

a state of comparative peace must have prevailed to permit this uninterrupted growth.

The numerous illustrations in the text and the admirable album of fifty-full page plates present in the most satisfactory manner the results of these important and suggestive excavations.

D. G. BRINTON.

Current Superstitions Collected From the Oral Tradition of English-Speaking Folk. Edited by FANNY D. BERGEN, with Notes and an Introduction by WILLIAM WELLS NEWELL. Pp. 161. Price, \$3.50. Boston, Houghton, Mifflin & Co.

The strange persistency of ancient superstitions in conditions of modern civilization is well illustrated in this volume. Its peculiar value consists in its presentation of beliefs and practices widely prevalent in our own day and country, most of them having been obtained by private correspondence with persons in various parts of the United States.

They are arranged under nineteen headings, such as love, marriage, dreams, luck, money, weather, warts, moon, sun, death omens, and 'projects.' The last mentioned is the term applied among girls in the United States to the ceremonies of divination by which they learn about the man they are to marry. The editor, Mr. Newell, says he cannot offer any explanation of this signification attached to the word. Is it not a direct descendant of the Latin *pro-jicere sortes*, divination by casting on the ground the divining sticks? This seems borne out by the fact that the most widely extended of these 'projects' is to throw a whole apple paring on the floor, where it forms your true love's initial letter.

The introduction and notes, prepared by Mr. Newell with his customary thoroughness and precision, add much to the value of Mrs. Bergen's collection by bringing out the analogies of the customs mentioned with the folk-lore and mythologies of other times and nations.

Among other noteworthy facts thus elicited is the vitality and number of formulas and beliefs still current in reference to the moon. So extended are these that Mr. Newell says they must be regarded as 'Nothing else than a continued worship of the orb, still connected with

material blessings expected from its bounty.' The sun is decidedly less important in popular belief.

Folk medicine is represented by the wearing of amulets and charms, the magical cure of warts, hiccough, toothache, nose bleed and other common ailments. Attention is called by the editor to the fact that in some of these the ancient 'doctrine of signatures' still survives.

Of the incidents of life, the two around which is associated the largest body of living superstition are marriage and death. Mr. Newell explains the latter by the suggestion that "The disinclination to exercise independent thought on a subject so serious leaves the field open for the continuance of ancestral notions," which seems an appropriate solution. He adds some pointed observations on the value of folk-lore to history, comparative mythology and archæology.

The volume is a member of the series issued under the auspices of the American Folk-lore Society. It is to be regretted that it is not furnished with an index, an omission scarcely excusable in a work of the kind.

D. G. BRINTON.

SOCIETIES AND ACADEMIES.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, MAY 19, 1896.

THE collections made by Dr. A. Donaldson Smith in Western Somali Land and the Galla Country, northeastern Africa, in 1894, were presented to the Academy, their value and extent being commented on by Mr. Arthur Erwin Brown on behalf of the curators.

Dr. Donaldson Smith spoke of the physical features of the regions from which the specimens had been collected and gave briefly some facts regarding the habits of the animals observed by him. Somali Land is very arid and barren, yet a greater variety of specimens and more new forms had been secured there and from the 200 miles beyond than from all the rest of the 4,000 miles traversed by him. In illustration it was stated that twenty-three new species of birds had been obtained from the district specially referred to, while but one had been secured elsewhere. Scattered over the

barren plains were little pyramids from which the sand was thrown up in jets by a hairless mole, which was only observed 200 miles from the coast. The hairlessness of this animal, *Heterocephalus glaber* Rüpp, is a unique feature among the rodentia. The specimen presented by Dr. Smith to the Academy is the only alcoholic preparation of the species known to exist and the second one on record in any form, the type being in the Senckenburg Museum.

Another specimen of unusual interest and variety is one of *Trilophomys imhausi* Milne Edw.—a maned rat covered with long, stiff hair, arranged in three longitudinal divisions. Its nearest affinities in externals and habits are to our marmots.

A *Colobus* or horse-tailed monkey occurred in troupes of 500 or 600 and formed a very peculiar feature of the landscape. The skins are used by the natives to form bands for the ankles and knees. The species is the *guereza* of Rüppell. Guinea fowls were found plentifully wherever there was water, a beautiful vulturine form being of special interest. An infinite number of bee eaters were observed, especially about Lake Rudolf, where they were active in catching the insects driven up by the volcanic smoke.

The entire collection of mammals, which was commented on in detail by Mr. Samuel N. Rhoads, includes fifty genera and about seventy species represented by 200 specimens. Seven genera and twelve species are new to American museums. This portion of Dr. Smith's gift is of special interest and value, as the mammals alone have not been examined and described by specialists elsewhere. Mr. Rhoads also spoke of the fishes and reptiles. The batrachia embrace 40 species of 18 genera, mostly new to the Academy.

Mr. Witmer Stone spoke of the collection of birds which had been determined by Mr. Bowdler Sharp, of the British Museum. The portion presented to the Academy consists of 150 specimens of about 100 species, fully one-half new to the museum. A new species of *Turacus* was found in the darkest portion of the inland forest and had been named in recognition of the discoverer's distinguished services to science.

Dr. Henry Skinner stated that the insects included 871 specimens; the distribution in the several groups was noted. A report on the diptera was made by Mr. Chas. W. Johnson, and Mr. Wm. J. Fox spoke of the collection of hymenoptera consisting of 160 specimens, all of which were new to the Academy's cabinet, eight being of undescribed species.

There were but few mollusks, but on those which were presented, Mr. Henry A. Pilsbry based some remarks on the molluscan fauna of Africa and its geographical distribution.

The entire collection is probably the most extensive and important yet brought from Africa by an individual explorer, and the portions so generously given to the Academy by Dr. Smith form a valuable addition to its resources.

Mr. Henry A. Pilsbry spoke of the geology of the deposit containing fossil *Unionidæ* at Fish House, New Jersey. The mussels, some twelve species of *Unio* and *Anodonta*, occur in a thick black clay stratum used for brick and tile making. Below this is a stratum of red clay, gravel and 'ironstone' (bog iron), about two feet thick, which rests on a bed of sand of unknown depth. This sand shows the stratification and oblique lamination characteristic of arenaceous deposits in running water. The speaker considered that the hypothesis of an ancient 'ox-bow' of the Delaware river explained the phenomena presented, the underlying sand having been deposited in the bed of the river; the channel was then abandoned for a new one, leaving a lagoon or 'slough,' in which the layer of yellow material was deposited at subsequent times of freshet, and after the up-stream end of the lagoon was entirely filled up, the black clay was formed in idle water, largely by the decay of organic matter, molluscan and other life flourishing in lagoons of this nature. Mr. Pilsbry held that the black clay and underlying sand was a deposit wholly different in genesis and earlier in time than the gravel which overlies the clay bed, this last gravel being referred by Prof. Salisbury to the Pensauken formation. Besides the mussels, fossil wood occurs in the black clay, as well as remains of the pleistocene horse, *Equus major* Leidy, determined by Prof. Cope.

The latter, as well as the Unionidæ (some of which are recent species), prove the deposit to be of post-pliocene age, instead of cretaceous, as claimed by Dr. Lea, Prof. Whitfield and some others. The character and age of these deposits were further considered by Messrs. Woolman and Heilprin.

A paper entitled 'The Planktonokrit, a centrifugal apparatus for the volumetric estimation of the food supply of oysters and other aquatic animals,' by Chas. S. Dolley, M. D., was presented for publication.

EDWARD J. NOLAN,
Recording Secretary.

PROCEEDINGS OF THE TORREY BOTANICAL
CLUB, MAY 12, 1896.

At the regular meeting, owing to the absence of the President and both Vice-Presidents, Dr. N. L. Britton and afterwards Mr. L. G. Fay occupied the chair. Dr. A. Schneider acted as Secretary.

One nomination for membership was received and the following communication was read and recommended to be placed on the minutes:

Secretary Torrey Botanical Club:

DEAR SIR: I have the honor to inform you that Mr. Edward Berry has presented the Torrey Club with fifty fine specimens of plants from the country about Passaic, N. J., and other counties of the same State. They will be mounted and placed among the other specimens in the herbarium as soon as opportunity offers. I remain, sir.

Very respectfully yours,
HELEN INGERSOLL,
Curator.

Mr. A. A. Tyler read his paper on 'A historical Review of the Study of Stipules.' He presented briefly the older opinions in regard to the morphology and modification of stipules. The paper was discussed by Dr. Britton and others. Mr. Tyler subsequently made further remarks on the origin and development of stipules.

The paper entitled 'Appendages to the Petioles of Liriodendra' by Mr. Arthur Hollick was read by title, owing to the absence of the author.

Meeting adjourned.

W. A. BASTEDO,
Secretary pro tem.

ALABAMA INDUSTRIAL AND SCIENTIFIC SOCIETY.

THE sixth annual meeting of the Alabama Industrial and Scientific Society was held in Birmingham, Ala., on May 13th; eighteen members present. On account of the death of the President, Mr. Thos. Seddon, the Vice-President, Mr. F. M. Jackson, presided. Papers were read before the Society, as follows:

'On the Manufacture of Steel in the Birmingham District,' by Paschal G. Shook; 'On the Grading of Coke Iron, with special reference to the Birmingham District,' by W. H. Brannon; 'On the Grading of Coke Iron,' by Dr. Wm. B. Phillips; 'On Gold Mining in Alabama,' by Wm. M. Brewer; 'On the Coal Washer used at Brookwood, Ala.,' by F. M. Jackson. A paper by Jno. S. Kennedy, of Chambersburg, Pa., on 'Blast Furnace Flue Dust,' was read by title in the absence of the author.

Steps were taken to provide for the collection and publication, monthly, by the Society, of the statistics of coal and iron production in Alabama. Twelve new members and the officers for the current year were elected. These officers are: President, F. M. Jackson; Vice-Presidents, Jas. H. Fitts and Jos. Squire. The Society then adjourned to meet again in November.

EUGENE A. SMITH,
Secretary.

NEW BOOKS.

- Publications of the Washburn Observatory of the University of Wisconsin.* Vol. IX. Part I. Investigation of the Aberration and Atmospheric Refraction. By GEORGE C. COMSTOCK. Part II. Determinations of Right Ascension. By ALBERT S. FLINT. Madison, Wis. 1896.
- Artistic and Scientific Taxidermy and Modelling.* MONTAGU BROWNE. London, Adam and Charles Black; New York, Macmillan & Co. 1896. Pp. xx+467. \$6.50.
- Ice Work, Present and Past.* T. G. BONNEY. New York, D. Appleton & Co. 1896. Pp. xiv+205. \$1.50.

Erratum: In the article by Prof. O. C. Marsh on *The Ape-man from the Tertiary of Java*, page 792 above, four lines were misplaced by the printers in inserting the illustrations. The last line of the first column and the first three lines of the second column should follow the fourth line of the first column.