

lot was placed in pond water without any food except for such minute particles as may have been suspended in the water. They were fed daily some two grain Parke Davis & Co. sheep thyroid tablets. The tablets were eagerly eaten by the tadpoles and except for appearing rather sluggish their behavior was normal. At the end of seventeen days the hind legs had developed much more and the fore left leg had come through and begun to joint. There seemed to be a slight development of the right forelimb, but it did not come through the operculum. The control lot which had been under the same temperature and light conditions and furnished with plenty of fresh pond water and food showed a slightly increased development of the hind limbs but no signs of any fore limbs. It became necessary at this stage to stop the experiment and the specimens were preserved in formalin. Unfortunately during moving all except a half dozen of the thyroid fed lot and a few of the control were lost, but these have been photographed and are in good condition. I cut open the opercular wall on the right side of one of the thyroid tadpoles and found a fore leg which had begun to develop but was much shorter and less advanced than on the left side where the limb broke through of its own accord. This experiment was too incomplete to have much significance, but it was interesting to note that the right fore limb only completely developed in every case of the thyroid fed tadpoles and in the control lot neither fore leg developed at all. This experiment may be worth while by suggesting more thorough and complete work along this line. It may possibly also be suggestive of a method for right-handed people to become ambidextrous by eating sheep thyroid.

PAUL ASHLEY WEST

BALTIMORE, Md.

SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE ninety-seventh regular meeting of the Botanical Society of Washington was held in the Assembly Hall of the Cosmos Club, at 8 P.M., Tuesday, May 5, 1914. Messrs. P. V. Cardon, G.

P. Van Esseltine and A. B. Clawson were unanimously elected to membership.

The scientific program was as follows:

Professor Chas. O. Appleman, "The Physiology of the Rest Period in the Potato Tuber" (with lantern). To be published as a Maryland State Experiment Station Bulletin.

Dr. H. B. Humphrey, "A Recently Discovered Loose Smut of Rye" (with lantern). To be published in *Phytopathology*.

Mr. L. H. Dewey, "The Common Names of Plant Fibers."

Confusion in the names of textile fibers of vegetable origin causes uncertainty, financial loss and injury to the trade. The name "hemp" and its forms in other languages is the oldest name used to designate a plant fiber. This name is now used in many languages as a specific term to designate the true hemp, *Cannabis sativa*, to which in all instances it was first applied, and also as a generic term to designate all long fibers. This double use is confusing. The name sisal is also being used in a similar double sense. The following suggestions are made regarding the choice of names of fibers: (1) Names in most general use are to be preferred, providing they are not misleading. (2) The same term should not be used to designate fibers from different kinds of plants. (3) One name should be used to designate the fiber from one kind of plant, irrespective of the country where the plant is cultivated, or the manner in which the fiber is prepared. (4) Geographic names are objectionable in general terms. (5) Names that may be adopted directly in all languages are desirable. (6) Single words of not more than three syllables are best.

P. L. RICKER,

Corresponding Secretary

ANTHROPOLOGICAL SOCIETY OF WASHINGTON

At a special meeting of the Society held March 3 at the National Museum, Mr. W. E. Safford read a paper on "The Pan-Pipes of Ancient Peru." Mr. Safford became interested in the musical instruments of the Peruvians during a cruise along the west shore of South America in 1887. At Arica, near the northern boundary of Chile, he found in a prehistoric grave two sets of pan-pipes made of graduated reeds closely resembling the syrinx, or fistula, of the ancient Greeks and Romans. On terra-cotta vases were depicted men playing these instruments. Similar pipes made of bone were also found in Peru and northern Chile. Afterwards an entire orchestra composed of pan-pipes was observed. These were played in pairs, each performer having a mate with a com-

plementary instrument who played the alternating notes of the scale. That the pan-pipes of the ancient Peruvians were thus played in pairs is shown by pictures upon prehistoric vases, in which two instruments are represented as being connected by a long loose string. The pan-pipes observed were in most cases composed of 16 reeds, in two rows, one row superimposed upon the other, the row played upon by the performer having the reeds closed at the bottom, the outer row having reeds with an opening at the bottom. The smallest pair produced shrill notes like those of a piccolo; the largest pair, four times as long, produced deep tones much like those of a barrel organ.

At a special meeting of the society held March 4, at the National Museum, Dr. A. B. Lewis gave an address on his "Travels in the South Seas and New Guinea," illustrated with excellent lantern slides. The four years 1909-13 were spent in the interest of the Field Museum of Natural History of Chicago, studying the natives and collecting ethnological material, chiefly in Melanesia. Many of the islands are only partially explored. Fiji is the most civilized. The natives of Fiji are all professing Christians, and read and write their own language. Except the ordinary things of everyday life, there is little of the old left. The native Fijian population is about 90,000, the European 3,500, while there are 40,000 to 50,000 Indian coolies on the sugar plantations. New Caledonia was, for years, a French penal colony, and the natives are reduced to about 30,000 located on reservations, much as our American Indians. Some of the large islands of the New Hebrides are still wild and unsafe. To the ethnologist, Malekula is the most interesting. Over 20 languages are spoken on this one island, to say nothing of dialects. On the Solomon Islands there are probably not over 300 Europeans. New Guinea is the most interesting island of all. Except Greenland, it is the largest in the world, and the least known. New Guinea has never been crossed except near the ends. More time was spent on New Guinea than anywhere else. A considerable portion of the coast was visited and short trips made toward the interior. There are but few Europeans in New Guinea, the greater number, about 1,000, being in the British portion. A considerable number of these are gold-diggers. In German New Guinea there are about 200 Europeans, and in the Dutch portion not over 50. The old condition of warfare among the natives has been stopped as far as the government can extend its influence.

At the 473d regular meeting of the society, held March 17 in the National Museum, Dr. J. Walter Fewkes delivered an address, illustrated with lantern slides, on his "Egyptian Experiences." He considered especially the significance of certain parallelisms in cultural objects of the Stone Age of Egypt and the Gila Valley, Arizona. These resemblances he ascribed in part to the influence of irrigation. Through the cultural isolation of the Nile Valley in Neolithic times it was protected from outside marauders. Social advancement at the dawn of history was due to the influx of foreign ideas from the east and to the cooperative union of clusters of villages or nomes in order to more effectually irrigate the valley. This cooperation of the rulers of Neolithic Egypt led to the rise of a Great House or Pharaoh. To this cooperation in constructing irrigation ditches may be traced a system of enforced labor in which the Pharaoh not only acquired all cultivated land and the water which alone made agriculture possible, but also controlled all labor of the inhabitants. To these rights acquired from the rulers of the nomes in very early times, may be traced the powers exercised in constructing the magnificent monuments that are the world's wonders.

In Neolithic Egypt, there was a succession of villages strung along the river, each independent of the other, like a cluster of pueblos in Arizona. The remains of architectural constructions at this early epoch still remain and are sometimes, as at El Kab, well preserved. They are rectangular, massive, walled forts with an encircling wall of clay not unlike the compounds at Casa Grande in Arizona. Within these enclosures, in Egypt and Arizona alike, were mud or clay built temples, public buildings and houses of priests, while around them were clusters of the mean hovels in which lived the people like the present Egyptians. The dead were buried in neighboring mounds, placed with knees drawn to the chin and surrounded by mortuary offerings. These graves were rude excavations with floor of straw and roof of mud and boughs. Many resemblances between archeological objects from the Stone Age in Egypt and in the Gila Valley were pointed out. Among these are weapons, stone implements, pottery and its symbolic decorations, flat basket trays, bone and other specimens. Certain common conditions of environment and the necessity for artificial irrigation had led the Stone-Age people of different races, without connections, to develop a parallel culture.

DANIEL FOLKMAR,
Secretary