bottle with a loose cover, were quite sufficient. A fortnight afterwards, a number of larvæ were seen in the bottle, and several pupæ were attached to its sides. Absence from home, however, interfered with the carrying out of the experiment. It could easily be tried this season by some of our entomologists, and the time required for the transformations of this curious fly be determined, as well as the further extent of its distribution.

The outline drawings were made under the microscope, and give a fair idea of the insect. Every part of the fly is covered with hairs of different lengths, as indicated in the figure. The branched hair on the head is faithfully copied from a specimen, but in others it was not so largely developed. The wings are beautifully edged with hairs, and the membrane is also studded with them. The fly was drawn in the position given, so as to show its extremely long legs, and the curious shape of the thorax and abdomen.

## REMARKS ON AGONODERUS COMMA FAB., PALLIPES FAB., RUGICOLLIS I.EC., AND TACHYCELLUS (Bradycellus) ATRIMEDIUS SAY.

## BY JOHN HAMILTON, ALLEGHENY, PA.

Experience in exchanging Coleoptera shows that the first two and the last of these forms are greatly confused in collections. Their appearances are so similar as easily to deceive, and they are only to be separated by a close observance of two or three characters. Comma and atrimedius are abundant here, and *pallipes* is not rare. Comma and pallipes are usually confounded, the former being labelled pallipes; and atrimedius is often marked pallipes also. The typical comma has a black vitta on each elytron extending from the first to the fifth stria, which does not reach the apex, and may be more or less abbreviated anteriorly. The vitta on each elvtron is therefore separated by a yellow suture. The scutellar stria is The typical pallipes has a broad black vitta on the disk of the lone. elytra extending from the fourth stria on one side to the same on the other, and not separated by a yellow suture. It does not reach the apex and may be abbreviated in front, in which case it is narrowed towards the The scutellar stria is short. The thoracic characters are scutellum.

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