

### THE STORY OF THE BEAR IN THE FIRST PRINTING OF DARWIN'S "ORIGIN OF SPECIES"

IN a previous letter to *SCIENCE*, it was mentioned that Hearne's story of the black bear is a distinctive feature of the first edition of Darwin's "Origin of Species" which was omitted in the second printing of this famous work. Professor E. B. Poulton, the greatest living authority on the works of Darwin, writes as follows on March 27, 1927:

I'm not sure that Hearne's story of the Black Bear is fabulous. Anyway this is the reference: "Journey from Prince of Wales's Fort in Hudson Bay to the Northern Ocean: 1769 to 1772." Samuel Hearne; Edited by J. B. Tyrrell, Toronto; Champlain Society: 1911: pp. 344-345. The original edition was published in 1795 and the reference in it is pp. 370-371, at least Major Leonard Darwin believes it is so. I expect the Bodleian has a copy, and, if so, I will look it up and write to you again.

HENRY FAIRFIELD OSBORN

### A NEW FIND OF THE WOOLLY ELEPHANT IN MICHIGAN

Of the numerous elephantine remains found in this state more than three fourths have been of the mastodon variety rather than that of the true elephant, or mammoth type.

So far as known there have been but eight finds of elephant within the state, only four of which have been specifically identified.

*Elephas columbi*, northern part Jackson Co.

*Elephas (primigenius) boreus*, near Three Oaks, Berrien Co.

*Elephas (primigenius) boreus*, near Eaton Rapids, Eaton Co.

*Elephas boreus*, near Gladwin, Gladwin Co.

The find here given is a tooth fragment, rounded so as to resemble a cobblestone found in the fall of 1925 in a gravel pit in the southwestern part of Oakland County, about one and a half miles north of New Hudson. The gravel deposit is of the nature of a kame ridge associated with the Interlobate Moraine of the Late Wisconsin ice-sheet. Some 140 acres of this deposit are owned by the Standard Gravel Company, eight to ten acres of which have been opened and operated for the last eight and one half years. The superintendent is Mr. O. E. Gooding and Mr. Rex Gooding, the night foreman, who picked up the specimen and noticed something peculiar about its appearance. The gravel deposit here is about one hundred feet thick and the tooth came from a depth of about seventy feet but may have rolled into this position from above. It was associated with rounded pebbles, cobbles and an occasional

boulder, the bulk of which is of Canadian origin. The specimen was carried home, broken open in the direction of the plates, and a fragment consisting of five plates given to a former pupil of the writer, Mrs. William A. Campbell, who in October, 1926, submitted it for identification.

The fragment was apparently broken from somewhere near the middle part of the tooth, the base being so rounded as to give no indication of roots. The height is 16 to 18 cm, greatest width 920 mm, distance across the four plates still in position about 45 mm, or the equivalent of about nine plates in 100 mm. These plates are flat, very regular and encased in a delicate enamel shell having a thickness of about 1½ mm. These plates come to the sides at right angles, suggesting that we have an upper tooth, while the number of plates indicated suggests one of the later molars. The specimen is greatly weathered, when compared with the ordinary mastodon teeth, the dentine and cement having the appearance of chalk or kaolin, except where discolored by iron stain. There can be little doubt but that the specimen tooth is that which has been generally identified with *Elephas primigenius* of the Old World and Alaska but now separated by Hay under the name of *E. boreus*. If this proves to be specifically distinct from the former the name *boreus* seems to the writer especially well chosen, since its occurrence in the lake region westward and its apparent relation to the till sheets and recessional moraines of the Iowan and two Wisconsin ice-sheets suggests strongly a much closer association with the actual ice than in the case of *E. columbi* and *E. imperator*.

W. H. SHERZER

MICHIGAN STATE NORMAL COLLEGE

### THE CONTROL OF COTTON-WILT BY THE USE OF ORGANIC FERTILIZERS

IN a recent article concerning the means by which the cotton-wilt fungus, *Fusarium vasinfectum*, induces wilting (*Jour. Agr. Res.*, v. 33, p. 1143-1162, 1926), the writer called attention to the fact that in a medium containing inorganic nitrogen the fungus produces substances that are deleterious to cotton. On the other hand, when organic nitrogen was used in the medium, no toxic effects were obtained.

In view of these findings, attention is now directed to the possibility of controlling wilt by the use of organic fertilizer, either in the form of barnyard manure or of some green manure, preferably some nematode-resistant legume. As the parasite causing wilt is a soil inhabitant, there is considerable possibility that its metabolic products in the soil may or may not exercise a deleterious effect on the roots, depending upon the chemicals present in the soil.