

the iron-ore regions whose structural and paleontological geology in detail has yet to be unraveled, or is at present being worked up for publication, in this as well as in other countries.

I merely desire here and now to announce the discovery of traces of organic remains, made by me in fragments of iron ore from the Chapin mine, Iron Mountain, Menominee, Michigan, as well as possibly from other mines on the same range or elsewhere in the Lake Superior region. It is hoped shortly to publish a much fuller account of my work in this connection, in another place.

During the period of 1890-93, I collected a considerable number of specimens of iron ore from the ore piles on the docks at Erie, Pa., and was firmly of opinion that some of the markings upon them or in them were of organic origin, produced by animals of some kind; but being only an amateur geologist, I decided to submit the material to Prof. H. S. Williams, of New Haven, Conn., for examination. After seeing the specimens, Prof. Williams kindly wrote: "There are certainly some among them which resemble very strongly the trailings left by worms or crawling things on the sand."

The material was then forwarded to the U. S. National Museum, Washington, D. C., where Prof. Charles Schuchert, assistant curator of the Museum—Smithsonian Institution—examined them, and said: "The specimens of the Algonquin ores contain annelid trails."

Finally they were placed in the hands of Dr. Chas. D. Walcott for examination and he kindly reported as follows: "Most of the specimens from the Lake Superior region containing 'traces of organisms in Lake Superior iron ores' show only markings of mechanical origin. A few, numbers 10, 14, A, E and G, appear to be casts of the trails of a small annelid and are, I

think, organic. It is not possible to identify them with any described species. For convenience of reference they can be referred to the genus *Planolites*."

Prof. C. R. Van Hise, geologist in charge U. S. Geological Survey, Lake Superior Div., also saw the specimens and remarks that in his opinion the markings might possibly have been produced by some complex movement or movements, but that they are very peculiar, and in any ordinary case would be unhesitatingly accepted as organic. My long-since-formed opinion as to the organic origin of these markings having thus been confirmed by the highest authorities, this discovery will doubtless add a new phase to the question or controversy regarding the origin and age of these Lake-region iron ores, and iron-bearing series of strata, and also should tend to excite renewed and closer investigation of the Huronian rocks in search of better 'fossils' than mine, which surely exist and will eventually be brought to light.

Those especially interested could, no doubt, see these specimens on application to Prof. Schuchert, at Washington, in whose care I propose to let them remain for the present.

W. S. GRESLEY.

ERIE, PA.

FOOD OF THE BARN OWL (*STRIX PRATINCOLA*).

It is well known that birds of prey disgorge the indigestible portions of food, such as hair, bones and feathers. These are formed into balls, known as 'pellets' or 'rejects,' by the muscular action of the stomach and are regurgitated before a new supply of food is taken. The 'pellets' contain the skulls, teeth, and other parts of the victims, and furnish a perfect index to the food eaten. In a work on 'The Hawks and Owls of the United States,' published in 1893, I recorded the results of the examination of 200 'pellets' or 'rejects' of the Barn

Owl taken from one of the towers of the Smithsonian Institution, Washington, D. C., June 28, 1890. Since that time 475 more have been collected—125, September 14, 1892; and 350, January 8, 1896, making in all a total of 675 'pellets.' This abundant material has been carefully examined and found to contain the remains of 1821 mammals, birds and batrachians as shown in the following table:

- 1119 Meadow Voles (*Microtus pennsylvanicus*)
 - 4 Pine Voles (*Microtus pinetorum*)
- 452 House Mice (*Mus musculus*)
- 134 Common Rats (*Mus decumanus*)
 - 1 White-footed Mouse (*Peromyscus leucopus*)
- 20 Jumping Mice (*Zapus hudsonicus*)
 - 1 Rabbit (*Lepus sylvaticus*)
- 33 Short-tailed Shrews (*Blarina brevicauda*)
- 21 Small Short-tailed Shrews (*Blarina parva*)
 - 1 Star-nosed Mole (*Condylura cristata*)
 - 1 Brown Bat (*Vesperugo fuscus*)
 - 2 Sora Rails (*Porzana carolina*)
 - 4 Bobolinks (*Dolichonyx oryzivorus*)
 - 3 Red-winged Blackbirds (*Agelaius phoeniceus*)
 - 1 Vesper Sparrow (*Pooecetes gramineus*)
- 10 Song Sparrows (*Melospiza fasciata*)
- 4 Swamp Sparrows (*Melospiza georgiana*)
- 1 Swallow (*Petrochelidon*?)
- 1 Warbler (*Dendroica*)
- 6 Marsh Wrens (*Cistothorus palustris*)
- 2 Spring Frogs (*Rana pipiens*?)

A glance at this list will demonstrate to any thoughtful person the immense value of this useful bird in keeping noxious rodents in check. Moreover, judging from the species in the list, it may be seen that the barn owl hunts almost exclusively in open country, such as cultivated fields, meadows and marsh lands, where such pests do most damage. In Germany, according to Dr. Bernard Altum (Journal f. Ornithologie, 1863, pp. 43 and 217) the barn owl feeds extensively on shrews. In 703 'pellets,' a number only slightly greater than that which I examined, he found remains of 1,579 shrews, an average of over two to each 'pellet,' while our 675 'pellets' contained only 54 shrews, an average of one skull to every 12½ pellets. On the other hand our

material contained the remains of 2½ mice to each 'pellet,' or 93 per cent. of the whole mass. The birds, which constitute about 4¾ per cent. of the owl's food, are in the main species of little economic importance.

A. K. FISHER.

CURRENT NOTES ON ANTHROPOLOGY.

THE ETHNOLOGY OF TIBET.

A VALUABLE article on this subject is published in the last report of the National Museum (Washington, 1895), prepared by the experienced traveler, Mr. W. W. Rockhill. It describes the social customs, dress, habitations, agriculture, food, music, money, religion, etc., of the Tibetans with much minuteness.

Their civilization was demonstrably obtained either from India or China, those who may be styled the indigenous inhabitants contributing very little to it. These indigenes are now best represented by the scanty and semi-nomadic population of the northern plateaux, which rise to an average altitude of more than 15,000 feet above the sea level. They are known as 'Drupa,' and although they belong to the same linguistic family as the Burmese they are more remote than these from the physical type of the Mongols. The hair, instead of being straight, is wavy, the eyes brown or hazel, the nose often narrow and not much depressed at the root. The skin is frequently nearly white and the cheeks rosy, though on exposure the complexion may become a dark brown.

These traits present a physical type quite dissimilar from that which ethnographers term the Mongolian.

RESEARCHES IN AMERICAN ARCHÆOLOGY.

THE twenty-ninth report of the Peabody Museum of Archæology and Ethnology, at Cambridge, Mass., is brief, covering but nine pages, but contains a number of inter-