P. pysoderus is a much smaller beetle, being but three quarters of an inch in length. Its colour is a dark brown; the hinder angles of the thorax are produced in acute spines, and the tubercles are not prominent. It is common in the Southern States and emits a light equal in intensity to that of our native "fire-flies," but constant instead of intermittent.

In the Phillipine Islands is found a very large species of Elater, called Oxynopterus (sharp-winged) Cummingii. It is a large, reddish beetle and the male has fine pectinate antenna. The prosternal spine is stated by Wood to be as large as a crow-quill, and three-fourths of an inch long, so that its powers of leaping and clicking must be well marked.

The genus *Pachyderes* is distinguished by having the thorax twice as broad as the elytra; *Semioti* has the tips of the elytra spined; and the males of *Macromalocera*, from Swan River, Australia, have the antennæ as long or even longer than the body.

Of seventy species found in Great Britain, the largest is Ludius ferrugineous, a dirty

red beetle about an inch long.

Turning now to Canadian beetles, the first sub-family is named *Eucnemidæ*, and comprises a few small compressed beetles found under bark or on leaves, and rather uncommon. Wood says that the prothorax in these species fits too tightly against the base of the elytra to admit of them leaping, but Le Conte claims for some a feeble power to do so. The second sub-family *Cerophytidæ* consists also of a few species of small beetles, living under bark, and rarely, from their size and habits, seen or captured.

The third and last bears the family name—Elateridæ—and includes all of our remaining species. Of these the largest and most striking examples are contained in the genus Alaus (meaning "dull" coloured). There are four species found in Northern America, viz.: Melanops, Gorgops, Occulatus and Myops, of which the two last (at least)

are found in Canada. A. occulatus (Fig. 52), must be familiar to nearly all my readers, and is the largest of our Elaters, varying in length from one and a quarter inches to one and three quarters.

Its general colour is a deep glossy black; the under surface of the body, and the legs being thickly powdered with white. The broad, almost square, thorax is also powdered (but usually much rubbed), with the exception of two large, oval spots of a rich black velvety appearance, and rimmed with white so as to seem like great staring eyes, often causing the thorax to be mistaken for the head by those ignorant of an insect's construction. These beautiful markings have determined its specific name; for occulatus is simply the Latin form of "eyed." The elytra are marked by longitudinal, impressed lines, and are sprinkled with bright white spots, of the same powdery substance which covers the rest of the body.

In early summer it is found crawling slowly, or sunning itself on trees, fences, buildings, paths, etc., and is easily captured. In Duncan's "Transformations of Insects" the larva is snown crawling on the ground, and the pupa in a cell beneath the surface, but Dr. Harris states that "it undergoes its transformations in the trunks of trees." He found them in old apple trees—the larvæ feeding upon the wood. The following is a portion of his description:—

"These larve are reddish-yellow grubs, proportionately much broader than the other kinds, and very much flattened. One of them, which was found fully-grown early in April, measured two inches and a half in length, and nearly four-tenths of an inch across the middle of the body, and was not much narrowed at either extremity. The head was broad, brownish and rough above."

Soon after the grub was found it cast its skin and entered the pupa state, and at the

proper time emerged as a beetle.

A myops is a somewhat smaller and less robust beetle, and varies more in size, some in my collection being only one inch long. In general appearance it is much like occulatus, but is not nearly so handsome an insect. The markings are less distinct, the colouring more greyish, and the eye-like spots on the thorax are much smaller and duller, whence it has received its name of myops, or the "short-sighted" alaus.

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