, thick, sharpto deposit their

nall number of z, Thunb. (Fig. ttle more than ong, and finely on their inner e head, to bear ne female it is ed with puncggs, which are female, in the uly, when this the trunks and e trees, willows white grubs, of ral appearance, characteristic ransverse foldable for having dy, which preg on their sides. two powerful it reduces to a ch are attached of the minute undergoes its mandibles or horoughly the t the male and insect lives six as they bore

he Romans, as

nis family, but

of Lamellicorn ra, comprising by having the terminated by an at will. In the basal one inclosed. The thorax of the of the most ceive the uses. of the females, wex, the legs

art subsisting es and flowers, In the colours ler ground are wers are often d never occurs but in the writings of Latin authors; yet Fabricius and Olivier give its derivation from the Greek σκάπτω—to dig, which MacLeay doubts, considering it to be of Etruscan origin, adding that it may have been obtained from the Greek σκαριφαομαι—the verb διασκαριφησαι being properly applied to the actions of animals which scratch or dig up the earth with the claws. Pliny gave a description of the sacred beetle of the Egyptians under the name Scarabœus; and in later times Linnæus applied it in a general way to the whole of the Lamellicorn beetles, placing the gigantic horned species, at the head of the genus. The Rev. J. G. Wood writes as follows:—"The Latin word Scarabœus is nothing but a corruption of the Greek word καραβοs—a crab. It was also employed to designate the cuttlefish, on account of its mode of crawling, the name being composed of two Greek words, signifying 'to walk on the head.'" By Aristotle, it is applied to an insect which is evidently the stag-beetle; but Linnæus was the first who gave it to the ground-beetle, and it has been so universally employed that it will continue to hold its place.

It is possible that the name may have been applied to these beetles by Pliny, from the fact that the female of the sacred Scarabæus, when it is rolling the balls of dung, in each of which it has deposited an egg, to the place where it has dug its burrow, does so by walking backwards and pushing the ball before it. Now from the size of the ball, generally over an inch-and-a-half in diameter, it actually has almost to stand on its head

when it places its feet on the top to roll it.

It would be impossible to do more, here, than mention briefly some of the most interesting sub-families and species of this extensive family of insects, the members of which exhibit such great variations in the form and arrangement of the various organs of the body, although preserving a characteristic appearance, and conjoined with it the lamellate antennal club and fossorial legs.

They have been conveniently divided into three divisions by De Geer.

Those which live upon or beneath the surface of the earth, or "ground beetles."
Those which in the perfect state are found upon and devour the leaves of trees, or "tree-beetles."

3. Those which in the perfect state frequent flowers, or "flower-beetles."

To the first group belong the most useful of insects, who in providing for the perpetuation of their species, at the same time till and manure the soil and dispose of offensive matter. This will be better understood by a glance at their life histories.

In Ontario we sometimes meet with a fine ground beetle, named Canthon lovis, Drory, which belongs to the same sub-tribe (Ateuchini) as the Egyptian Scarabeus, to which it bears great resemblance. A noticeable feature of these insects is the length of their hind-legs, and the proximity of the bases or coxæ to the end of the body. This peculiar structure is of particular service to them. Their mode of depositing eggs is very remarkable. The female having discovered a deposit of fresh cow-dung, at once seeks for a suitable place, and digs out a pit about 18 inches deep; she then returns and gathers together exactly so much of the material as will amply supply one grub with food, and in the centre of this she deposits an egg. She then proceeds to form it into a round ball; at first it is quite wet and soft, but by turning her back to it she works it backwards, in the hot sun-shine, by means of her long hind-legs, over dusty or sandy soil, and it gradually becomes rounder and harder, by taking up some of the dry dust as it goes along. When she arrives at the hole, she previously prepared, if her ball is dry and hard enough, she drops it in and covers it up; but if it is not sufficiently hard, she takes it for another short circuit, during which it picks up more dry dust and gains the required consistency, and then brings it back to the hole and buries it. If the day is wet or even cloudy, these insects will not work at all. Occasionally intervening objects render this task of transportation exceedingly difficult; but she works away with the utmost patience and determination, and is generally successful; sometimes as a last resource when obstacles of unusual magnitude have to be surmounted, she will call in the aid of one or two other beetles. It is curious, too, how cheerfully they seem to work for each other, and although it is almost impossible to induce one of these insects to abandon the ball which contains her egg, yet if when two females are engaged in depositing eggs at the same time, the balls are changed, neither seems to be aware of the deception, and they labour as contentedly for each other's egg as if it were their own.