

sites and which are known to be of importance to cultivators of cotton. It is made a condition of the grant that the university should admit cotton research scholars and their assistants to the laboratories of the university. The university is also asked to deal with inquiries from scientific advisers to cotton-growers, and for this purpose should have available such publications as would be likely to give the required information. The council of the university has expressed its gratification at the offer, and has accepted the grant. In the department of botany Mr. Samuel Williams will undertake investigations on plant diseases under the direction of Dr. Wilfrid Robinson, who has for some years past been engaged in research on plant pathology. In the zoological department Mr. R. A. Wardle will supervise the investigations in entomology.

UNIVERSITY AND EDUCATIONAL NOTES

By the will of Alexander F. Morrison, of the California bar, a bequest of \$1,000,000 is left to the University of California.

HERBERT W. RICE, of Providence, R. I., has given to Brown University a scholarship which will yield annually \$700 for graduate work in chemistry.

By the will of William Prescott, of Liverpool, £20,000 is given to the Liverpool University for the founding of a chair of agriculture.

PROFESSOR ALFRED NORTH WHITEHEAD, hon. D.Sc. (Manchester), hon. LL.D. (St. Andrews), fellow of Trinity College, Cambridge, and professor of applied mathematics in the Imperial College of Science and Technology, has been appointed professor of philosophy at Harvard University. He will begin his work in September, 1924, and will give courses on metaphysics, logic and the philosophy of science.

At the Stanford University Medical School the following promotions will be made for the year 1924-25: Dr. Jean Oliver from associate professor in pathology to professor; Dr. Edward B. Towne from assistant professor of surgery to associate professor; Dr. George deF. Barnett from assistant clinical professor of medicine to associate professor; Maurice L. Tainter from assistant in pharmacology to instructor.

KENNETH C. HEALD, chief of the gas and oil section of the United States Geological Survey, has been appointed associate professor of geology at Yale University with assignment to the Sheffield Scientific School. The following promotions from assistant to associate professor have been made: Ralph G. Van Name, chemistry; Edwin Hoyt Lockwood, mechanical engineering; Carlton T. Bishop, structural engineering, and Charles A. A. Bennett, philosophy.

DISCUSSION

EXTENSIVE VOLCANIC ACTIVITY IN THE MIDDLE TERTIARY OF THE SOUTH TEXAS COASTAL PLAIN*

IN the course of a short field study of the geologic formations in Live Oak and McMullen counties, Texas, which the writer made early in September, 1923, an extensive deposit of volcanic tuff and agglomerate was discovered. The area in which this volcanic material outcrops is situated near the center of the Gulf Coastal Plain of Texas from 65 to 90 miles south of San Antonio. A more complete report on this deposit will be published later.

This tuffaceous deposit is considered to be of formational rank on the basis of (1) lithologic dissimilarity to the formations above and below it, and (2) its unconformable relations to the adjacent formations. It is here designated as the Gueydan formation from the Gueydan Ranch and Survey in southeastern McMullen County, where it is well exposed.

The Gueydan tuff consists of a lower yellowish-white trachyte tuff and an upper brownish-pink latite or andesite tuff. These members are separated in places by a bed of pink and green mottled, massive, bentonitic clay. The trachyte tuff often exhibits well-marked sun-cracks and frequently contains small pumice pebbles. The latite or andesite tuff contains, in addition to pebbles of pumice as much as three inches in diameter, scattered boulders of black vesicular andesite up to three feet in diameter and a few rounded pebbles of hard sandstone. At the base of the formation is a bed of coarse conglomerate attaining a thickness of twenty feet.

The Gueydan formation lies unconformably above the Frio formation of uppermost Eocene age and unconformably below the Oakville sandstone of Upper Miocene age. Although no fossils were seen in it and no rocks of probable Oligocene age have been reported heretofore from the southern half of the Coastal Plain province of Texas, it is provisionally placed in the Oligocene. The Gueydan formation outcrops in a belt, from three to seven miles wide, that was traced from three miles east of Three Rivers, Live Oak County, southwest to the Duval County line, a distance of over thirty miles. So far as known at the present time, this is the largest deposit of volcanic material that has been found in the Texas Coastal Plain.

The old volcanoes from which the Gueydan tuff was erupted have not been discovered. It is possible either that more detailed field work will bring them to light or that the eroded cones have been covered up by deposits younger than the Gueydan. It is unlikely

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