THE FLAT-HEADED APPLE-TREE BORER (Chrysobothris femorata), Fig. 30, is much more common than the preceding species and diffes in many respects in its habits and life-history. The adult beetle is about half an inch in length, somewhat flattened above and with short antennæ. The upper surface is dark metallic brown, while beneath it is bright copper color; the thighs of the fore legs are armed with a stout tooth, from which the insect's specific, name (femorata) is derived. It delights in the hot sunshine and may be found on logs and the trunks of trees. Like most wood-borers, it chiefly attacks trees that are dying or weakened by disease, and will bore into the limbs and branches as well as the trunk; its chief injuries, however, are done to young and newly transplar trees. The eggs are laid late in May and in June in crevices of the bark, through which the newly hatched grub bores, and forms its broad burrow immediately under the bark. The cnannels thus made sometimes extend completely round, so as to girdle and cause the death of the tree or limb.

This larva differs very much from the preceding in having the segment next the head broad and flat and much larger than those following, and is usually to be found with the posterior half of the body very much curved; it takes but a single year to complete its life period. Attacking, as it does, all parts of the tree, the preventive measures suggested for the Round-headed Borer are of no avail unless the wash is applied to limbs and branches as well as trunk. V. nen discovered the grubs may be killed with a knife; but their presence is not readily seen. Woodpeckers, however, have no difficulty in finding out the burrows and devour large numbers, and the presence of these birds in the orchard should by

all means be encouraged.

As this beetle attacks a number of forest trees, such as oak, beech, birch, elm, etc., as well as mountain ash and many other cultivated trees, it is necessary to see that no dead or dying trees are left near the orchard to serve as breeding places. They might, however, serve as traps, if

rare was taken to burn them up before the month of May.



Fig. 30. Flat-headed Apple Tree Borer: a, grub; b, pupa; c, enlarged head and following segments; d, beetle.

2a Bull, 158.

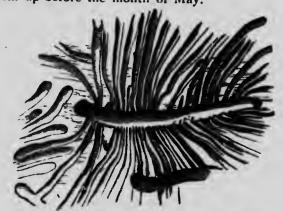


Fig. 31. Tunnels under the bark made by a Scolytus beetle.