

by slow depression but also by the work already then accomplished by subaerial erosion. Only by supposing an extensive system of open valleys to have been developed during the earlier advance of wave work on the retreating coast can satisfactory explanation be given for the scattered arrangement of the remnant islands on the abraded platform.

THE SOUTHERN URALS.

THE excursion of the Russian geological congress turned attention to the Urals as an example of an uplifted and dissected peneplain. Further information on this subject is found in some 'Topographic notes on the Ural Mountains,' by Purington (*Bull. Amer. Geogr. Soc.*, XXXIII., 1901, 103-111). The southern extension of this old chain, where the structure is as greatly disordered as elsewhere, is for the most part a gently undulating plain, the Orenburg steppe, hundreds of miles in extent. Its surface is compared to that of a calm sea, swept by huge, flat, crossing swells, 100 or 200 feet high and from two to four miles from crest to crest. The general turf cover of the nearly treeless plain is frequently broken by low reefs of quartzitic schists, traceable for long distances, and thus revealing something of the underground structure. Some of the more decomposable schists are weathered so deeply that mine shafts have been dug 100 feet deep before blasting was necessary. Water-worn gold-bearing gravels are abundant on the undulating plain, but are frequently too far from the streams for profitable washing. Low monadnocks of the more resistant rocks occur in the region of the steppe; further north in the forested Urals the higher extension of the same peneplain is dominated by dome-shaped monadnocks, rising 3,000 and 4,000 feet over the uplands. The rivers of the steppe have now eroded broad and shallow valleys from 50 to 200 feet deep; the sides of the valleys are well defined where they rise to the upland, whose borders are dissected by ravines for a few hundred feet. The valley floors are sheeted with gravels in which the rivers meander freely.

W. M. DAVIS.

THE STRECKER COLLECTION OF 'LEPIDOPTERA AND THE AMERICAN MUSEUM OF NATURAL HISTORY.

SINCE the death of Dr. Herman Strecker, many representatives of large museums have visited his former home in Reading, Pennsylvania, and commendable zeal has been displayed in their efforts to secure the Strecker collection of lepidoptera for their respective institutions. The heirs, however, have insisted that no deviation would be made from the original valuation placed upon the collection by Dr. Strecker, namely \$20,000. The Right Reverend Dean Hoffman has authorized the American Museum to purchase the collection. This is not the first time that Dean Hoffman has benefited the people of New York by gifts of like character, and the silent appreciation of the thousands that visit the superb exhibition of butterflies and moths which his generosity has made possible is itself a testimonial of public gratitude.

The growth of the Department of Entomology within the last few years has been phenomenal. In 1890 Mrs. M. S. Elliot donated the 'Elliot Collection,' consisting of six thousand local specimens, all reared from caterpillars, and consequently as nearly absolutely perfect as specimens can be—butterflies that are captured in the field are almost invariably injured. In 1892 friends of the Museum contributed some \$15,000 toward the purchase of the 'Harry Edwards Collection.' This was a general collection of insects, but contained some forty to fifty thousand butterflies and moths from various parts of the world; among these were some three hundred which were absolutely new to science. For a long time this has remained the principal part of the Museum collection. In 1891 a collection of insects numbering some ten thousand, and containing at least three thousand North American Lepidoptera, was donated by Mr. James Angus. Mr. Angus had made a specialty of one genus of moths, the *Catocala*, and in this one genus alone he had upwards of fifteen hundred specimens. In 1897 Mr. William Schaus, then of New York, but now of England, donated a remarkably complete collection of Old World Lepidoptera, numbering

some five thousand specimens, all authoritatively named, and many representing most remote localities.

The arrival of the Strecker material will increase the Museum collections by fully one hundred thousand specimens, among which are several hundred 'types.' Mr. William Beutenmüller, the curator of entomology, will personally attend to the details of transportation. The Museum will also receive the 'Strecker Library.'

THE MISSOURI BOTANICAL GARDEN.

FROM advance sheets of the administrative report of the Garden for 1901, it appears that during the past year \$44,409 was spent on the maintenance and improvement of the establishment, \$5,287.60 less than the net income for the year after providing for publications and certain fixed events designated in Henry Shaw's will, the total gross receipts being \$125,690.73.

91,262 persons visited the Garden, about 45 per cent. of this number on the first Sunday afternoon each in June and September, the only two holidays on which the Garden can be opened to the public.

The collection of living plants, which in 1900 contained 9,194 species or varieties, has been increased to 9,967. Nearly 3,000 surplus plants were distributed to hospitals and schools. Exchange relations were maintained with other botanical establishments, and in addition to what was derived from these sources the living collections were increased by an expenditure of \$2,829.61.

16,256 sheets of specimens were incorporated in the herbarium, on which \$1,175.39 was spent, and the herbarium is stated to consist now of about 365,000 specimens, valued at \$54,743.00.

\$2,688.71 was spent on the library, to which 929 books and 254 pamphlets were added, and the library now contains about 36,000 books and pamphlets, valued at \$60,305.00, in addition to which there are about 275,500 index cards.

The extent of the exchange relations of the Garden is shown by the Director's statement that 1,184 serial publications are received at

the library, of which 1,083 are received in exchange for the Reports of the Garden.

THE NATIONAL GEOGRAPHIC SOCIETY.

SEVERAL announcements of plans and progress are made by the National Geographic Society. A handsome building, costing \$50,000, is being erected for the Society and as a memorial to its first President, Hon. Gardiner Greene Hubbard. The building is located on the corner of M and 16th Streets, in the central part of the city.

The annual meeting of the Society was held on the 10th of January, Alexander Graham Bell in the chair. The membership of the Society is now about 2,700, representing every State in the Union. The following directors were elected for three years:

Alexander Graham Bell, General A. W. Greely, chief signal officer of the War Department; Henry Gannett, chief geographer of the U. S. Geological Survey; Angelo Heilprin, Academy of Natural Sciences, Philadelphia; Gifford Pinchot, forester of the U. S. Government; O. H. Tittmann, director of the Coast and Geodetic Survey; W J McGee, ethnologist in charge of the Bureau of American Ethnology, and Russell Hinman, New York City.

The National Geographic Society is already forming plans for the great International Congress of Geographers which will be held under its auspices in Washington in 1904. It is the first time the Congress has met in the Western Hemisphere. These geographic Congresses are of international importance and it is expected that representatives from all parts of the world will attend.

SCIENTIFIC NOTES AND NEWS.

AT the meeting of the Paris Academy of Sciences on January 6, M. Bouquet de la Grye, the engineer, succeeded to the presidency. M. Albert Gaudry, the paleontologist, was elected vice-president, and will be elected president next year.

THE Lavoisier medal of the Paris Academy of Sciences has been awarded to Dr. Emil Fischer, professor of chemistry in the University of Berlin.