Crown Rot or Collar Rot.

This is the name commonly given to that form of injury which consists in the death of the bark around the base of the trunk of trees. The girdling may be either complete (and in such cases the whole tree soon dies) or may be partial, only one side or portions here and there being girdled. In the latter cases, the branch or branches just above the dead bark may die, but often the whole tree may remain alive and healthy. There is a great tendency, however, for these semi-girdled trees to become completely girdled after a few years. Crown Rot is fairly common in apple orchards in most parts of the province, and is by no means limited to the colder districts. King of Tompkins is specially subject to it, but many other varieties also suffer.

There are several theories as to the cause of this Collar Rot, but the writers are convinced that the chief cause is low temperatures acting upon succulent tissues which have not been properly hardened up for winter. The bark at the crown is much more tender than that higher up on the trunk, and hence where trees have been over-fertilized and cultivated too late this is the part that is most likely to be killed, especially if not protected by snow.

The death of the bark around the base of the trunk of peach trees and also of sweet and sour cherries, sometimes extending a short distance below the ground, is probably very closely allied in nature to the Collar or Crown Rot of apples. It is usually found where the trees are in exposed situations or where wind currents sweep through the orchard, especially if the trees were very thrifty the previous summer.

Methods of Control. (1) Do not plant on their own stock King of Tompkins or any other variety known to be very subject to this disease. If these varieties are desired, they should be grafted on immune or nearly immune stock, such as Tolman Sweet or Transcendent or Martha Crab.

(2) Do not over-fertilize or cultivate so late that the trees will not have their wood and bark hardened up for winter. Cultivation, even in the warmer districts, should usually close about July 1st, and a week or two earlier in the colder districts. A cover crop should be sown as soon as cultivation is finished. This will help to hold the snow on the ground.

(3) Never plough away from the trees in autumn, but see to it that the soil around the trunk is high enough so that no water will remain there.

(4) It is very probable that on exposed positions peach trees could be saved from this trouble and also from root-killing by first banking up a little earth around the trunk and then placing about six inches deep of manure around this for a width of two or three feet. It is better not to have the manure in contact with the trunk itself.

(5) Where trees are only partially girdled, especially apple trees, it is a good plan to remove the dead bark and cover with coal tar the wood thus exposed. Rotten bark favours the entrance of fungi, hence the reason for its removal.

Black-Heart.

After a very cold winter or after sudden extremes of temperature many apple, pear and peach trees will, on examination, be found to have their wood killed and darkened, even though the bark and cambium are still alive. Young trees, including nursery stock, are more subject than old trees to this trouble, but the branches even of old trees may be affected. Where the injury occurs in the same tree a couple of years in succession, or where rot-producing fungi get entrance through