

complete examination has been made, we will lay the results before the readers of the *Journal*.—*Silliman's American Journal*, November 1866.

*On the Discovery of the Remains of a gigantic Dinosaur in the Cretaceous Beds of New Jersey.* By E. D. COPE.

Prof. Cope exhibited the remains of a gigantic extinct Dinosaur, from the Cretaceous Greensand of New Jersey. The bones were portions of the under jaw with teeth, portions of the scapular arch, including supposed clavicles, two humeri, left femur, and right tibia and fibula, with numerous phalanges, lumbar, sacral, and caudal vertebræ, and numerous other elements in a fragmentary condition.

The animal was found by the workmen under the direction of J. C. Vorhees, Superintendent of the West Jersey Marl Company's pits, about two miles south of Barnesboro, Gloucester county, N. J.

The bones were taken from about twenty feet below the surface, in the top of the "chocolate" bed, which immediately underlies the green stratum which is of such value as a manure.

The discovery of this animal fills an hiatus in the Cretaceous fauna, revealing the carnivorous enemy of the great herbivorous *Hadrosaurus*, as the *Dinodon* was related to the *Trachodon* of the Nebraska beds, and the *Megalosaurus* to the *Iguanodon* of the European Wealden and Oolite.

In size this creature equalled the *Megalosaurus Bucklandii*, and with it and *Dinodon*, constituted the most formidable type of rapacious terrestrial vertebrates of which we have any knowledge. In its dentition and huge prehensile claws it resembled closely *Megalosaurus*; but the femur, resembling in its proximal regions more nearly that of the *Iguanodon*, indicated the probable existence of other equally important differences, and its pertaining to another genus. For this and the species the name of *Laelaps aquilunguis* was proposed.

The paper continues with descriptions of the mandible, femur, tibia, fibula, humerus, phalanges, vertebræ, &c.—*Ibid.*

*On the Development of small Acari in Potatoes.*

By M. GUÉRIN-MÉNEVILLE.

The two months of rain which have done so much mischief to agriculture appear to have had considerable influence upon potatoes, which have become diseased in various localities. This diseased condition has made its appearance among the Australian and other potatoes experimented upon by me at the laboratory of sericulture of the imperial farm of Vincennes, by the development of myriads of *Acari* belonging to the species described by authors under the name of *Tyroglyphus feculæ*, which I investigated and figured, four-and-twenty years ago, in a paper on the potato-disease, published in the 'Mémoires de la Société Impériale et Centrale d'Agriculture de la France' (1842, pl. 5. fig. 9).

What has appeared to me worthy of remark in this circumstance is the immense quantity of these animals developed in less than a

week. The platform on which I deposited my potatoes is covered with a layer of these little *Acari*, which simulate an animated dust of a grey colour. In a very short time one might collect considerable quantities of them. This living powder consists of individuals of different ages. We find in it adult specimens in copulation, gravid females, and young individuals in all stages of development.

This immense assemblage has attracted, as usual, many other small carnivorous insects, which have found in it an abundant banquet. There are larvæ and perfect insects belonging to various genera of Coleoptera, Diptera, Hemiptera, &c., to which the *Acari* attach themselves in innumerable quantities—giving them a most singular aspect. These insects, thus covered with mites and completely unrecognizable, run about amongst them, and probably devour a great number of them.

All the potatoes, which have still the most healthy appearance, are nevertheless covered with these *Acari*. As they can no longer all remain upon the surface of these, they accumulate in the interstices of the paving-stones, then upon the paving-stones themselves, on which they form a layer of several millimetres in thickness, over a space of about four square metres.

I intend to keep a certain quantity of these potatoes, to see whether they can be preserved sound for a longer or shorter time. It would be, I think, very interesting to ascertain whether these innumerable *Acari* are the consequence of the disease of the tubers (as in the pedicular disease of man) or the more or less proximate cause of an alteration which will manifest itself at a later period.—*Comptes Rendus*, October 1, 1866, pp. 570-571.

*Experiments demonstrating that the members of the Newt (Triton cristatus) are only regenerated when their basal portion at least is left in its place.* By J. M. PHILIPPEAUX.

In 1865 the author found that in the rabbit and the marmot the spleen is regenerated only when a portion of the organ is left behind. This observation led him to think that the regeneration of the limbs of Newts, which has been long known to occur, may also require the same condition. He therefore made some experiments on *Triton cristatus*, in which he extirpated not only the anterior limb itself, but also the scapula. In all these cases there was no appearance of regeneration. He has specimens operated upon eight months ago, in which the wound is completely healed, but not even the commencement of a regeneration of the limb is apparent.

In others, on the contrary, in which the anterior limb was cut off at the surface of the body, as was done by Spallanzani, it was reproduced, with all its bones complete, within four months. The number of bony pieces in the anterior limb of the *Triton* is stated by the author to be forty-six; the posterior limb consists of fifty-six such parts. The author believes that he will be able to demonstrate similar facts with regard to the reproduction of the fins of fishes, and thinks that it will be found a necessary condition of the regeneration of organs among the Vertebrata that some portion, at least, of the organ should be left.—*Comptes Rendus*, Oct. 1, 1866, pp. 576-578.