

There are also several species of another sub-tribe (*Coprini*), closely allied to the *Ateuchini*, which possess somewhat similar habits. They differ chiefly by frequently having the heads of the males armed with a large curved horn, and by having the middle and hind tibiae gradually thickened, which unfits them for transporting the balls of material which serve for the food of the larvæ; though some of the species do construct balls, they bury them in the place where they are formed. Notwithstanding that these insects live in such unclean localities, they are remarkable for their constant state of glossy cleanliness; this is due to an oily fluid which they secrete, and which prevents all the nasty things they live amongst from collecting upon them or staining their coats.

The type of this group (Scarabæidæ), is the renowned *Ateuchus Sacer*, or Sacred Scarabæus, of the Egyptians, perhaps the most celebrated of insects. It was worshipped by them as a god, and dried specimens of the actual beetles or models of all sizes and in every possible material, from the commonest stone to the most precious metals, have been frequently discovered in Sarcophagi, or rolled up in mummies and other ancient relics found among the monuments on the borders of the Nile. For common use they were made very small, and some were pierced so as to form necklaces for the women, others were used as seals, as is shewn by the inscriptions beneath them. Plutarch states that the military caste made use of the figure of a Scarabæus as a seal, and Horappollon explains this by asserting that this insect peculiarly represents man, since (as was formerly believed) "there are no females of its species." A male wishing to procreate, said the Egyptians, takes some of the dung of an ox, and having fashioned it into the shape of the world, rolls it with its hind legs from east to west, and places it in the ground, where it remains twenty-eight days. On the twenty-ninth day the ball is exhumed and thrown into the water, where it opens and another male comes forth. Some of the models of the Scarabæus which have been found are of very large dimensions—one in the British Museum, carved in granite, is about four feet in length. There are several smaller specimens cut from marble, porphyry, agate, lapis-lazuli, garnet and gold.

Representations of it are to be found everywhere throughout the whole land of Egypt, carved upon the temples, tombs, monuments and obelisks.

The reverence shewn to these insects seems to have been called forth by many causes in their imaginative minds. Being an agricultural people, and knowing the habits of the Scarabæus, they worshipped it, because they could appreciate how, by the manner in which it provided for the welfare of its own offspring, it also benefited them by fertilizing the ground, and removing from the surface obnoxious matter. Its sudden appearance in great numbers on the sandy margins of the Nile, after the fall of the water every year, together with its extraordinary motions whilst rolling along its globular balls of dung, were regarded as mystically representing the resurrection of the soul, and the motions of the earth and sun. It, with the earthen ball containing an egg in the centre, was also regarded as an emblem of fecundity, and to this day, the beetle is eaten by the women of Egypt. On account of the shape of the egg-ball, and the wonderful care bestowed upon it by the parent beetle, it was employed as an emblem of the Creator's watchful care over the world.

In addition to these, a short mention must be made of two other families of ground beetles which are much commoner, and which from that account perform the useful work of their kind much more fully than the above-named interesting species. These two families are the *Geotrupidæ* or earthdiggers, and the *Aphodiidæ*, or cow-dung frequenters. They do not form balls of the food for their larvæ, but burrow straight through the mass and down into the earth below; they then bring down some of the material from above, and deposit an egg in it, in the same way as the others. Two well known instances of these families are *Geotrupes blackburnii*, a small, blackish beetle with a green lustre, of about one-half or three-quarters of an inch in length, and *Aphodius fimetarius*, a small cylindrical insect, with coral-red elytra, which is always to be seen about manure heaps in spring, and although it is one of the commonest of our insects, was only introduced from Europe a comparatively small number of years ago.

To the second division of the Scarabæidæ, namely, the "Tree-beetles," belong a large number of insects, which are perhaps even more injurious than their near relatives, the ground beetles, are beneficial. These are of much greater interest to the farmer than

any other class destroy an egg the larval stage. The most injurious done, have a it is not voracious. The M.

The M. *Melolontha*, which were flowers of apple in the world (33) gives a insects in the may be easily already too v In fig. 33, No "White Worm" ditor, is also worm with the body is and a half lo rule three) yet time it destroys its reach in the has been found roots of straw vegetables, but have been killed digious number rolled up from stage of this insect of *Lachnosternus* be found in the



but arti Fab des Fig, 34 this *dnota punctat* beetle, of which tation, the color cases is redd decorated with The thorax, which bears two mandibles jaws and scutum and under surface. The Larva, which like the white fed by a distinct on the last se purer white, and has been found and roots of plants the summer time