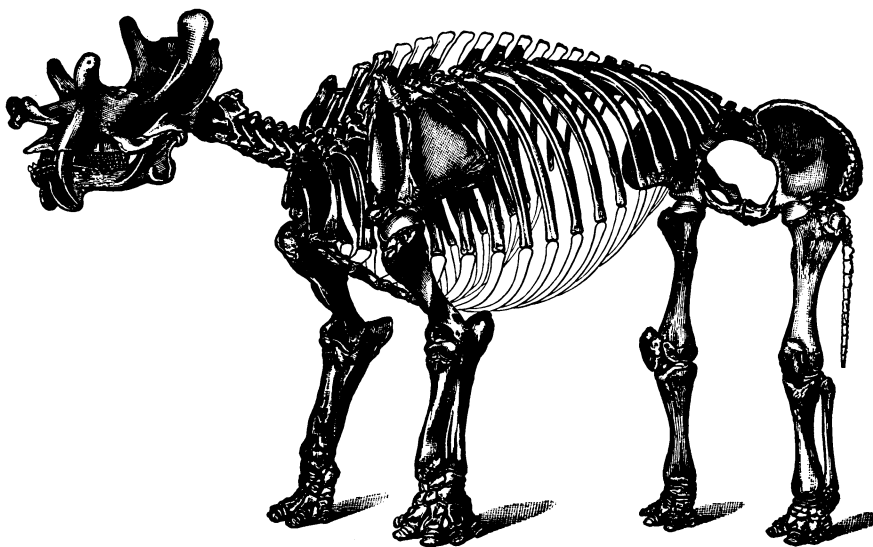


as now known, indicates that the genus represents a distinct family of perissodactyl ungulates, the Coryphodontidae. The skull is clearly of this type, and the skeleton and feet present no differences sufficiently important to justify a separation from that natural order" (*Amer. journ. sc. and arts*, 3d ser. vol. xiv. p. 84). Yet in the present volume he adopts the order under the name of Amblydactyla. But the proposed new terms, Amblydactyla, Coryphodontia, Holodactyla, and Clinodactyla, are all synonymes of earlier names, and cannot be

The plates of this volume are beyond all praise. They are drawn with the utmost fidelity, and at the same time are most beautiful specimens of artistic skill. In this respect they may challenge comparison with any similar work. The printing and type leave nothing to be desired, and the numerous finely executed woodcuts add much to the clearness of the text. Notwithstanding, then, all that we have found to criticise, 'The Dinocerata' is a splendid piece of work, which is an honor to American scientific enterprise.



RESTORATION OF TINOCERAS INGENS MARSH. ONE-THIRTIETH NATURAL SIZE.

adopted. This volume is, we believe, unique among modern scientific works in not containing a single reference in the text to the work of others, and the reader never knows how much of the book has already been anticipated. There is, it is true, a scrupulously exhaustive bibliography appended; but, as few can plod through such a mass of pamphlets, injustice cannot be avoided by this method.

In conclusion, a few words as to the classification of the Dinocerata. The genus first to be named was the Uintatherium of Leidy: the Tinoceras and Dinoceras of Marsh, and the Loxolophodon and Eobasilus of Cope, were described at later dates. As far as the evidence in this volume goes, these names all refer to the same genus, which, of course, must be called Uintatherium. The shortness of this article will not allow us to attempt to prove this proposition, but we believe it capable of satisfactory demonstration. It is, however, a matter of slight importance.

REPORT OF THE U. S. ENTOMOLOGIST FOR 1884.

WORKERS in economic entomology look forward with especial interest to the appearance of the annual report of the U. S. entomologist. The bureau under his charge is the only institution devoted to this department of science, which is liberally supported; and therefore it is rightly expected that this report shall be the most important contribution to applied entomology during the year.

The report before us, contained in the report of the department of agriculture for 1884, consists of a hundred and thirty-four pages, illustrated by ten plates. The more important articles in the body of the report treat of kerosene emulsions, the streaked cottonwood leaf-beetle, the southern buffalo gnat, and the cranberry-fruit worm. There are appended to the main report several reports by special agents.

The article of most general interest is that

treating of kerosene emulsions; and we are glad to see considerable space devoted to 'words of caution and advice' as to the dangers attending their use: for it can hardly be said that the discussions of the kerosene question in these reports have been heretofore conducted "in the spirit of an investigator, and not in the spirit of an advocate."

The experiments with kerosene, and the invention of devices for applying insecticides, have been the characteristic features of the work of the bureau during the past four years. This work has been of great importance; but it is hard to see on what grounds the late commissioner of agriculture claimed that "the chief remedies and insecticide appliances now quite generally employed with satisfaction, and constantly discussed and recommended in the agricultural press, have originated during my administration of the department" (p. 13).

The successful introduction of *Apanteles glomeratus*, a parasite of the imported cabbage-worm, is one of the most practical results of the work of the bureau; and the working-out of the life-history of the cranberry-fruit worm is also important. The article by Mr. Hubbard, on the rust of the orange, is very complete, except that nothing is said to lead the reader to think that any thing has ever been published before concerning this disease. This is the more surprising; since we find, that, although the mite which is supposed to cause the rust is carefully figured, the name given to it by Ashmead five years ago is nowhere used in the report. The creature is referred to as simply 'the rust-mite,' or as 'the mite.'

The illustrations are not so good as we have learned to expect in these reports. Of the figures on the ten plates, nearly one-half are reproductions, and the original figures are nearly all photo-engravings. The photo-engraving processes are a great boon to impecunious investigators who cannot afford to employ engravers; but in a small report, which is almost the only visible result of the expenditure of a vast sum of money, we have a right to look for something better. It is due to the artist, however, to say that the new figures bear inherent evidence of truthfulness.

In looking at the report as a whole, we find much in it of value, but still not so much as might fairly be expected when we consider the large number of entomologists employed (we think, fifteen), and the size of the appropriation made to the bureau (nearly \$30,000 for the year ending June, 1884). It is true that the entomologist complains that the work of the bureau has outgrown its present means of put-

ting results before the public; but this complaint would have more force if he were more economical of the space at his disposal. If the bureau has accumulated large additions to knowledge which are of great interest to the agriculturists of the country, why devote what is more than one-fourth of the report to an article on cabbage-insects, the greater part of which is a compilation from sources which are easy of access? or why devote seven pages to republishing an address on 'General truths in applied entomology'?

NOTES AND NEWS.

At a meeting of the American society for psychological research held in Boston, June 4, a report was made by the committee on thought-transference which covered a discussion of the results of the experiments upon guessing digits and the colors of cards, which were described in a circular issued by the society during the winter. A large number of returns were received, but no evidence was obtained of the existence of thought-transference among ordinary persons for such matters as the value of a digit or the color of a card. Prof. E. C. Pickering of the Harvard-college observatory also presented a discussion of the observations taken at the observatory in the revision of the star catalogues,—observations in which it was supposed that some thought-transference might take place, as the recorder knew the magnitude of each star as given in the *Durchmusterung* before he received the observer's estimate. If thought-transference existed, this fact might have an influence upon the observer's mind; but no evidence of this influence was found in a discussion of some ten thousand observations. One of the members of the society has met with some success in the reproduction of drawings after the plan of the English society. The committee on mediumistic phenomena made a brief report, stating that they had visited a number of mediums, and had arranged several private *séances* on their own terms, but had met with nothing satisfactory; they will, of course, continue their work, as will the other committees of the society.

—Reports are received from the Pacific coast of unusual damage by insects destructive to crops. Locusts, presumably *Camnula pellucida*, are just now very destructive in the unfledged condition in some ten counties of California, especially in the San-Joaquin valley. The genuine Hessian-fly is also doing much damage to the grain districts embraced in a line drawn from Vallejo in Solano county to Benecia, thence to Suisun, thence to Napa City, and back to Vallejo; also in parts of Sonoma county.

—The *Athenaeum* states that the Russian traveller Piassetsky, who accompanied Col. Sosnoffsky on his journey through China and Mongolia in 1872, and a translation of whose travels was published last year by Messrs. Chapman & Hall, is about to set out on