HOW TO IDENTIFY THE BAN JOSÉ SCALE.

APPEARANCE OF THE SAN JOSÉ SCALE, -- If we take a San José Scale infested piece of bark or an infested apple or pear in the summer or early autumn and examine it carefully we shall find the surface studded with small dot-like bodies. If we crush these, juice or fat will run out from beneath, and if we use a pin or a knife we can easily remove them from the bark or the skin of the fruit. These little dot-like bodies or specks are scales. Now if we examine them more closely with a hand lens we shall see that there are a few circular scales several times larger than any of the others. These are the adult female scales, and they are usually grayish or grayishbrown in color. Further study will reveal a good many elongate or oblong scales about twice as long as broad, and usually grayish or blackish in color. These are the adult males. Examining those that are left we shall find large numbers of little black scales about half the size of the males but quite circular. These are a very important stage of the immature females and males, because it is in this stage that all, or practically all, the San José scale winters, and by them we usually identify the insect. In addition to these three forms we shall find, especially on warm days, numerous little orange yellow scales running about. These are the larvae, both

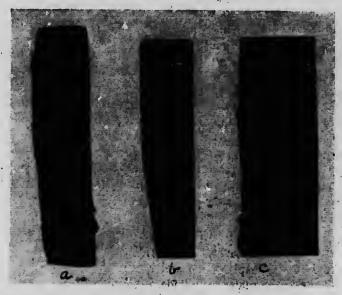


Fig. 2. (a) A healthy piece of apple bark showing the natural smooth surface.

(b) A badly infested piece with the bark completely covered by the scale. This piece has an ashy appearance.

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(c) A similar piece of bark to 3, but showing the small circular areas from which dead adult female scales have dropped off. Natural size. (Original.)

males and females. It is only while in this stage that females can move about. Intermediate between these active little yellow larvae and the small black circular stage will be seen little white dots, which are the young larvae that have just settled down and covered themselves over with their first waxy coat. As this covering thickens and hardens it gradually becomes darker, until the black stage mentioned above is produced, so that we shall find many very small scales varying in color between white and black. Of course, what we see with the naked eye, with the exception of the little active yellow larvae, is not the insects themselves, but merely

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