

The Preservation of Cartilage and other Tissues in a Dried Condition. W. PATTEN.

The cartilaginous crania and other parts of the skeleton of the skate, when perfectly dehydrated, may be cleared in benzole, turpentine or chloroform, and impregnated with paraffine in the usual manner preparatory to sectioning. But if, instead of imbedding them in a block of paraffine, they are drained in the warm oven for a few minutes, or wiped off quickly with blotting paper and then allowed to cool, they harden very quickly, with little or no shrinkage, and show very clearly the important anatomical details.

Complete dehydration may require days and even weeks of immersion in strong alcohol, to which pieces of calcium oxide are added to absorb the water given off by the tissues. In very difficult cases prolonged heating or boiling in alcohol may be necessary.

If the dehydration is not complete the objects will shrink when placed in paraffine. But in some cases the shrinkage will not appear till three or four weeks after exposure to the air. Paraffine that has been used before and contains oil of cloves, etc., discolors the tissues. The same is true of turpentine. When one wishes to preserve the clear, white color of the tissues the best results are obtained by using perfectly clear alcohol, chloroform and pure paraffine. The method has not been thoroughly tested, but there seems to be no reason why we cannot prepare in this way the entire skeletons of animals, whether in whole or in part cartilaginous, and entire embryos or adult animals, when not too large.

In this way series of amphibian eggs were prepared, which when fastened to a card are very useful in the laboratory; also a series of sections about $\frac{3}{16}$ of an inch thick from a horseshoe crab eight inches long. The sections are cut before dehydration and impregnated with paraffine afterwards. When the paraffine collected in ex-

posed cavities (blood sinuses, elementary cavities, etc.), and would not drain off readily, it was absorbed while hot by a bit of blotting paper.

If the object is too large to be imbedded safely it may be cut open or sliced down approximately to the desired plane before dehydration and then heated, as described above. The imbedded pieces may then be cut down to the requisite level in the microtome, and, if necessary, heated again to drain off the excess of paraffine. Excellent sagittal sections of the brains of fishes were obtained in this way, showing very clearly the ventricles and their connections. The same method might be easily applied to show the structure of sea anemones, earth worms, mammalian embryos, etc.

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(*To be concluded.*)

ZOOLOGICAL NOTES.

THE FLORIDA MONSTER.

I HAVE just received some large masses of the carcass cast ashore in December and described by me as the body of an *Octopus* in the *American Journal of Science* and elsewhere. These masses of integument are 3 to 10 inches thick, very tough and elastic, and very hard to cut. They are composed mainly of tough cords and fibers of white elastic connective tissue, much interlaced. This structure resembles that of the blubber of some cetaceans. The creature could not have been an *Octopus*. It was probably related to the whales, but how such a huge bag-like structure could be attached to any known whale is a puzzle that I am unable to solve at present.

The supposition that it was the body of an *Octopus* was partly based upon its bag-like form and partly upon the statements made to me that stumps of large arms were attached to it at first. This last statement was certainly untrue. A. E. VERRILL.

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A NEW SUBGENERIC NAME FOR THE WATER
HARES (*hydrolagus* GRAY.)

MR. FREDERICK W. TRUE has called my attention to the fact that the name *Hydrolagus* used subgenerically by me in a recent paper on American Hares* is preoccupied in Ichthyology, the case standing as follows:

Hydrolagus GILL, Proc. Acad. Nat. Sci., Phila. for 1862, p. 331.

Hydrolagus GRAY, Ann. and Mag. Nat. Hist., 3d ser., XX., 1867, p. 221.

There being no synonym of Gray's pre-occupied *Hydrolagus* to replace it, the name *Limnolagus*, new subgenus, is therefore proposed for the group of Water Hares, of which *Lepus* [*Limnolagus*] *aquaticus* Bachman will be the type.

This section of *Lepus* was originally characterized by Baird (Mammals of North America, 1857, page 575), as follows: "F. Skull and incisors very large and massive; muzzle about as wide as high. Post-orbital process completely fused with the skull for its entire length, leaving neither foramen, notch nor suture, *L. aquaticus* [and *L.* *palustris*." The above diagnosis, supplemented by additional characters given by Baird in his Key to the North American species of *Lepus* at the top of page 577, has since been repeated, with some modifications, by Gray (who raised Baird's section 'F.' to generic rank), Allen and myself.

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CURRENT NOTES ON ANTHROPOLOGY.

WOMAN IN CHINA.

PROF. GUSTAVE SCHLEGEL, of Leyden, contributed to the 10th International Congress of Orientalists a charming study (in French) on the position of woman in China,

* Preliminary description of a new subgenus and six new species and subspecies of Hares from the Mexican border of the United States. Proc. U. S. Nat. Mus., Vol. XVIII., No. 1081, pp. 551-565, 1896.

in times past and present. Truly, as he points out, she enjoys there in many respects an influence greater than with us. The Emperor of China to-day, in theory at least, does nothing but carry out the orders of his mother! The conjugal position of the wife is, as a rule, dignified and important; and when she is unhappy it is nearly always a case of two much mother-in-law.

In the past Chinese women have occupied prominent rank in literature and the fine arts. They have been poets and writers of history, and indirectly have directed government. Even in the most ancient monuments of Chinese literature we do not discover any expressions which indicate that women were kept in a servile condition

DEATH MASKS IN EUROPE AND AMERICA.

Two interesting contributions to the study of death masks have recently appeared. One is by Mr. F. S. Dellenbaugh, in the *American Anthropologist* for February, on the faces of the dead so accurately reproduced on vases from Arkansas. These, he argues, were, in fact, not hand work, but obtained from moulds actually taken from the visage of the corpse. In no other way, he believes, can we explain their striking accuracy.

In *Folk-Lore* for December, 1896, the Hon. J. Abercromby treats of funeral masks in Europe. The custom still prevails in various localities to cover the face of the dead with such a mask during the funeral ceremonies, though sometimes the mask is placed not on the face, but besides the corpse. His explanations of the custom in some of its details are not convincing, and probably we have not yet caught the exact spirit of remote ages on this point.

ONTARIO ARCHÆOLOGICAL REPORT.

THE annual report (1896-7) of the Ontario Archæological Museum contains some matters of unusual interest. The first is a careful description of the Otonabee serpent