zygomatic arch was destroyed. Large portions of the occipital and parietal bones were missing, as if the skull had been crushed in killing; there was no evidence of recent change. The smaller skull was the more complete. The distance from occipital ridge to premaxilla was ten and one half inches; from the foramen magnum to the premaxilla, six and one quarter inches; the zygomatic arches were both broken and there was a hole in the occipital and left parietal, as if the animal had been shot. The complete mandible belonging to this skull was found.

In addition to these two skulls, which are of the black bear, there were parts of four different mandibles of the same variety, one of which was a full inch longer than the mandible of the larger skull. The incisors are present in this large mandible, and a number of rudimentary premolars were found in several of the mandibles.

The leg bones of the bears consist of the following: one pair of humeri ten inches long, incomplete, the proximal ends being absent. These two humeri are so similar that I believe that they belonged to the same animal. One right humerus nine inches long, having the proximal ends present; the distal ends of two left humeri; a left tibia and fibia which are united, and a right tibia that is so similar to the left one that they undoubtedly belonged to the same animal. Judging from the number of humeri, we have at least the remains of three bears and possibly a fourth.

The deer bones are one incomplete humerus and radius, eight and one half and nine and one half inches, respectively, in length, and a complete ulna eleven and five eighths inches long. These three bones articulate perfectly. One tarsal nine inches long, that articulates with the radius and ulna. A second set of leg bones that articulate also, indicating that they are from the same individual. One humerus eight and one half inches long, the proximal end absent; one radius nine and three fourths inches long, complete; one ulna five and one half inches long, incomplete; two broken humeri; three miscellaneous vertebræ; six ribs, and the part of an antler. This would give us the remains of at least two deer.

All these bones are recent and do not show any evidence of mineralization. The two skulls and the mandibles and leg bones of the deer still show evidence of animal oil, being slightly oily to the touch. The leg bones of the bears are drier than the others and the epiphysial joints are plainly evident when present, but in most of them the articular surface is lost.

It is difficult, with the few facts at our command, to estimate the age of these bones. I am inclined to think that they are not very old, possibly a hundred years. Until we possess more bones and know more of the geology of the place, any statement concerning their age must be mere conjecture.

As to the manner in which the bones reached this place, a few suggestions may be made. Onondaga Lake is of glacial origin, like most of the central New York lakes. At each side and south of it, the old valley is filled with glacial débris to a depth of several hundred feet, the present lake beach being some distance from the rock strata that limits the valley. Along the hillsides of the region about Syracuse there is evidence of beaches, showing the limits of the lake in prehistoric times. The place where the bones were exhumed probably represents a part of the lake previous to its last subsidence. From the scattered condition of the bones it is easy to imagine how they may have been washed down from the banks, being possibly the remains of an Indian feast.

The present collection is of sufficient interest to warrant some care in future excavations in the above area.

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SYRACUSE UNIVERSITY,
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May 1, 1903.

BOTANICAL NOTES.

THE STUDY OF WOOD.

WITH the rapid increase in interest in all matters pertaining to forestry, so notable in the past few years, there has been a corresponding increase in the number of books devoted to some phase of the subject. The

latest contribution is a volume of about two hundred pages entitled 'The Principal Species of Wood; Their Characteristic Properties,' by Professor Charles H. Snow, of the School of Applied Science of New York University, and published by John Wiley and Sons. In his preface the author says of the book that it is 'a brief, untechnical presentation of general features characterizing economically important species of wood.' This should be understood as implying that the presentation is untechnical from the botanical standpoint only, for it is emphatically a technical book, in so far as it is designed for the use of foresters, engineers, builders and dealers in wood (lumber) of all kinds. It is written for and appeals to men of these classes, and to that extent it is a technical book.

The book opens with an introductory chapter containing such explanations as will make the text more readily understood. Then follow thirty-six sections, each devoted to a group of similar woods, and here each section opens with an introductory statement in regard to the species discussed in it. The treatment of the particular species may be illustrated by that of the white oak, which covers the following topics: Nomenclature (including English and Latin names, as well as the more common synonyms); locality; features of the tree (height, diameter, shape, bark, acorns, leaves); color, grain and appearance of the wood; structure of the wood; representative uses of the wood; weight of seasoned wood (in pounds per cubic foot); modulus of elasticity; modulus of rupture; remarks (the latter general in nature). Each topic is given a paragraph, and each species of wood is given one page, and no more. The book is, therefore, a very handy one for reference, since all that is said about any particular wood is seen at a glance on one page. Thirty-nine excellent 'half-tone' plates add much to the usefulness of the volume. It is not too much to say that this book should find a place in every botanical library, and unless we are much mistaken, it will soon become an indispensable work in the hands of those to whom it appeals more directly, and for whom it was primarily designed.

ANOTHER MOUNTAIN LABORATORY.

For several years the University of Montana has maintained a biological station and laboratory at Flathead Lake, Montana. This year it offers its fifth annual session, and there will be opportunities for study in botany, zoology, entomology, nature study and photography. The work in botany includes field study and collecting, classification, type forms, structure, methods of preservation, etc. A general course in ecology and local plant geography is offered also. The region is one which offers opportunities for work on many botanical problems. The surface of the lake is over four thousand feet above sea level, and is surrounded by mountains reaching an altitude of ten thousand feet. It should attract many students of nature.

SPECIMENS OF FUNGI.

Dr. E. S. Salmon, of Charlton House, Kew, England, the well-known student of the powdery mildews (Erysiphaceæ) desires American students of fungi to procure for him specimens of the fruiting stage of *Erysiphe graminis* occurring on *Poa* and other related grasses. The conidial stage is quite common, but the fruiting stage is less so, and it is the latter alone which Dr. Salmon desires. American collectors should see that he is supplied with an abundance of good material.

Charles E. Bessey.
The University of Nebraska.

SCIENTIFIC NOTES AND NEWS.

The degree of LL.D. was conferred last week on a number of American men of science, as follows: Harvard University, Professor E. C. Pickering, director of the observatory; N. S. Shaler, professor of geology; William James, professor of philosophy. Yale University, William H. Brewer, professor emeritus in the Sheffield Scientific School. Dartmouth College, E. L. Nichols, who has resigned the chair of physics at Dartmouth to accept a similar position at Columbia University; Alfred Thayer Mahan, U.S.N. Amherst College, Frederick J. E. Woodbridge, professor of philosophy in Columbia University, who graduated from Am-