VEGETABLE FIBERS ADDED TO ECONOMIC EXHIBITS

BY LLEWELYN WILLIAMS Assistant in Wood Technology

Among recent additions to the exhibits pertaining to economic botany in Hall 28 is a display of important vegetable fibers utilized in industrial processes by various nations.

Cotton is represented in the exhibit by a lifelike reproduction of a cotton plant, and samples of cotton fiber in the raw state, as well as bleached, neutralized, and scutched cotton. Instructive photographs accompany the exhibit. There are shown also specimens illustrating various steps in the production of cottonseed meal and cottonseed oil.

of cottonseed meal and cottonseed oil. Ramie, or china grass, is another important fiber included in the exhibit. This is a native of India, and is probably indigenous to China and Japan. It is one of the oldest fibers used in Oriental nations, its use antedating written records of both China and India. It is strong, durable, little affected by moisture, and its filaments can be separated almost to the fineness of silk be separated almost to the fineness of silk. In China and Japan the fiber is extracted by hand labor and woven into one of the finest and most beautiful of fabrics, as well as coarse manufactures.

Flax, also represented in the exhibit, has been cultivated from time immemorial, and there is no record of its growth in an original wild state. Its prehistoric home was probably in Asia, but it is now cultivated in nearly all temperate countries.

The exhibit includes also Indian hemp. The hemp fiber industry has existed in the United States since the founding of the Plymouth and Virginia colonies. Since 1860, however, the production of hemp has seriously decreased, because cotton has taken its place for textile purposes.

Agave fibers, shown in the exhibit, are obtained from the fleshy-leaved plants belonging to the family of the spider lilies, growing in Mexico, and Central and South America. The best fibers are sisal hemp and henequen. Other species of agave yield fibers known in the vernacular as pita, istle, ixtle, lechuguilla, etc.

Raffia fiber is derived from the leaves of several species of African and Madagascar palms. The thin strips of fibrous material pulled from the sides of the young leaves are used by the natives as a textile material for clothing, plaited goods, hats, mats, and baskets for domestic purposes. There are baskets for domestic purposes. There are also included in the display a number of rafia cloths with woven zigzag designs, and a sample attractively colored with native dyes, made by the Tanala tribe of Madagascar. These were obtained by the Marshall Field Anthropological Expedition to Madagascar in 1926-27.

Other fibers shown in the exhibit include New Zealand flax, banana and plantain fibers, sedges, and several obtained from various members of the grass family.

ANCIENT SHARK HAD JAWS FIVE FEET WIDE BY ELMER S. RIGGS

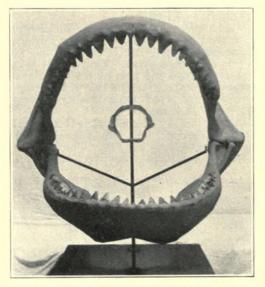
Associate Curator of Paleontology

The model of a great pair of jaws shown in the accompanying photograph represents those of a species of extinct shark, *Char-charodon*, which inhabited the waters off the Carolina coast in Miocene time. Fossil teeth of this great fish, flat and triangular in shape, are found in the phosphate beds of Carolina and Florida and in "shell-rock" as far west as Texas. Their skeletons, being of cartilage, were not preserved as

fossils, but their teeth were bony and covered with a strong coat of enamel which resisted decay. Thus it has been possible to include specimens of the teeth in the exhibit.

The teeth of this shark are from three to five inches in breadth. Compared with the size of teeth of modern sharks, it is estimated that the jaws must have been no less than five feet in breadth and the shark nearly forty feet in length.

Fossil sharks' teeth were known and prized by the North American Indians before the



Model of Giant Shark's Jaws

About fifteen million years ago sharks were about forty feet long and had jaws five feet wide. The contrast with the jaws of a modern shark is shown in the above photograph of an exhibit in Ernest R. Graham Hall (Hall 38).

advent of white men to America. Numbers of them have been found in Indian burial places from the Gulf states as far northward as the Indian mounds of Ohio. This is evidence that the teeth became objects of barter and as such were carried and distributed from tribe to tribe. They are of further interest to modern science in showing that these great sharks were abundant in the warm waters of the South Atlantic and of the Gulf of Mexico.

Somali Wild Ass Group

A group of Somali wild ass is on exhibition in Carl E. Akeley Memorial Hall (Hall 22). These animals, now quite rare and in danger of becoming extinct shortly, are of especial interest in connection with the ancestry of domestic asses or donkeys.

Gifts to the Museum

Following is a list of some of the principal gifts received during the last month:

gifts received during the last month: From American Friends of China—a celadon figure, Sung period, and a cover of cut velvet, K'ien-lung period, China; from School of Forestry, Yale University—135 herbarium specimens, Amazon Valley and Colombia; from American Bemberg Corporation —14 specimens of rayon and yarn, including chemical ingredients and finished products; from William A. Schipp—94 herbarium specimens, British Honduras; from Edward Hines Lumber Company—4 trunk slabs of Ponderosa pine, Oregon; from Dr. Fortunato L. Herrera—121 herbarium specimens, Peru; from Laboratorio de Botanica, Ministerio de Agricultura —164 herbarium specimens, Argentina; from Dr. C. T. Elvey—2 specimens of the Odessa, Texas, meteorite; from A. Dunbar Brander—a specimen each of red shank, snipe, and shelduck, Scotland; from Alfred M. Bailey—a gannet skin, Quebec, Canada; from Frank H. Eyman—2 young pickerel, Wisconsin; from C. B. Coursen—5 specimens of nestling birds, Illinois; from Q. Stewart—a timber rattlesnake, West Virginia; from S. Z. Schenck—an adult king rail skin, Illinois.

SEPTEMBER GUIDE-LECTURE TOURS

Conducted tours of exhibits, under the guidance of staff lecturers, are made every afternoon at 3 P.M., except Saturdays, Sundays, and certain holidays. Following is the schedule of subjects and dates for September:

Thursday, September 1—General Tour; Friday— Egyptian Exhibits.

Week beginning September 5: Monday—Labor Day holiday, *no tour*; Tuesday—General Tour; Wednesday —Woodland Indians; Thursday—General Tour; Fri-day—Crystals and Gems.

Week beginning September 12: Monday—Prehis-toric Exhibits; Tuesday—General Tour; Wednesday —Plant Life; Thursday—General Tour; Friday— Ores and Mines.

Week beginning September 19: Monday—Peoples of the Far North; Tuesday—General Tour; Wednesday —Animal Life of the Seas; Thursday—General Tour; Friday-Mexican Exhibits.

Week beginning September 26: Monday—Interesting Geological Exhibits; Tuesday—General Tour; Wednes-day—Story of Peat and Coal; Thursday—General Tour; Friday—Habitat Groups.

Persons wishing to participate should apply at North Entrance. Tours are free and no gratuities are to be proffered. A new schedule will appear each month in FIELD MUSEUM NEWS. Guide-lecturers' services for special tours by parties of ten or more are available free of charge by arrangement with the Director a week in advance.

Innovation in Bird Labels

A new method of labeling individual specimens in the systematic collection of birds, designed to give concisely more information about each species than on the labels formerly used, has been introduced in Hall 21. Thus far one case, that containing the new exhibit of parrots and paroquets from all parts of the tropics, has been equipped with these labels. Each label contains a map indicating the geographic distribution of the bird to which it refers, and a paragraph giving briefly the most salient facts known about the bird. It is hoped in due course of time to extend this type of label to all the exhibits in the hall.

NEW MEMBERS

The following persons were elected to membership in Field Museum during the period from July 13 to August 15:

Associate Members

J. Gardner Bennett, Miss Frances Bird, Mrs. James Minotto.

Annual Members

Mrs. Reid M. Bennett, A. C. Bruhnke, William W. Kimball, Paul W. Klugh, Mrs. William C. Kobin, Mrs. Henry J. McFarland, Mrs. R. Townsend McKeever, Hon. Harry Olson, Mrs. W. G. Potts, Charles Riddell, Robert B. Shanner, Mrs. Edward G. Vail.

MEMBERSHIP IN FIELD MUSEUM

Field Museum has several classes of Members. Field Museum has several classes of Members, Benefactors give or devise \$100,000 or more. Contribu-tors give or devise \$1,000 to \$100,000. Life Members give \$500. Non-Resident (Life) and Associate Members pay \$100. Non-Resident Associate Members pay \$50. All the above classes are exempt from dues. Sustaining Members contribute \$25 annually. After six years they become Associate Members. Annual Members con-tribute \$10 annually. Other memberships are Corpo-rate, Honorary, Patron, and Corresponding, additions under these classifications being made by special action of the Board of Trustees. of the Board of Trustees.

of the Board of Trustees. Each Member, in all classes, is entitled to free admission to the Museum for himself, his family and house guests, and to two reserved seats for Museum lectures provided for Members. Subscription to FIELD MUSEUM NEWS is included with all memberships. The courtesies of every museum of note in the United States and Canada are extended to all Members of Field Museum. A Member may give his personal card to non-residents of Chicago, upon presentation of which they will be admitted to the Museum without charge. Further information about memberships will be sent on request. charge. Further in be sent on request.



Williams, Llewelyn. 1932. "Vegetable Fibers Added to Economic Exhibits." *Field Museum news* 3(9), 4–4.

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