

in 'trade stores' on vessels convinces me the Indians secured small quantities of these shells before the fur trade. We know copper, obsidian, nephrite, dentalia, etc., passed through many tribes prehistorically, Why not Abalone?" It does, indeed, seem improbable that they would be willing to pay as much as one sea-otter skin each for shells unless these shells had already a recognized and established value.

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#### FOSSIL BONES AS MEDICINE

In the Museum of Anthropology of the University of Michigan are two specimens of fossilized bones, with notes concerning their use as medicine. Since the receipt of these specimens we have noted several published accounts which indicate that fossil bones frequently came to the attention of primitive peoples, who assigned to them names and properties, often of a medicinal nature. Such data as have been found are summarized here in order to bring this point to the attention of others who may have or may be in a position to obtain additional information.

Gustav G. Carlson in 1933<sup>1</sup> collected from Comanche Indians near Indianahoma, Oklahoma, a white, chalky mineral which seems to be fossil bones. This material, which bears the Comanche name *tsɔβiŋ' sɪtsuni*, is obtained from certain deposits known to the Indians. It is thought by them to be the bones of Piamupits, a supernatural being. It is used in treating sprains and broken bones.<sup>2</sup>

The second specimen was collected by Alfred F. Whiting in the same year<sup>3</sup> from Mexicans at Charcas, San Luis Potosi, Mexico. This material, which is similar to that from the Comanche, is obtained by the Mexicans in the sides of deep *barrancas*. It is considered by them to be ancient human bones. Boiled with a certain plant (unidentified) called *del gato*, it is administered in cases of fright, hence the Mexican

<sup>1</sup> While a member of a Laboratory of Anthropology field party led by Dr. Ralph Linton.

<sup>2</sup> This is the specimen mentioned by Carlson and Jones in a footnote on p. 534 of their *Some Notes on Uses of Plants by the Comanche Indians* (Michigan Academy of Science, Papers, 25, 1939), pp. 517-542.

<sup>3</sup> While on a University of Michigan, Department of Botany, expedition under the leadership of Dr. C. L. Lundell.

name *hueso de espanto* (bones of fright). It may also be powdered and taken in water at the time of childbirth or at the menstrual period.

These two specimens of alleged fossil bones were examined by Dr. E. C. Case, Director of the Museum of Paleontology of the University of Michigan. In his opinion both have definite evidence of bone structure and doubtless are fossilized bones, probably of some large extinct animal such as elephant or mastodon. He discounts the possibility of the Mexican specimen being human bones, as considered by the Mexicans.

Plains Indians other than the Comanche were aware of fossil bones. Clark<sup>4</sup> in speaking of Plains materia medica in general says that fossil bones of certain kinds were sought and preserved, but he fails to mention any particular tribes and does not give the purpose or manner of their application. According to Grinnell<sup>5</sup> the Cheyenne referred to an under-water monster which lives in springs as *Ahke*. He explains that *ahk* means "of stone" or petrified, and that large fossil bones found along streams or on the prairie were considered as belonging to *Ahke*. He does not mention any uses, medicinal or otherwise, of such bones.

A recent Science Service release<sup>6</sup> tells of the finding of mastodon bones in kitchen refuse pits of a prehistoric house south of St. Louis, Missouri. Mr. Adams, the excavator, is represented as uncertain whether contemporaneity of man and mastodon is indicated, or whether man later collected the bones as "curios." If the latter is found to be true, these bones are pertinent to this discussion, and may possibly be interpreted as medicine.

Lumholtz<sup>7</sup> offers data on Mexican Indian uses of fossil bones, quite similar to those given in Whiting's notes. The bones which are used as a strengthening medicine are called "giant's bones."

It is highly questionable that fossilized bones have any practical value in medicine. Their use by Indians and Mexicans is likely predicated on assigned rather than inherent properties and the attention to and esteem of fossil bones would appear to be behavior comparable to that involved in the placing of various unusual and mysterious objects such as crinoids and other fossils, concretions, petrified wood, and other such items in medicine bundles. This practice has, of course, been recorded for many tribes, and for some archaeological cultures the placing of such objects in burials has been noted. It is interesting to note that the attribution of fortifying or strengthening powers to fossil bones seems to underly many of their medicinal uses. It may well be that the extension of this idea may account for the nature of the aplastic in certain archaeological pottery from near Abilene, Texas. Matson<sup>8</sup> describes this material as likely bone phosphate from fossil bone deposits.

<sup>4</sup> W. P. Clark, *Indian Sign Language* (Philadelphia, 1885), p. 253.

<sup>5</sup> G. B. Grinnell, *The Cheyenne Indians* (New Haven, 1923, vol. 2), pp. 98-99.

<sup>6</sup> Science, vol. 93, no. 2420, May 16, 1941. See Supplement, p. 14.

<sup>7</sup> K. Lumholtz, *Unknown Mexico* (New York, 1902, vol. 1), p. 118.

<sup>8</sup> F. R. Matson, *Identification of the Aplastic Present in Pottery Sherds from Texas* (Texas Archeology and Paleontology Society, Bulletin, vol. 7, 1935), pp. 68-69.

The selection of this rather than more conventional and practical materials may have been for magical reasons with the idea of adding strength to the pottery.

There seems to have been an intensive and widespread use of fossil bones in China from ancient times to the present. The bones are sold by druggists under the name "dragon bones." The teeth which are considered more desirable and bring a higher price are known as "dragon teeth." Creel<sup>9</sup> says that such bones are prescribed by "old fashioned" physicians. A bit of the bone is said to be pounded in a mortar and fed to the ailing; a dose is thought to be especially good for nervous disorders. Andersson<sup>10</sup> gives a long list of diseases which are treated by the Chinese with "dragon bones" and cites a 5th century reference concerning their early use. He also (pp. 81-82) gives an idea of the magnitude of the industry of mining these bones and of the extent of the commerce built around them. It is beside the point but of some interest perhaps to note that the tracing of such bones from apothecaries' shops to the field led to highly important paleontological and archaeological discoveries in China.<sup>11</sup> The finding of the famous Peking man was in the course of paleontological work at a site discovered through a tip from a native concerning a deposit of "dragon bones."<sup>12</sup> In view of the ancient and extensive use of fossil bones as medicine in China, the question naturally arises as to a possible historical connection between this trait among the Chinese and the American Indian. It remains for future research to throw additional light on the answer to this question.

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#### COMMENTS ON THE NAME "WICHITA"

In a recent issue of the ANTHROPOLOGIST, Mrs. Zoe A. Tilghman has advanced the theory that the name of the Wichita Indians is derived from the Creek or Muskogee language and that the first appearance of the name occurs in 1835.<sup>1</sup>

Perhaps the most serious objection to be raised against this supposition is to be found in the fact that the name was in use long before 1835, indeed well over a century before that date. In the *Handbook of American Indians* a list of the various names applied to the Wichita is appended to the discussion devoted to this tribe.<sup>2</sup> A study of this list reveals the fact that the earliest use of the name under discussion occurs in the writings of La Harpe and is attributed to the year 1719. In one place he spells it as *Ositas*<sup>3</sup> and in another as *Ousita*.<sup>4</sup> In the year 1723 we find a Spanish

<sup>9</sup> H. G. Creel, *The Birth of China* (New York, 1937), p. 22.

<sup>10</sup> J. G. Andersson, *Children of the Yellow Earth* (New York, 1934), pp. 74-76.

<sup>11</sup> See Creel, *op. cit.*, pp. 21-26 and Andersson, *op. cit.*, pp. 76-93.

<sup>12</sup> Andersson, *op. cit.*, p. 97 and following.

<sup>1</sup> Zoe A. Tilghman, *Origin of the Name Wichita* (*American Anthropologist*, vol. 43, 1941), pp. 488-489.

<sup>2</sup> Frederick W. Hodge, ed., *Handbook of American Indians* (Bulletin, Bureau of American Ethnology, 30; Washington, 1910), Part II, pp. 947-950.

<sup>3</sup> La Harpe (1719) in French, *Historical Collections of Louisiana*, III (1851), p. 74. This and the following five references are taken from the *Handbook of American Indians*, *loc. cit.*

<sup>4</sup> La Harpe (1719) (*Margry, Déc.*, VI, 1886), p. 289.