

BORERS.

Q. What is the mixture for preventing borers in trees?

A. It is made with ordinary soft soap, diluted or made thinner with a strong solution of common washing soda. You make the solution of washing soda as strong as possible, and then thin the soft soap with that, and if this wash is painted on the trees on a clear warm day it will leave a thin, varnish-like coating on the trunks which will stay there for a number of weeks, and will prevent the female beetles from laying their eggs on the bark. The borers are the grubs of beetles which hatch from eggs laid on the bark; if this coating of soft soap and soda is painted on the trees the mother beetles will not lay their eggs there and the trees are safe.

Q. That would be death to all that kind of insect?

A. Yes, because the trees are rendered obnoxious to the beetles when they go to lay their eggs, eggs are not laid, and injury is prevented.

PEA WEEVIL.

Dr. Saunders told me, Mr. Chairman, that some gentleman in the Committee wished me to speak to-day about the Pea Weevil or "pea bug," as it is frequently called. The insect I refer to is the one which bores inside the pea and leaves a small round hole in the seed pea, through which the beetle emerges. The pea weevil we know does a great deal of harm every year. This harm, I think, is, on the whole, less than it used to be, because better measures are now taken by seedsmen and growers to disinfect their seed.

Remedy.—The bisulphide of carbon treatment is perfectly effective against this enemy. By using this chemical all the weevils inside the seed pease can be killed, and if clean seed, or seed in which all the weevils have been killed is sown, and seed is now treated regularly by growers, by that means the insects must, in time, be reduced. The trouble is, many of the weevils leave the seed in autumn and hibernate about the roofs, shingles or rafters of barns. In some seasons the proportion of the beetles that do this is large, but in other seasons the majority remain inside the pease, when, if the seed is properly treated, the numbers are much reduced, and it is in those years that we hear people say it is a "good year." By remaining inside the pease the insects are destroyed when the seed is fumigated, and therefore there are very few beetles left to lay eggs in the next year's crop. In the big seed firms they have "bug houses," special places where they can treat at once 100 sacks or more by putting them inside these air-tight chambers and then putting bisulphide of carbon on the top in shallow open vessels, so that evaporation may take place readily. When all the sacks are placed in the bug house, the bisulphide is emptied into the pans at the top and the whole is left tightly closed for forty-eight hours. The bisulphide vaporizes easily and the heavy vapour falls down through the pease and as they are kept tightly closed in, under the influence of this poisonous vapour all the weevils inside the seed pease are destroyed. It is best to treat the pease as soon as possible after they are threshed, so that the weevils may be killed before they have consumed much of the inside of the pea. The egg is laid on the green pod and the young grub hatches and eats its way inside and then penetrates one of the pease inside which it lives until it is mature. A very convenient way for farmers to treat their pease is to use an ordinary 45-gallon coal oil barrel. Pour five bushels of pease into it and then put three ounces of carbon bisulphide in a flat vessel on the top of the seed, close the barrel tightly, first with a damp sack on the top and boards on the top of that so as