

the collections have occupied various buildings, but now for the first time they are shown in one designed for this purpose, though about a quarter of the collections still remain in buildings which were originally constructed for the exhibition of 1862.

A PRIZE of about \$250 is offered by the British *Journal of Anesthesia* for the best research in anesthesia made in Great Britain during the coming year. This will be known as the Sidney Rawson Wilson prize, in memory of the late Dr. Wilson.

THE University of Edinburgh has received intimation of a bequest by the late James Sanderson, Galashiels of five shares of the residue of his estate, to be applied for the advancement or promotion in the university of technical and scientific study and research in the chemistry and engineering branches of the faculty of science. The amount of the bequest is estimated at about £35,000. The university has accepted the offer of an endowment contributed by former students and others associated with the work of emeritus Professor Robert Wallace, for the foundation of a university prize, to be known as the "Wallace Prize," to be awarded to the best degree student of the third year in agriculture.

ACCORDING to the report of the Royal Magnetical and Meteorological Observatory at Batavia for 1926, recorded in *Terrestrial Magnetism*, the electrification of the Batavia-Buitenzorg railway has made it necessary to move the recording magnetographs at Buitenzorg to the Island of Kuiper in the Bay of Batavia. The plans for the new building have been completed and construction was to begin shortly.

UNIVERSITY AND EDUCATIONAL NOTES

OF an allotment of \$200,000 to the school of agriculture, Pennsylvania State College, for new buildings, \$150,000 is to be used for the first unit of a biology building, primarily for botany. The remaining \$50,000 is to be divided between a new sheep barn, an addition to the dairy barn milk room, a livestock hospital and the first unit of a new poultry plant.

COLUMBIA UNIVERSITY has announced twenty-eight gifts, aggregating \$25,950, including one of about \$10,000 from Dr. L. M. Waugh for the purpose of financing a research expedition to Labrador.

THE new Warner laboratory of mechanics and hydraulics at the Case School of Applied Science has been completed.

THE Dorr Memorial Research Laboratory of Temple University was dedicated on January 31. This laboratory was made possible through a \$50,000 fund bequeathed by the late Dr. Henry Isaiah Dorr.

T. R. FERENS has given a further sum of £22,500 to the newly established University College at Hull. This brings his gifts to the college to about £300,000. Mr. Ferens has asked that £20,000 of his latest benefaction should be set aside for endowing a chair. The foundation stone of the new buildings will be laid on April 28.

DR. CHARLES K. EDMUNDS, formerly president of Canton Christian College, now Lingnan University, and later provost of the Johns Hopkins University, has accepted the presidency of Pomona College. He will assume office about May 1.

DR. MADISON BENTLEY, of the University of Illinois, has been appointed Sage professor of psychology at Cornell University to occupy the chair held for nearly thirty-five years by the late Edward Bradford Titchener.

DR. EDWARD U. CONDON, recently an International research fellow in mathematical physics at Göttingen and Munich and at present a special lecturer in Columbia University, has been appointed assistant professor in physics at Princeton University.

DR. P. W. WHITING, for the past year research investigator under the National Research Council stationed at the Bussey Institution, Harvard University, has been appointed assistant professor of zoology at the University of Pittsburgh.

ALBERT H. GILBERT, assistant professor of botany at the University of Vermont and associate plant pathologist for the Vermont Experiment Station, has been appointed professor of plant pathology and head of that department at Macdonald College, the Agricultural College of McGill University.

A. C. HARDY has been appointed the first professor of zoology at University College, Hull, England. Mr. Hardy acted as zoologist to the recent expedition to the Antarctic in the *Discovery*.

DR. EMIL RITTER VON SKRAMLIK, of Freiburg, has been appointed professor of physiology at Graz.

DISCUSSION AND CORRESPONDENCE THE ICHNOLOGY OF TEXAS

IT is almost one hundred years since the Reverend Dr. Duncan initiated the subject of ichnology by the description in the *Transactions of the Royal Society of Edinburgh* of some genuine tracks in the New Red Sandstone of Scotland. During the century that has passed there have been many contributions to the subject, and the last two years have been especially fruitful of studies, both in America and in Europe. Interest in these fascinating objects does not wane, but rather seems to be on the increase, in spite of the

opinion of paleontologists that the study of tracks "leads nowhere," and "are so blind." To a true paleophilist fossil footprints are notes from the life of the animals of the past and give us some clue, not otherwise obtainable, of their daily life. The evidence is slight, it is true, but none the less the study of footprints aids us in our understanding of paleobiology, which we could not otherwise have.

Feeling thus as I do about the study of footprints, it was a source of delight to find here on the Pacific Coast other paleophilists who felt the same about the matter, and they possessed a collection of fossil footprints from the Red Beds of Texas, which I suggested would be well worth studying. The collection was then placed at my disposal. The tracks all represent small animals of types which are unknown from skeletal material. Williston saw some of the tracks in 1909 and suggested they might represent salamanders. During the twenty years which have elapsed since Williston published his short note, small collections of these objects have accumulated in several museums, and the time seems propitious to gain an insight into the small animals of the famed Texas Red Beds, by a study and description of this assemblage of new materials. The several hundred tracks represent a variety of animals, all of which are new to science.

We shall accept it as a well established matter that the usual rules of taxonomy apply to ichnological objects. This is a commonly accepted opinion of paleontologists and needs no defense. There are several new species, of different genera, represented in the present assemblage which it is planned to define as well as may be and place the matter where it can be at the disposal of other workers. The majority of the tracks measure under 15 mm. in length, the imprints looking amazingly like the foot-structure of the Microsauria whose anatomy I so delighted to study ten years and more ago. In addition to the vertebrate impressions, and making the study more fascinating still, are the trails of invertebrates and weather indications.

It has been more than a century since Pliny Moody pointed out to his friends the footprints of *Noah's Raven* on the red slab which formed a doorstep to his home in Massachusetts, and it is my purpose to regard this study of the Ichnology of Texas as a centennial celebration of man's study of the trails of his predecessors. It is my hope to see and study all materials of this nature and I hope that those who read this note and know of footprint assemblages from Texas will be so courteous as to let me know.

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DISCOVERY OF FOSSIL TRACKS ON THE NORTH RIM OF THE GRAND CANYON

FOSSIL tracks of quadrupedal animals were first discovered in the rocks of the Grand Canyon of the Colorado in 1915, but the abundance of their occurrence and their great variety of kind has only recently been made known.¹ During the past three years investigations carried on by the senior author show the presence of no less than 28 genera and 36 species of fossil ichnites. These represent three distinct faunas that named in descending order occur in the Coconino (Permian), Hermit (Permian) and Supai (Pennsylvanian?) formations. All of the specimens on which the above-mentioned determinations are based were obtained entirely from the south side of the canyon, and it is, therefore, of interest to find that fossil footprints also occur on the north side. Mr. Sturdevant, with the assistance of Mr. Charles Nash, made a special search for tracks on the north rim and on December 9, 1927, and was rewarded by finding well-preserved footprints in both the Coconino and Supai formations.

When collections have been made, it will be a matter of added interest to learn whether the tracks occur in the same horizons and also whether the same genera and species are to be found on both sides of the canyon, which are separated by a distance in an air line of fourteen or more miles.

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U. S. National Museum

GLENN E. STURDEVANT,

Grand Canyon National Park

A CORM ROT OF GLADIOLUS CAUSED BY A PENICILLIUM

THE diseased corms have reddish brown lesions, firm but not hard, sunken, usually irregular in size and shape and without definite margins. The dark brown, moderately porous rot invades the corm tissues rather rapidly at temperatures between 12 and 23° C., eventually destroying the corm. At temperatures above 20° C. there is but scanty development of the blue-green conidia. Numerous sclerotia appear both on the surface and in the interior of the attacked corms.

The pathogenicity of the fungus has been proved by inoculation experiments and the connection of the sclerotia with the *Penicillium* has been definitely established.

¹ Gilmore, C. W., *Smith. Miscel. Coll.*, Vol. 77, No. 9 1926, pp. 1-41, 12 plates; *Smith. Miscel. Coll.*, Vol. 80, No. 3, 1927, pp. 1-78, 21 plates; *Smith. Miscel. Coll.*, Vol. 8, No. 8, 1928, pp. 1-16, 5 plates.