

transverse quadrate; hypopygium armed with an upward curved aculeus (Tribe II., Apterogynini), (Europe, Africa and Asia).....Apterogyna, Latreille.

(Type A. Olivieri, Latr.)

2. Abdomen with the first two segments nodiform; mandible narrowed, arcuate, pointed at apex.....Apterogyna, Latreille.

GYNANDROMORPHISM IN LUCANUS ELAPHUS.

BY H. F. WICKHAM, IOWA CITY, IOWA.

Some time ago, while in St. Louis, I called on Dr. Geo. W. Bock, and saw in his collection a remarkable specimen of a female *Lucanus elaphus*, from Poplar Bluff, Mo. On my expressing interest in the matter, the Doctor very kindly gave me the insect, and I wish to put the case on record.

The chief organ affected is the left mandible (fig. 7 a), which is more than twice the length of the right (fig. 7 b), and partakes of many characters usually exhibited by the male. It is irregularly curved in outline, sparsely punctured, except at the base, where two elongate areas are coarsely and closely punctate, the larger area being on the superior face, while the smaller is lateral. The external face is flattened, trituberculate along the middle region, carinate along the upper and lower margins. The armature of the mandible is as follows: Subbasal and subapical teeth long, as in the male, the smaller intermediate teeth arranged not in one series, but in two, the lower row containing three denticles, one in front of and one behind (but below) the subbasal tooth, the other behind the subapical one; the upper series consists of five teeth forming a row, as shown in the figure, the second being bifurcate at tip. The antennæ are not affected. The head is roughly punctured, somewhat uneven, but without the characteristic ridges of the male. The prothorax is not quite alike on both sides, the left being a little longer and showing a tendency to develop the shape of the male. The front tibiæ differ from each other, the left being a little narrower than the right, the apical tooth shorter and less excurved, the subapical trifurcate, the two teeth near the middle of the tibia crowded close together. The right middle tibia has four teeth (exclusive of those around the apex), while the left has but two. The hind tibiæ are practically alike.