

NOTES ON COLEOPTERA—No. XII.

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Liparocephalus cordicollis, Lec.—This species does not differ in any way from *L. brevipennis*, Mæk., except in its pale colour, and the two forms must be united, as intimated in a former paper (CAN. ENT., XXIV., 158). Since the publication of that paper more than thirty examples of *brevipennis* and several of *cordicollis* have been examined and compared. Apart from colour, not a single character of general applicability has been observed by which to separate them into species. The synoptic characters given by Capt. Casey (Ann. N. Y. Acad. Sci., VII., 354) are without value otherwise than as descriptions of those of some individuals. When a sufficient number of each form is present, all the elements, without exception, tabulated by him to differentiate *cordicollis* exist in examples of *brevipennis*, and the reverse.

L. brevipennis is very variable in most of its structural parts (length of antennæ, width of head, form of thorax, etc.), for which due allowance must be made, or about four species created.

It may be observed that Dr. Leconte described *cordicollis*. He had seen only one example from the sea coast of California, and one of *brevipennis* from Unalashka, both of which, from his remarks, were evidently extremes, such as now exist. The pale colour of *cordicollis* may be from immaturity, just as in other dark *Staphylinidæ*, or it may be permanent, as occurs in variations of *Cryptobium bicolor*, *Belonuchus formosus*, etc. Rev. J. H. Keene, Massett, Queen Charlotte Islands, to whom I am indebted for such ample material, writes that he takes both forms together on the beach under rubbish in early spring, while later the pale form is not so often seen.

Tachinus Schwartzi, Horn, is by no means a common insect, and is mentioned here to record its occurrence in the mountainous parts of Western Pennsylvania. I took several examples recently in Forest County, in the pine region, from a decaying boletus growing on a pine log. It may readily be known by its black colour, elytra longer than wide and with distinct traces of sulci; the last joint of the antennæ, the four basal, and the legs, rufous; the sixth ventral segment of the male is deeply and widely emarginate, and in front of the emargination concave to the base and finely punctate, but without granulations. It was described from examples taken near Detroit, Michigan, and is known from Canada.