study of the anatomy of the parts, supplemented by observation of the females and rearing of the species during three consecutive seasons.

A most interesting chapter is included on the economic value of Tachinidæ, in which it is shown that these flies, unaided by other parasites, have entirely wiped out considerable colonies of lepidopterous larvæ in Denmark.

It is greatly to be hoped that Dr. Nielsen, and other students as careful and painstaking as he, will carry on further investigation of the early stages of Muscoidea.

I have to thank Dr. L. O. Howard, chief of the bureau of entomology, for having an English translation of Dr. Nielsen's paper made for me. This translation was done by Mr. August Busck, and it is hoped that it can be published in the near future for the benefit of students not familiar with Danish.

C. H. T. TOWNSEND GIPSY MOTH PARASITE LABORATORY

The Autobiography of Sir Henry Morton Stanley, G.C.B. Edited by his wife, DOROTHY STANLEY. Pp. xvii + 538. Sixteen photogravures and a map. Boston and New York, Houghton Mifflin Company. 1909. \$5 net.

One of the greatest of modern geographers has called Henry M. Stanley the Bismarck of Africa. This was his due because of the great part he took in the solution of the many difficult problems of that continent.

The son of James Rowland, born in 1841, at Denbigh, in Wales, his early life was a succession of serious and discouraging struggles. In fact, nearly his whole life was marked by this struggle with his fellow men. Even after success had crowned him, there were always to be found those who not only doubted and opposed him, but did so to the extreme of malice.

From the time when he was cast off by his own people he may have been the child of fortune, but it was always hard to realize that such was the case; perhaps this early buffetting was the means of developing that selfreliance which was his marked characteristic through life. Neglected by his family, his early training in the poor-house certainly can not be considered as the most favorable condition for beginning a career.

The first chapters of this volume were prepared by Stanley himself, the latter portion of the work, however, is the kindly work of his talented wife, who has filled in with marked skill the blanks in his rather fragmentary journals by abstracts from his publications.

One is constantly struck during the perusal of the first part of the book by the intensely devout attitude of Stanley's mind, and his sincerity and singleness of purpose. mental activity was curiously in contrast with his surroundings, and he was most fortunate in his early contact with Mr. Stanley, the man to whom he owed most of his serious convictions as well as his name. Would that there were more men capable and willing to throw such helpful and sturdy influences for good about the needy youth of to-day; whether it would be accepted by them or not is, of course, an open question. Stanley accepted them, however, and prospered under this guidance.

Thrown again upon his own resources by the death of his best friend, he soon became a wanderer, serving in the southern army, later a prisoner of war, then in the northern navy. At the close of the war his career as correspondent began, and he traveled extensively, inspiring confidence in his energy and capability until the New York *Herald* opened the door to his future work.

Of this work the estimate of the great Petermann, was "that he had done more than all the scientific travelers in Africa for eighty years previous, more than the Arabians for a thousand years, and that he had no equal among the 'discoverers' of the earth." This was high praise, but the physical exertions which won these words and brought him home a gray-haired man did not dampen his zeal, and when the time came to finish the work of Livingstone, he was ready for the task.

Stanley undoubtedly lived ahead of his time, but time has caught up with him, and the real estimate of the man's work which has recently been formed by the calmer study of the unprejudiced, will only be helped by the appearance of this thoroughly good work. It is all that an autobiography should be. There is no self-laudation, no posing for effect, and no fulsome praise.

In an ascending scale we follow him through Turkey, the Levant and Abyssinia. During these campaigns he became famous for the accuracy of his work; and his energy in getting it to his publishers was so great that some of his competitors seemed inclined to doubt its authenticity until the more tardy reports verified his statements. In the following years, during the search for Livingstone, the war in Ashanti land and the search for Emin Bey, the description of the terrible difficulties encountered were undoubtedly the cause of the disbelief so frequently expressed with regard to his results. Stanley was not a scientific man, but his keen observation of facts and his conscientious performance of duty must over-balance many defects in this The pioneer work of the first man traveling along these lines of greatest resistance must have been savage work indeed, and demanded every ounce of vitality of the most capable explorer of his day, if not of any time, and the wonder is that so few mistakes were made.

Immediately upon his return to Europe he sought to make his work of practical value, and here again he encountered the wildest sort of antagonism. His success and his after life are matters of history and this volume records them in a most pleasant and readable manner.

WILLIAM LIBBEY

PROGRESS OF PALEONTOLOGICAL RE-SEARCH BY THE CARNEGIE INSTITUTE

Generously supported by Mr. Andrew Carnegie, whose interest in paleontological research is well known, the Carnegie Museum of Pittsburgh has during the past year made many forward strides. The work of extricating from the matrix some of the skulls of

the mammalia found in the summer of 1908 in the Uinta Basin by Mr. Earl Douglass was diligently prosecuted during the early part of 1909, and Mr. Douglass has published in the Annals of the Carnegie Museum a brief account of three new Titanotheres from the Upper Eccene. These three species represent only a few of the large number of interesting forms recovered by Mr. Douglass during the expedition of 1908. A number of fossil turtles apparently representing an equal number of species were also recovered from various levels. These have been partially prepared for study and will be submitted for description to a specialist in this group. The nearly perfect skeleton of Moropus elatus recovered during the explorations made in western Nebraska during the years 1906 to 1908 has been freed from the matrix and prepared for mounting. A monographic paper giving an account of the osteology of the animal is in course of preparation by the Curator of Vertebrate Paleontology. Nearly twenty skeletons, some of them absolutely complete and others approximately complete, belonging to two species of the cameloid genus Stenomylus, were recovered in 1908 and 1909 by Mr. O. A. Peterson. Several of these skeletons have been worked out from the matrix and two of them have been prepared as slab-mounts and are now on exhibition in the museum. A singularly perfect skeleton of a carnivore, revealing features common to the Canidæ and the Felidæ, and not distantly related to Daphænus felinus Scott, has been extricated from the matrix and mounted for exhibition. A paper upon this specimen is in course of preparation by Mr. O. A. Peterson.

Mr. Earl Douglass since June has been busy making collections in various geological formations in Utah. In August he discovered three dinosaurs with the skeletons apparently completely articulated. Under the direction of the curator of paleontology he is spending the winter in Utah engaged in carrying forward the work of taking up the remains of these colossal animals. Mr. Douglass's camp is located at a considerable elevation, but he has, so far as possible, forti-