BERTIELLA, NEW NAME FOR THE CESTODE GENUS BERTIA BLANCHARD, 1891.

THE generic name *Bertia* was proposed by Ancey, 1888, with *Nanina cambodgiensis* Reeve, a member of the family Limacidæ, as type. *Bertea* is a genus of diptera.

In 1891, R. Blanchard, overlooking the fact that the name *Bertia* was preoccupied, proposed it as a name for a cestode genus which has *Bertia Studeri* as type species.

In place of *Bertia* Blanchard, 1891, we herewith propose *Bertiella* Stiles & Hassall, 1902; which takes *Bertiella Studeri* (Blanchard 1891) as type.

On a former occasion, we changed the name *Levinsenia* to *Levinseniella* on the same nomenclatural grounds (rule of homonyms), and several colleagues have expressed surprise that the new name should be so similar to the old. This selection of the old name as the initial portion of the new name is made deliberately and with a certain definite purpose, namely, in order to produce as little change as possible, both in the name itself and in the position of the generic and specific names in an alphabetical index. It is in line with the change of *Trichina* to *Trichinella, Dicrocœlium lanceolatum* to *D. lanceatum, Hæmatolœchus similis* to *H. similigenus,* and with many other changes which have been made. In dealing with a large number of names, we find that such a plan saves much time and trouble, and is not an inconsiderable aid to the memory. These points, in our opinion, greatly outweigh the objection that the genus *Trichinella* is not a small insect closely related to *Trichina.*

The species which should be placed in *Bertiella* are *Bertiella Studeri* (Blanchard, 1891), *B. americana* (Stiles, 1895), *B. americana leporis* (Stiles, 1895), *B. conferta* (Meyner, 1895), *B. Delafondi* (Railliet, 1892), *B. edulis* (Zschokke, 1898), *B. mucronata* (Meyner, 1895), *B. obesa* (Zschokke, 1898), *B. plastica* (Sluiter, 1896), *B. Sarasinorum* (Zschokke, 1898) and *B. satyri* (Blanchard, 1891).

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NOTES ON CANKER AND BLACK-ROT.

DURING the summer of 1901 the leaves on some of the upper branches of several sumacs (*Rhus glabra* L.) growing on the university campus, were observed to be withering in much the same way as though they had been struck by a blight. An examination of the leaves revealed nothing, but the twigs were found to be affected with 'canker' caused by *Sphæropsis rhoina* (Schw.) Starb. Some of the larger limbs, too, had been completely girdled by the attacks of the fungus, and this accounted for the drying up and withering of the leaves. Very careful examinations were made in the search for some other cause of the trouble, but none could be found. Cross- and longi-sections of the diseased twigs were made, but aside from the fact that the bark and cambium were injured, they appeared to be in a perfectly normal condition. No borers were found in the specimens examined.

During the present summer I have been carrying on some experiments to determine whether *Sphæropsis rhoina* of the sumac and *Sphæropsis malorum* of the apple may not be the same fungus. The work is not yet completed, but the results so far obtained are very interesting.

Very briefly, the experiments were carried out as follows: The first thing done was to compare the growth and development of pycnidia in both species. This was accomplished by making poured plates of apple bark agar. Pycnidia obtained from diseased sumac and apple branches were washed in a one-per-cent. aqueous solution of corrosive sublimate, and finally in distilled water before being broken open. Spores were then transferred to Petri dishes by the ordinary dilution process. Both species germinated and grew very rapidly, and in fourteen days typical pycnidia and spores were formed. The cultures proved to be pure and their behavior was identical in every particular.

At the same time perfectly sound apples were inoculated with spores obtained in the same way. The apples were carefully sterilized before being inoculated, by immersing them for thirty minutes in a one-per-cent. solution of corrosive sublimate. After inocu-

lating them they were placed in sterile glass chambers having close-fitting covers. In six days the apples showed signs of rotting and in ten days pycnidia had begun to form. On the fourteenth day after inoculation the entire epidermis was blackened and densely dotted with the protruding pycnidia. Here again no difference was observed either in the manner of growth or the decay produced by the two species of *Sphæropsis*. An examination of the inoculated apples showed that they were entirely free from other fungi. Apples treated in the same way and put under similar conditions but stabbed with a sterile scalpel did not decay.

Finally, spores obtained from the inoculated apples were used to inoculate healthy branches of both the apple and the sumac. So far no difference can be observed in the growth of *Sphæropsis rhoina* and *Sphæropsis malorum* on the apple tree, but the fact that growth has gone on from the points of inoculation is established. In the sumac, growth has not been so rapid.

The facts already established in these experiments go to show that *Sphæropsis rhoina* will cause black-rot in the fruit of the apple and will also produce the typical 'canker' on the branches and limbs just as readily as *Sphæropsis malorum*. Although the evidence is not yet complete it is probable that the two species are identical.

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THE UNIVERSITY OF NEBRASKA,
August 27, 1902.

PALEONTOLOGICAL NOTES.

THE GENERIC NAME OMOSAURUS.

THE name *Omosaurus armatus* was applied by Owen in 1874 to a dinosaur from the Kimmeridge Clay described by him in 'A Monograph on the Fossil Reptilia of the Mesozoic Formations,' issued by the Paleontographical Society. The name first occurs on page 46 of the part printed in 1875.

The same generic name had, however, been used by Leidy in 1856 for a crocodilian described by him on page 256 of the *Proceedings of the Academy of Natural Sciences*, of Philadelphia, for that year, to which he gave the name *Omosaurus perplexus*.

Omosaurus Owen is thus preoccupied, and for the genus of Stegosaurs included under that name I propose the name *Dacentrurus* in allusion to the powerful spines with which the tail was armed.

A NEW GENERIC NAME FOR STEGOSAURUS MARSHI.

IN Vol. XXIII. of the *Proceedings of the U. S. National Museum*, pp. 591, 592, I described a new dinosaur from South Dakota under the name of *Stegosaurus marshi*, stating that it probably represented a distinct genus, although owing to lack of material generic characters could not be stated. Curiously enough, failure to give a new generic name has resulted in the creation of a synonym. Better acquaintance with dinosaurs in general and Stegosaurs in particular has shown that the species is not a Stegosaur, but is nearly related to the English *Polacanthus*. With the present material it is only possible to say that the main apparent differences between *Polacanthus* and *Stegosaurus marshi* are the greater size of the latter and the larger and more varied dermal spines with which it was clad. In the light of my past experience, I shall, however, take the liberty of giving a new generic name to the species, and for that purpose propose *Hoplitosaurus* in allusion to its heavy armature.

This genus and the English *Polacanthus* and *Acanthopholis* are characterized by the sudden and considerable expansion of the long bones at their articular faces, a feature particularly noticeable in the humerus at its distal extremity. It may be said that in the Stegosauridæ not more than two pairs of spines appear to be present and these are near the end of the tail. The main dermal armor is in the form of very large and thin plates running from the head to near the end of the tail. In the three genera named above, placed by Mr. Lydekker in the Scelidosauridæ, the dermal armor consists of numerous flattened scutes and many large variously shaped spines.

F. A. LUCAS.