that demands of our western fauna this abnormal frontal development, the heavy tibial armature, and the corneous, lengthily extruded \Im ovipositor?

Torrey botanical club.

June 10. - Mr. P. H. Dudley exhibited specimens and gave a brief account of his recent studies of wood A large number of micro-photographs of sections. transverse, radial, and tangential sections of our timber-trees were shown. Among the specimens were Sequoia sempervirens, in which attention was called to the very large cells (none less than a tenth of an inch in length), and to the fact, that, in this and other conifers examined, the pits in the cell-walls are only seen in abundance in the radial sections; Catalpa speciosa, which has lately been extensively employed for railroad-ties in the west; Ailanthus glandulosus, which the speaker stated he had found to contain the greatest number and largest ducts of any wood yet examined; Liriodendron tulipiferum, in which the ducts are very numerous but small; Maclura aurantiaca, in which the parenchymatous tissue within the ducts was plainly noticeable. In the white oak, chestnut, and black walnut, it had been observed that these parenchyma cells shrink away, in drying, from the inside surfaces of the ducts and from each other, then appearing as separate vesicles.

NOTES AND NEWS.

A LIST of the published writings of Spencer Fullerton Baird from 1843 to 1882, with indexes, compiled by George Brown Goode, the first of a proposed series of bibliographies of American naturalists, forms Bulletin No. 20 of the U.S. national museum. In a prefatory note, Mr. Goode explains that since 1874 he has been collecting materials for 'An index-bibliography of American ichthyology,' which will embrace "not only anatomical and descriptive ichthyology, but the literature of the fisheries, angling, fishery legislation and diplomacy, fishery statistics, and the commerce of the fisheries." Besides the titles and references, notes upon what each paper contains, and, in case of important papers, synopses of their contents, will be given: these notes will include references to every published engraving. It is hoped to finish this work in 1884, including in it material published before July of that year. The bibliography of Professor Baird's writings is apparently in part material collected for the above-mentioned work, although notes are wanting to many titles. Other special bibliographies of prominent naturalists are in preparation, among which one of Charles Girard and of Theodore Gill, by Mr. Goode, and one of Isaac Lea by Mr. Newton P. Scudder, are announced.

The articles recorded for Professor Baird number 1,063 titles; the numerous notices, abstracts, and reviews which appeared in *Harper's magazine* and in *Harper's weekly* being cited only in their reprinted form in the *Annual record of science and industry*. The general plan of this special bibliography is commendable. An excellent biographical sketch of Professor Baird follows the prefatory note, and is supplemented by a portrait, which Professor Baird refused to allow to be inserted in the work, but which Mr. Goode has kindly sent to as many as possible of the recipients of the bibliography. It is the same which appeared in Science, No. 5. The list of genera (1) and species (32) named in honor of Professor Baird is pardonable material, perhaps, with which to fill three pages of a government publication. This form of honoring the names of naturalists means little, and has just reached the maximum of its absurd development in England, where an entomologist has calmly named a butterfly after himself. The real honor due Professor Baird as organizer and scientific worker is not enhanced by this valueless list. The chronological catalogue of papers occupies 246 pages of the work. In some cases the notes are long, and embrace lists of the genera and species, and even of the varieties, treated of in some of Professor Baird's more extensive works. This may be a practicable or even a desirable method in bibliographies of workers in vertebrates, but would become unwieldy were it carried out for those whose work lay in some other portions of the animal kingdom. Following the chronological catalogue are a systematic catalogue and a list of species discussed and illustrated, both referring, by number and by condensed title, to the list of titles. An alphabetic index of subjects - not scientific names - closes the bibliography.

A commendable feature of this bibliography is the complete independence of each entry, allowing the catalogue to be cut and pasted on cards without additional writing. There are points in which the mode of recording might be bettered. Initial capital letters are very properly discarded, although with some inconsistency of usage, from numerous words in titles of papers, following the practice of many modern bibliographers; but why should the compiler retain initial capitals in such unimportant parts of the titlepage as 'With Eighty-seven Plates of Original figures,' on p. 83? Considerable condensation might be made by using only arabic numerals, and by considering p., pl., fig., and like abbreviations, plural as well as singular. Thus 'pp. i.-xvii., 1-496, pll. i.-xxxii.,' would be more tasty, and more easily read, if printed, 'p. 1-17 + 1-496; pl. 1-32.' The space occupied by ..., in recording titlepages, might be given to more practical purpose, for indicating the actual size of volumes in centimetres (or even in inches), instead of using, as was done, the indefinite indications Svo and 4to.

- Nature, June 19, states that letters addressed to the secretary of the committee of the British association for the exploration of Kilimanjaro have just been received from Mr. H. Johnston, dated from the British residency, Zanzibar, May 13. After consultation with Sir John Kirk, Mr. Johnston had selected the Mombasa route for Kilimanjaro, and was expecting to depart for that port in about a fortnight's time. The country between Mombasa and Chaga was said to be quiet, and to present no serious difficulties in the way. Mr. Johnston had succeeded in obtaining the services of three of the same birdskinners that had been employed by Dr. Fischer, and of a botanical collector trained under Sir John Kirk, of whose kindness and assistance he speaks in the highest terms. Mr. Johnston, in spite of the trying climate of Zanzibar, was in excellent health, and had strong hopes of the success of the expedition.



We are pleased to learn that Mr. Joseph Thomson has arrived safely at Zanzibar from the expedition he undertook to the Masai region. It will be remembered that Mr. Thomson left England in the end of the year 1882; his object being to proceed by Mount Kilimanjaro to the almost unknown country of the Masai, and to settle the question of the existence of a Lake Baringo to the east of Victoria Nyanza, Mr. Thomson left Zanzibar in the spring of last year, but, after proceeding some distance, found the country so disturbed owing to the recent passage of a German explorer, Dr. Fischer, that he was compelled to return precipitately to Mombasa. In July last. however, he started again, and has evidently accomplished his work in a way quite worthy of his previous record. Passing round the north-eastern side of Mount Kilimanjaro, Thomson proceeded north to Lake Naivasha, halfway between Kilimanjaro and Mount Kenia; then on to the latter mountain, and, by way of Lake Baringo, to the shores of Victoria Nyanza. This latter lake he skirted as far as the outlet of the Nile, returning by a more northerly route, striking the west coast of Lake Baringo, and proceeding south and south-east by Ukambani to Mombasa. It is satisfactory to record that no lives have been lost except by illness. The telegram which the Geographical society has received from Sir John Kirk does not, of course, enter into minute details; but, from its general tone, it is evident that Mr. Thomson will have an interesting and instructive story to tell when he returns. The telegram does not state positively that Mr. Thomson found a lake where Baringo is placed on our maps; but, as Baringo is mentioned as having been touched at, it seems most probable that the information obtained from natives by the sagacious Wakefield is correct. All the country traversed by Mr. Thomson's expedition to the north of Lake Naivashais new ground, hitherto untraversed by any explorer. Dr. Fischer, in his

recent expedition, reached only as far as the lake just mentioned.

- In the anthropological section of the British association meeting at Montreal, the following specially American topics, as to several of which Canada affords important evidence, are suggested for papers to be read: The native races of America, their physical characters and origin: Civilization of America before the time of Columbus, with particular reference to earlier intercourse with the old world: Archeology of North America, - ancient mounds and earthworks, cliff-dwellings and village-houses, stone architecture of Mexico and Central America, etc.; Native languages of America; European colonization, and its effects on the native tribes of America. The papers on each subject will, as far as possible, be grouped for reading on the same day, so as to insure a general discussion.

- The Daily Iowa capital of June 24 contains an account, by Prof. H. W. Parker of Grinnell, of a large mammoth recently found in that city in digging a cellar. One of the remains is a molar tooth fifteen inches long, and which might have been sixteen or more inches before the end of the crown was broken off and lost. It weighed fifteen pounds when first unearthed. The other principal relic is a tusk, which must have been at least eleven or twelve feet long: it now measures, along the centre, seven and a half feet, and, where broken off at the end, the diameter is four inches; the largest diameter is eight inches. Two years ago a small tooth, and fragments of bone, including part of pelvis, were found in digging a cellar adjoining. Other fragments were exhumed last year from a cellar about three rods north of the site of the tusk. The tusk occurred five feet below the surface, the tooth and other fragments about eight. in yellow clayey loam. The Davenport elephantbones, from a railroad cut in the bluff, were found in yellow clayey loess, twenty-one feet below the surface, and separated by three feet of bluish clay from an old peat-bed and ancient soil, probably similar to that which is said to exist everywhere under our prairies, at an average of twenty-five or thirty feet below the surface. At Davenport the bowlder clay of the glacial period underlies the ancient soil.

— One of the results of the deep-sea dredgings of the Albatross was the discovery, at a depth of nineteen hundred and seventeen fathoms off the Atlantic coast, of probably the largest known amphipod crustacean, Eurythenes gryllus Bock. The few previously known specimens came from Cape Horn, Greenland, and Finmark, and have apparently all been taken from the stomachs of fishes. This species, and its occurrence in the extreme arctic and antarctic seas, have been much discussed, and are the subject of a long memoir by Lilljeborg; but the apparently anomalous distribution is explained by its discovery in deep water, off our middle Atlantic coast.

- Dr. C. V. Riley, U. S. entomologist, has gone to Europe, partly for rest, partly on special work of the U. S. agricultural department.