

The scavenger-beetles feed on decaying vegetable and animal tissue and also on small, living animals; the larvae are said to feed entirely on living forms, such as insects, snails, tadpoles, etc.

About 150 species belonging to this family are found in North America.

Representatives of both these families are readily secured by sweeping the bottoms of ponds with a dip-net. They make good subjects for school study, and can be kept in aquaria, covered with cheese cloth, for a long time, when properly supplied with food. When free in nature, they fly from pond to pond and are frequently found near electric lights in towns and villages.

The adult form of the May-beetle or June-bug, as it is called in some localities, is too well known to need further description. Fig. 5 is given to illustrate its life history. Note the shape and position of the larva in its little underground home. These larvae are the well known white grubs, often turned out by the plow. They feed on the roots of grass, corn and garden plants, but the adult is said to feed at night on the leaves of various shade and fruit trees. The pupal stage is also passed underground. Dig in garden earth for larval and pupal forms. The adult form, quite inactive, is often found in the ground, during spring and early summer. Is it likewise found in the fall?

Compare the life history of the May-beetle with that of another familiar beetle, the Colorado potato-beetle.

How many stages are present in the life cycle of the potato-beetle?

How do these compare with similar stages of the May-beetle?

In what form does each of these beetles pass the winter, and where?

These and other questions from the teacher, if properly answered, will tend to develop this line of work and bring many happy surprises to the interested teacher.

The insects mentioned in this article belong to the order Coleoptera, (Gr. *koleos*, sheath: *pteron*, wing). They all agree in possessing hardened sheaths to cover the hind wings (hence the name), and biting mouth-parts. The Col-

eopectera are true beetles, not "bugs." In their life cycle, they undergo a complete metamorphosis; their larvae are called grubs.

The Coleoptera is a large and important order; there are said to be about twelve thousand species in North America, north of Mexico. We find a representative of the order, the sacred beetle, the *Scarabaeus* of the ancients, carved

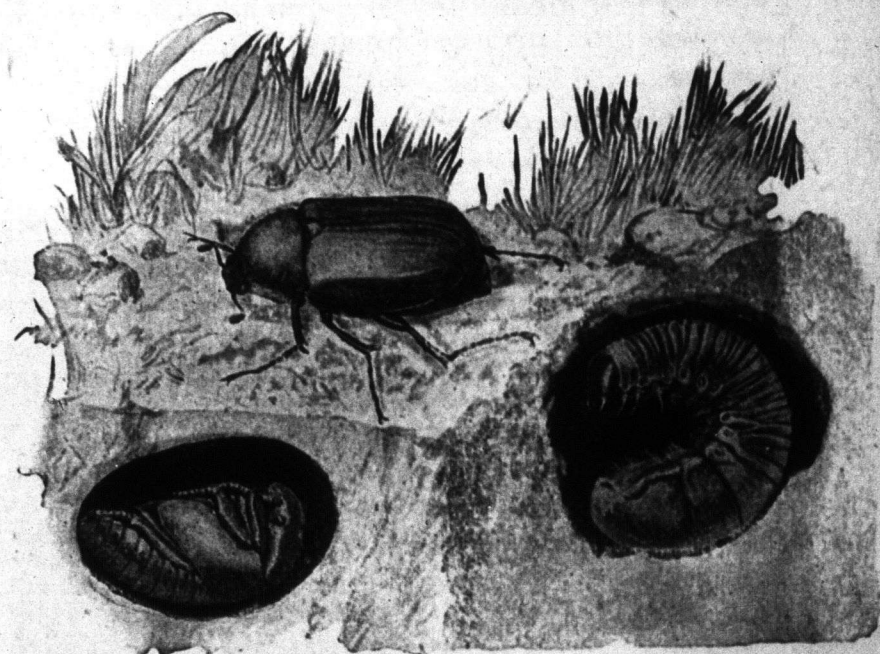


Fig. 5. May-beetle, showing larva (or white grub), pupa and adult. (Natural size).

on the monuments of stone of ancient Egypt, and history tells of the important part it played in the religion and symbolism of that country. And in our own day, we have hardly begun to compute either the harm or the benefit, arising from the habits of the various species of this order, to the agricultural and other industrial operations of our country.

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SURE OF THE "PEP."

A laborer in one of our plantations a few days ago went up to one of the overseers and in a serious manner, which evidently showed that he was really seeking enlightenment, said in his local vernacular, which we cannot attempt to reproduce: "Massa, is it true that before the war the Kaiser sent a bag of rice to King George and told him, 'King George, I got as many soldiers as they is rice in the bag,' and that King George sent the Kaiser a bottle of nigger peppers and tell him: 'I only got as many soldiers as is in this pepper bottle, but you just bite one and then you'll see if your soldiers like these?'"—*Barbadoes Standard*.