready for occupancy next fall.

WORK is to start about June 1 on the new \$300,000 science building which Milwaukee-Downer College will build to house the departments of zoology, botany, physics, geology, geography and domestic science.

THE construction of a new three-story \$600,000 building for the Philadelphia College of Pharmacy and Science will be undertaken at once. The board of trustees of the college has decided to reduce the number of freshman students for the next session to 250, in the interests of better education.

THE Neurological Institute of New York City has received a gift of \$200,000 from Mr. William Bingham, of New York and Cleveland. The gift is to be used to build and equip one floor in the new building of the institute to be constructed in connection with the new Columbia-Presbyterian medical center, and is given as a memorial to Dr. J. G. Gehring, neurologist, of Bethel, Me.

CHANCELLOR TRYGGER, of Upsala University, has announced that the institution will celebrate its 450th anniversary from September 15 to 17. University representatives in all parts of Europe will be invited to attend. Upsala University was founded in 1477 by Jakob Ulfson.

DR. KIRTLEY F. MATHER, associate professor of physiography at Harvard University, has been promoted to be professor of geology.

RUTGERS UNIVERSITY has promoted Dr. Leon A. Hausman, from assistant professor of zoology to associate professor; Dr. Clyde M. Huber, from instructor to assistant professor of mathematics, and Dr. Darrell B. Lucas, from instructor to assistant professor of agricultural engineering. George W. Musgrave, professor of agronomy, has resigned.

IN the school of medicine at Stanford University, Dr. George D. Barnett, Dr. W. Edward Chamberlain and Dr. Henry G. Mehrtens have been promoted to full professorships in the department of medicine. In the same university Dr. Maurice L. Tainter has been promoted to an assistant professorship of pharmacology.

DR. HULSEY CASON has been appointed assistant professor of psychology at the University of Rochester.

J. W. BARKER has resigned his position as professor of chemistry in the Junior College of Flat River, Mo., to fill an assistant professorship in the chemistry department of Wittenberg College.

PROFESSOR W. W. C. TOPLEY has resigned from the chair of bacteriology and the directorship of the public health laboratory at the University of Manchester, as from September next, when he will take up his duties as professor of bacteriology and immunology in the new London School of Hygiene and Tropical Medicine.

THE chair of mineralogy and geology at the University of Lille has been changed to a chair of geology and physical geography and M. Leriche has been appointed to the position.

DISCUSSION AND CORRESPONDENCE

THE LUNAR ECLIPSES OF 1927

THERE are to be two lunar eclipses in 1927, about the middle and end of the year. Some of their relations to the earth's atmosphere are as follows:

1927 June 15, the first eclipse is at its height (mid-eclipse) at 8 h 24.2 m, Universal Time; but the moon barely gets within the umbra on the north side of the earth's shadow. The radius of the geometrical umbra is 40.8'; the outer limb of the moon at mid-eclipse is distant 40.7' from mid-shadow. At this moment the edge of the shadow nearest to the moon's limb is east by the earth's surface and atmosphere at about W 97.3°, N 63.75°, in the neighborhood of Baker Lake, which drains into Chesterfield Inlet, on the west shore of Hudson Bay. It would be very interesting to know the weather, cloud and sky conditions in this region at this moment. But the atlas indicates hardly any population there.

In the eclipse of 1892 November 4 the outer limb of the moon was 43.0' from mid-shadow, the radius of the geometrical umbra was 45.4', so that the immersion was deeper than in the coming case. But Gale, at Sydney, N. S. W., reported the limb so bright as to give the impression that the eclipse was not total; Russell, also at Sydney, said definitely that it was not total; Dobereck, at Hong Kong, remarked on the brilliancy of the immersed limb. We may expect

this time to observe the density of the earth's shadow very near to the edge, but due to weather and climate conditions very different from those which ruled in 1892. Then the grazing point was over water, between Iceland and Norway, north of the Shetland Islands.

The last rays on the moon's limb at first contact with the umbra graze the earth's surface or atmosphere about W 174.7°, N 32.7°. This is at sunset on the open Pacific, north of Pearl and Hermes. The rays at last contact in like manner graze about W 69.1°, N 17.6°, a point at sunrise in the Caribbean Sea, considerably south of Catalina Island, south of Santo Domingo. Observations of weather, cloud and sky at these points are desired, for comparison with direct observations of the shadow edge at these moments.

The two internal contacts at this eclipse come so close together that they are hardly separable from mid-eclipse. At mid-eclipse the sunrise-sunset line, centered about the subsolar point at E 54.0°, N 23.3°, passes by Cape San Roque, Nova Scotia, Great Bear Lake, New Guinea, Gulf of Carpentaria and Enderby Land. Of all this great circle, however, only a fraction, perhaps 35°, on the two sides of the Baker Lake region, is effective in illuminating the eclipsed moon.

The second lunar eclipse, on December 8, with middle at 17 h 34.6 m, Universal Time, is of much deeper immersion, 11' or more at most, in the southern half of the shadow. The inner (north) limb of the moon just covers the middle of the shadow. The grazing light at the contacts comes from regions about the points indicated:

First Contact: E 41.6°, S 25.7°, in the Mozambique Channel, between Tulleur and Europa Island, at sunset.

Second Contact: E 51.0°, S 51.3°, in the Sea Tang, south of the Crozets, at sunset.

Third Contact: E 164.4°, S 22.0°, southwest of New Caledonia, at sunrise.

Fourth Contact: E 157.0°, S 3.5°, northeast of Bougainville Island, at sunrise.

Observations of weather, cloud and sky at these points are desired, for comparison with observations of the shadow edge at the contacts.

At mid-eclipse the sunrise-sunset line is centered about the subsolar point at W 85.75°, S 22.7°, and passes over or near Kaiser Wilhelm Land, Fiji Islands, Sitka, Timbuctoo, Mossamedes, Cape Town. The whole southern half of this great circle is effective in illuminating the eclipsed moon at this moment.

The mere naming of the grazing points above indicates that observations within a few degrees of them are unlikely to be obtained. Still, it is desired that persons near any such, at sea or ashore, report