

of round holes of 1 millimeter in diameter. 8 oz., or 227 grams, of infested chaff yielded 1.52 grams of dust and mites.

METHOD EMPLOYED FOR BULK TREATMENT OF CHAFF.

After the comparatively satisfactory results resulting from carbon-disulphide fumigation, it was decided to employ this method on about sixteen thousand sacks that represented the worst-affected of the lines which could not be safely shipped owing to their extremely mitey condition. The application of heat or cold would, of course, have necessitated special accommodation and apparatus, and for so large a quantity of material would have been extremely expensive. Any method, too, that required the rebagging of the chaff was clearly out of the question for this occasion.

About ten days before the proposed shipment of the chaff the shed was made as airtight as possible, and some 40 gallons of carbon disulphide was poured into the various stacks from the top. The liquid was well distributed and volatilized rapidly, necessitating considerable speed in the application of the material. The sides of the stacks were also sprayed with carbon disulphide through a Bordeaux nozzle, but this part of the work had to be curtailed owing to the overpowering effects of the fumes. After the carbon disulphide had been applied the only exit from the shed was battened up. Owing to the extremely inflammable nature of carbon disulphide every possible precaution was taken, and the shed was carefully guarded throughout the fumigation. The fumes escaping from the shed were quite strong five hours after the application of the material, and when the place was opened next day the smell was distinctly noticeable in the vicinity of the treated stacks. In fact, nearly a week afterwards, when the stacks were being broken down, the disagreeable odour of carbon disulphide was present.

The effect on the mites appeared to be that many were driven to the outsides of the sacks, where they perished. While it could not be claimed that the fumigation exterminated all the mites, yet it certainly was instrumental in limiting any increase of the pests and rendered the chaff perfectly safe to ship. The whole of the chaff, with the exception of some 150 sacks picked out as likely to cause recontamination, was shipped, and arrived at its destination in excellent condition. The cost of the fumigation was extremely low, being less than 1s. 6d. per £100 worth of material treated.

TREATMENT OF INFESTED BRAN.

The mites were found particularly abundant in a large stack of bran, in which they appeared to thrive, owing to the large amount of food easily available to them in a powdery form. The stack