



PYLYPCHUK

Oleg Ja.

Doctor of Biological Sciences,
Professor,
Head of Department "Ecology and life
safety by rail » State University of
Infrastructure and technologies of the
Ministry of Education and Science of
Ukraine
olegpilipchuk47@gmail.com
(Kyiv city, Ukraine)

**PROMINENT AMERICAN EVOLUTIONIST OTNIEL MARSH (1831–
1899): CONTRIBUTION TO THE DEVELOPMENT OF
PALEOZOOLOGY**

Otniel Charles Marsh is a US paleontologist. During 1861–1899 he had published almost 300 works (articles, reports and books), described 225 new genera, 469 species, and 64 families. Competition with the American Paleozoologist Edvard Kop grew into the so-called "War of Bones", which promoted public interest to dinosaurs and many discoveries in the field of Paleozoology and evolution.

O. Ch. Marsh was the first professor of paleontology in America. Publications of his first scientific works, he started in 1861. At this time, he became an organizer of the first expedition, equipped for the special purpose of collecting fossil vertebrate animals. This expedition carried out a paleontological excavation in the western states of the USA. As a result of this activity, O. Marsh published a number of small articles on fossil vertebrates and two large Palaeozoic works: A value monograph on the fossil-toothed birds (Odontoornites)

(1880), And also the great monograph devoted to the wonderful group of Eocene ungulates (*Dinocerata*) (1885).

Considerable importance came to the discovery by O. Marsh in 1872 toothy birds of Cretaceous deposits of Kansas. In general, Fr. Marsh has found many new forms. Some of the published genera were widely known. For example, Dinosaurs: *Atlantosaurus*, *Drontosaurus*, *Diplococus* and *Stegosaurus*. Horned dinosaurs: *Triceratops* and *Torosaurus*, pterosaurs, representatives of the Equidae family: *Eohippus*, *Mesohippus*, *Orohippus*, *Pliohippus*, titanotheriidae: *Brontops* and *Brontotherium* and many other. Their listing in the book about Marsh, written by Shukhter and M. Le-Ven occupies seven pages.

Scientific heritage O. Marsh is very large. He opened new families, even genera of mammals, birds and reptiles. He gave the classical restoration of the representatives of three mammal classes studied by him. Marsh did a lot to study the ancient Upper Jurassic and Upper Cretaceous mammals of Colorado and Wyoming. Particular note is on his merits in the field of studying the genealogy of the Equine family. He described various members of this family found in North America, from the small *Eohippus* with four fingers on the front limb to the Pleistocene horse *Equus*. In general, O. Marsh studied many forms of American fossil horses. He established phylogenetic relationships between these forms. However, he could not make a monographic description of this wonderful group of animals. His works doesn't even compare with the classic monograph of our Volodymyr Kovalevskyi on this issue. And this despite the fact that O. Marsh possessed incomparably richer material than V. Kovalevskyi, and he already has the work of our scientist, who proposed a new method of paleontological research. That is why O. Marsh's small articles are mostly of historical interest today, they have a rather honorable place in the archives of the science, and a later monograph by V.O. Kovalevskyi is still a consummate treatise on paleozoological research. The article analyzes the scientific achievements of Othniel Marsh in the field of paleozoology.

Key words: paleozoology, paleontology, fossil animals, dinosaurs, evolution.

