

Field Museum News

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ASBESTOS

BY HENRY W. NICHOLS
Associate Curator of Geology

Asbestos cloth is another one of the many products usually considered strictly modern which a little research reveals as having an ancient history. It has been known for hundreds of years that the longer and stronger fibers of the mineral asbestos could be spun into thread and woven into cloth. The ancient Romans used it, believing it to be of vegetable origin, just as they believed silk was a wool which grew on trees. In the Middle Ages asbestos cloth napkins were used, eliminating laundering, as they were thrown into the fire for cleaning. About A.D. 1250, Marco Polo found in Tartary asbestos cloth purported to have been made from the skin of the salamander, thus associating the fabled ability of that animal to live in the midst of flames with the fire-resisting qualities of the asbestos cloth.

It is an almost universal rule that minerals are brittle. They may be hard or tough, but few of them can be bent without breaking. When a mineral departs from this condition, and is both fireproof and flexible as well, it can serve important purposes in industry. Thus it is that asbestos with its flexible fiber, and mica with its flexible sheets, have become the two most widely used minerals for certain purposes. Asbestos and mica and products made from them are represented in the collections of nonmetallic minerals in Frederick J. V. Skiff Hall (Hall 37).

Asbestos is the fibrous form of either of two minerals, serpentine and amphibole. Serpentine asbestos is the most used, and Canada supplies most of this country's requirements. Serpentine is usually a massive rock very unlike asbestos, but occasionally it fills veins with fine, silky flexible fibers. The other asbestos is the fibrous form of amphibole, a common mineral occurring as crystals in rock. Some amphibole shows no fibrous character; some breaks with a splintery fracture; and some can be separated into long brittle splinters. Occasionally amphibole is found which separates into long flexible fibers and this is the amphibole asbestos. There are several varieties of it.

Modern uses of asbestos are numerous and many of them are illustrated in the Museum's exhibit. Besides being employed for insulation and for resisting heat it is utilized in numerous things which require an ability to resist the destructive action of superheated steam, hot oil and corrosive chemicals. It is used for automobile brake linings and clutch facings, in plasters and cements to prevent cracking, in paints and, a strictly modern development, in combination with cement under hydraulic pressure as fireproof lumber and shingles. A peculiar use, as shown by a specimen from Tibet, is as medicine. The Museum's collection includes a variety of woven fabric and felted papers, sheets, blocks and tubes.

Asbestos has a reputation for heat resistance and insulation value which it does not deserve. Many other minerals shown else-

where in this and an adjoining hall excel it in these respects and are employed where asbestos would fail. Its value for insulation and refractory uses consists in a flexibility which other minerals do not have and a fireproof nature which organic insulation lacks.

Two materials which may be called artificial asbestos are included in the collection. These are mineral wool, which is fiberized blast furnace slag, and rock wool, which is a fiberized impure limestone. These possess in a degree some of the qualities of asbestos and can be substituted for it for certain purposes, especially for insulation in buildings, boilers and refrigerators.



COLLARED LIZARDS

In the eyes of a herpetologist, at least, the collared lizards pictured above must be considered as ranking among the most beautiful of all animals, according to Karl P. Schmidt, Assistant Curator of Reptiles. Even a person not thus biased in favor of reptilian forms, or in fact one of the many to whom snakes, lizards and all such creatures are naturally repulsive, would have to admit that the rich yellow, green and black coloring in the pattern of the skin of these American lizards is attractive. The photograph shows an exhibit recently installed in Albert W. Harris Hall (Hall 18). This species of lizard is found from Missouri to New Mexico. Its most common local name is "mountain boomer." The museum exhibit, consisting of reproductions in celluloid-like material, represents a male and female, and is the creation of Taxidermist Leon L. Walters.

More Skeletons Reinstalled

Reinstallation of several more exhibits of animal skeletons in the hall of osteology (Hall 19), by the new method adopted recently, has been completed. Skeletons now reinstalled include, in addition to the carnivores, and the monkeys, apes and man mentioned in previous issues of FIELD MUSEUM NEWS, the following: hooded seal, northern sea lion, walrus, hippopotamus, camel, beisa antelope, koodoo, elk, tapir, zebra, and rhinoceros. The appearance of these exhibits has been improved by the elimination of heavy wooden bases, and the use of light-colored screens, floor coverings, and labels.

Two ancient Roman bathtubs, of bronze, from Boscoreale, Italy, are on exhibition in the Museum.

NEW MAYA EXHIBIT

BY J. ERIC THOMPSON
Assistant Curator of
Central and South American Archaeology

A synoptic collection illustrating Maya art and industry has been placed on exhibition in Stanley Field Hall. This collection comprises pieces from many parts of the Maya area. Much of the material was collected by the First, Second, and Third Marshall Field Archaeological Expeditions to British Honduras conducted during the past several years, and the rest of the material comes from various sources, notably by gifts from Allison V. Armour, Patron, Contributor, and former Trustee of the Museum.

Dominating the collection is a very forceful stone sculpture representing the Maya Sun God. He is recognizable by his squinting square eyes, a four-petaled leaf on his forehead, and his peculiar filed teeth. The head had been attached to the façade of a temple by a deep tenon.

In contrast to this forceful masterpiece in stone is a delicately carved piece of shell, showing a seated Maya priest or ruler wearing an elaborate headdress. This piece is of peculiar interest, for although it is definitely Maya in style, it was found at Tula in northern central Mexico. It must have been carried there in trade, or as the prized possession of an early Maya traveler.

Among the gifts from Mr. Armour in the collection is a necklace of rock crystal beads, the only one of this material ever found in Maya territory. There are also necklaces of turquoise, and other materials.

Other objects displayed include copper bells, jade beads, and a bowl containing copal incense. These were recovered from the bottom of the sacred well at Chichen Itza, into which they had been thrown, with gold plates, idols, and even young girls as offerings to appease the rain gods.

Various types of filed human teeth and a set of teeth with jade inlays are also shown, as well as a small series of carved and painted pottery vessels.

Modern and Extinct Plants

A new exhibit of reproductions of the plants known as horsetails or equisetes, with restorations of calamites and sphenophylls which have been extinct for many millions of years, has been added to the Hall of Plant Life (Hall 29).

Models of the modern horsetails or scouring rushes are shown as they appear in life, and in conjunction with them is a model of their spore-bearing cone, and restorations of related but long extinct calamites with specimens in fossil form for comparison. The great number of fossils found indicates that these plants were abundant in prehistoric times and occurred in many genera and species. The modern species are relatively few in number, but are found widely dispersed in many parts of the world. The sphenophylls, jointed-stem flowerless plants related to the horsetails, became completely extinct some 200,000,000 years ago.



1932. "Collared Lizards." *Field Museum news* 3(9), 1–1.

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