(Fig. 48) is ne male, and colour, from brown to an The fore wings similar wavy margin is of a the hind wings y similarly to male. These t night.



ative currant



Fig. 49. In nearly all ad were it not bushes would cause of its be more or sawdust-like (0), and some-

ler eggs upon to the heart of eason. They length. The 1 black jaws. hed with very larva gnaws a a beetle it can ed with little s stuffing the th a finer manch in length, le is ready to ts way to the its escape. pale chestnut e middle, and lowish. The d with short y hairs.

in the larval ence, secluded ape the acute death. As these worms remain in the dead stalks throughout the winter, their destruction is easily compassed by breaking off all the dead wood to the surface of the ground and burning it.

The imported currant borer is a pretty little wasp-like moth with a bluish black body crossed by three narrow golden bands. It flies only during the warmer part of the day and is very active in the hot sunhine. The female lays her eggs singly near the buds, and when hatched the young larvæ eat their way to the central part of the stem as in the insect just described, but instead of being footless this grub has sixteen feet, which are of a brown colour while the body is fleshy white.

ON THE ELATERIDÆ OR CLICK-BEETLES.

BY W. HAGUE HARRINGTON, OTTAWA.

This extensive and interesting family of *Coleoptera* has hitherto had but little attention devoted to it in these Annual Reports. Yet, it is one which deserves more than the passing mention or description of a species, and the present paper is intended to call the attention of our Agricultural readers to a large group of insects, which are now in some measure destructive, and which may become far more so in the future. The facts will be presented in as plain and untechnical a manner as is consistent with the scientific requirements of the case.

These beetles belong to the thirty-fifth family in Le Conte's classification of *Coleoptera*, and are a sub-division of the *Serricornes* of Latreille, being classed with the *Sternoxi* (sharp-breasted). They are very nearly related to the family *Buprestidæ*, which were so fully described in last year's Report by Mr. Fletcher, differing, however, from the Buprestians in being much more flattened and elongated, and less hard. They also have the hinder angles of the thorax prolonged in sharp points, which prevent any lateral movement of it. The thorax in most cases is very loosely articulated to the meso-thorax, allowing considerable motion upward or downward of the front part of the body.

The pro-sternum (breast-bone) of the Buprestians was mentioned as being prolonged backward into a point or spine, and this spine-like pro-sternal process forms one of the most striking characteristics of the click-beetles. Our great teacher in scientific nomenclature, Linnæus, gave to these beetles the name Elater, (from a Latin word meaning to "bound,") but this name is now strictly limited to one of the many genera comprised in the *Elateridæ*.

The family is one very easy to determine, as the species preserve a marked resemblance to each other, varying but little in general shape, and going to no extremes in size or colouring. Glancing at a collection of them, it will at once be seen that there is a preponderance of dull black or brownish species, with occasional touches of red or yellow, but none are so brilliant as forcibly to individualize themselves by mere gay tints. Roughly, they may be said to vary in size from a quarter inch to two inches.

They have been named click-beetles, skip-jacks, spring-beetles, snap-bugs, clickers, snap-beetles and blacksmiths, from their power of leaping from their back, or from the clicking noise which attends such a performance. By the celebrated Swammerdam they were called grasshopper or locust-beetles.

As already stated, they belong to the great tribe of Serricornes, or "saw-horned" beetles, so named because the inside of the antennæ presents a notched appearance, from the joints having the tips more or less projecting. Their antennæ are eleven-jointed, except in a few rare instances where an extra joint is found, and are placed widely apart. In some genera they can be laid back under the thorax in grooves excavated along the margins of the pro-sternum so as to be beautifully hidden and protected. The great majority of genera have these members of moderate length, and but slightly serrate; but in some few genera they are longer and pectinate, especially those of the males.

Click-beetles have rather short and slender legs, which can be folded very closely to the body when the insect is alarmed. One of their most marked peculiarities of structure is the spine into which the pro-sternum is produced. It is to be found between the first