

THE PEAR LEAF BLISTER

WE have several times received from subscribers in various parts of our province, samples of pear leaves having black corky spots upon them, and these were either a mystery to the senders, or else supposed to be either leaf blight, or scab. After consultation with Prof. Fletcher, of the Central Experimental Farm, we were able to reply that the cause of the trouble was a minute mite (*Phytoptus pyri*), belonging to the same order (*Acarina*) as the cattle tick, and the itch spider. Fig. 2600 shows an adult mite, greatly magnified. Indeed, these mites are so small that they cannot be seen without a glass, and to study their structures a first-class microscope is necessary.

Bulletin 61 of the Cornell Experimental Station, gives a most excellent account of this mite, written by Prof. Slingerland. To give an idea of their diminutive size, he says that it would take 150 of them placed end to

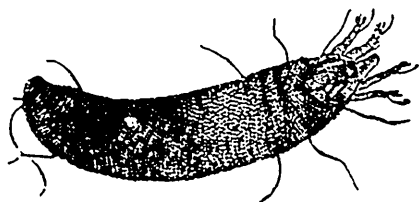


FIG. 2600. PEAR LEAF BLISTER MITE.

end, and 600 side by side to measure an inch. These tiny mites winter underneath the outer scales of the buds, fifteen or twenty having been found underneath a single bud scale. Thus situated, they are ready for mischief early in the spring.

The diseased portions of the leaves are

really galls, produced by these mites, and within them the eggs are deposited; they are quite easily distinguished from the fungus spots by their blister-like corky appearance.



FIG. 2601.

Fig. 2601, from the bulletin referred to, shows a highly magnified section of a pear leaf through one of these galls, *g*, showing gall; *n*, *n*, normal structure of leaf; *o*, opening of the gall; and *e*, eggs of the mite.



FIG. 2602.

Later in the season the galls dry and turn brown or black, and are more conspicuous on the lower side. The leaf in the meantime has shrunk to its normal thickness, as shown in Fig. 2602, in which *g* is gall, *n*, *n*, uninjured portion of leaf, and *o*, opening to gall from under side.

Various remedies have been experimented with, but the most successful one, according to Prof. Slingerland, is a thorough spraying in winter with kerosene emulsion diluted with from five to seven parts of water. Apply from every side, so as to reach all autumnal buds, for it is about them the blister mite is most abundant.