

IV.—*The fossorial anterior tibiæ.*

The digging apparatus of the female consists of rather short, depressed, anterior tibiæ, more or less hollowed ventrad, and bearing at the distal end two conspicuous stout *spurs*, the outer of which is depressed and much longer than the inner (mesal). They are admirably fitted for the purpose used.



Fig. 17.

(Fig 17 : Portion of anterior leg, ventral view, showing the fossorial tibiæ ; *a* and *b*, mesal and lateral spurs ; *c*, portion of basal tarsal joint ; *d*, distal three-fourths of tibia. Greatly enlarged.) When thrown forward and forced into the earth, and then drawn back, they hold the earth like a shovel. The males possess the same structure, though relatively more slender. As would be expected, the anterior femora are much stouter than the others.

The two posterior legs are assistants to the anterior, and for that reason they are much slenderer and longer. Their tibiæ bear short, slender spines ; those of the anterior tibiæ are true spurs or chitinous prolongations of the part, wholly immovable. The legs are well clothed with hairs.

There are very few references to this species in our literature, practically none bearing on its habits and life. This is apparently the first published record of the method of oviposition of a *Bibio*.

The figures were kindly drawn by Mr. John F. Strauss ; the writer is also indebted to Prof. A. L. Quaintance, Washington, D. C., for timely suggestions.

MR. FRANKLIN SHERMAN, Entomologist of the North Carolina Department of Agriculture at Raleigh, has been appointed Professor of Entomology and Zoology at the Ontario Agricultural College, Guelph, Canada, and enters upon his new duties this month.

MR. O. W. BARRETT, Entomologist and Botanist of the Porto Rico Experiment Station, has been appointed to the new office of "Plant Introducer" in the Bureau of Plant Industry at Washington, and will have charge of the distribution of tropical and sub-tropical plant stock and the inspection and quarantine of both imports and exports of plant shipments.