

A NEW PEST OF THE PEAR.

a, *Agrilus Sinuatus*, adult beetle; b, full-grown larva; c, one of the anal hooks more enlarged; d, pupal cell in the solid wood. The last engraving shows a sample of burrows in young pear tree, from a photograph. This is the first publication in America of either the description or illustration of this serious pest and the remedy for it.

Sinuate Pear-Borer.

A BORER which did great damage last year to the peach trees in several districts of country is thus described by Professor John B. Smith: The bark on the trees showed peculiar dark, somewhat depressed lines, and was sometimes cracked. Slicing off a section down to the sap wood, I found broad, shallow burrows or channels, partly in the bark and partly in the wood, dry and brown in color, more or less filled with sawdust or frass. These channels were very irregular, zigzagging from side to side, but not evenly; sometimes forming a long bend to one side and a short one to the other, or again reversing this. Not only the trunks but the larger branches were attacked, and later I found that even nursery trees, or those just set out, did not escape. Following the course of the burrow, the culprit would be found in the shape of a white, flattened larva, varying from half an inch to an inch or more in length, the anterior segment very much enlarged, the following two decidedly smaller, and beyond that the joints were more even, but always strongly marked, the last ending in a pair of little brown curved points, or hooks. Investigation resulted in the discovery of an adult beetle $\frac{3}{4}$ of an inch in length, *agrilus sinuatus oliv. r.* This beetle makes its appearance about the middle of May, flies only in the hottest sunshine, and lays its eggs in the bark some time in June. Early in July the very minute larvæ may be found in the sapwood, and they feed until winter, becoming by that time above $\frac{3}{4}$ of an inch in length. Feeding is resumed in spring and continues until September, when the larva is from $1\frac{1}{2}$ to $1\frac{3}{4}$ inches in length. It then bores into the solid wood about $\frac{1}{4}$ of an inch and forms a cell, in which it rests until March or April, when it changes to a pupa, and soon afterward to a beetle. Thus the larva feeds two years in the trees, and during that time forms channels from six to eight inches in length. As to remedies nothing very definite has yet been discovered. In France the trunks of the trees are covered with straw coated with coal tar. In Germany a mixture of cow dung and clay is plastered on the trunks and kept in place with bandages.

Libe Stock.

BREEDERS are looking about for bulls, and far sighted herdsmen will insist upon choosing the best bulls offered for sale.

THE value of beet pulp for feeding cattle is being demonstrated largely in California, where beet growing is an important industry.

As a remedy for film on an animal's eye, get burnt alum. Pound and rub the alum into a

powder, making it as fine as flour. Fill a common goose quill partly full, and from that blow it into the eye. If the eye is bruised by a blow the alum would probably do no good.

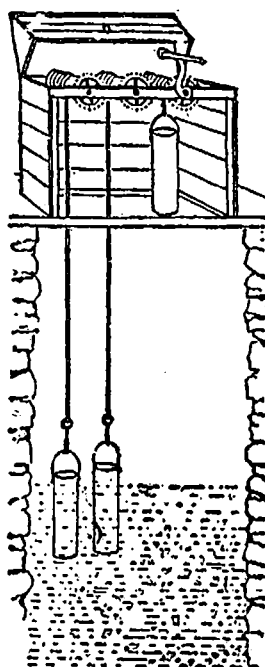
Sows and young pigs ought to have plenty of grain with slops and sour milk. Arrange to have a swill of milk undisturbed by the older hogs or their own mother.

FOR ticks on sheep, take oil of turpentine, four parts; olive oil, twelve parts; creosote, one part. Mix well, and apply along the body, parting the wool. Too much should not be applied at one time.

FRIGHT and excitement are frequent causes of abortion in timid and nervous mares. The sudden appearance of strange and noisy objects, and disagreeable strong odors of animal matter are to be avoided. Also fast riding, driving and overloading.

CAREFUL tests were conducted by Prof. Jas. Law during the past winter at Cornell experiment station. "Taking all in all, there is nothing in the records of temperature to indicate, either at the time of the test or later, that tuberculin had in any proved inimical to the general health." The decline in milk which followed is claimed to have not been more than the natural falling off. No effect of tuberculin was observed on increase or decline of fat in the milk. Prof. Law concludes, "So far as there is evidence before us, everything points to the harmlessness of a single test dose on a sound animal system, even if such dose were repeated several times."

WITH reference to the use of caustic potash in dehorning "J.M.D." writes:—In the spring of 1894 I applied caustic potash to two calves as a dehorner. I supposed it had proved effective, but early in the autumn the horns began to grow again and are now about two inches long. The small horn was taken off completely. What was the trouble? The failure to completely kill the horn germ was undoubtedly due to an incomplete application of the potash. Best results are obtained by operating on the calf as soon as the horn button can be located. Clip off the hair covering it, wet one end of the stick of potash, and rub the horn until it has a red, inflam-



A SUCCESSFUL CREAMERY.

ed appearance. When the scab comes off examine the calf's head, and if there is the slightest evidence of a horn, repeat the operation. Watch the animal, and if the horns begin to grow give another application. If J.M.D. had observed this, he could have prevented the growth when he found that the first application had failed. The caustic had evidently not reached the horn germ and it finally developed. This method of dehorning has been tested not only by careful experiment station men, but by a great number of practical stock raisers and farmers, with satisfactory results. If thoroughly applied it will prove successful in nearly every case. It is by far the best method of getting rid of horns.

The Poultry Yard.

Setting a Hen.

THE illustration on previous page shows the very best way to set a hen that has yet been discovered, so far at least as the writer is concerned. The nest is made in a roomy box, with cover. Nailed to one side of the box is a little slat yard—slats on top also—in which water and food are kept constantly. The hen can go out into the yard at any time, eat and drink and has no temptation to wander away and let her eggs get cold. When several hens are setting a contrivance like this for each saves all bother of looking after them, to see that two do not get on the one nest, etc. You put food and water in the dishes—the hen "does the rest!"

ALBERT F. FIRESTONE contributes the following extremely interesting article to the *Poultry Monthly*:—I have noticed several communications from prominent breeders on the subject "The care which fowls should receive after they are mated." I do not expect to be able in this article to add anything new, but I hope that I will be able to give a few hints which will be of some benefit to the novice and the beginner. With some breeders it is not that they do not know, so much as they do not practice. What some poultrymen know is their greatest fault. The care of breeding birds should be such as to enable the fowl to first perform the duty of production; the fowls should be so cared for that they will live, thrive and grow to standard weight. There is no duty which can be safely neglected by the fancier who desires to make a success of it. There is one duty which must be considered or else disaster will surely follow.

A breeding-pen made up of strong, vigorous and healthy fowls is certain to produce the same; the chicks from such birds will resemble their parents; and on the other hand, if these fowls should be weakly and sickly, unprofitable chicks will be the sure issue. The proper care of the breeding birds then resolves itself into the important question: How can I keep fowls in the best of health? Three-fifths of the sickness that fowls have is due to the fact that winter finds them out of prime condition; I do not mean disease, but a lack of that surplus of energy and vigor which enables them to successfully stand the cold, blustering winter. Fowls ought to be fat and glossy in the beginning of winter. This fat ought to have been acquired when they were at full range. I do not think that breeding fowls, when used as such, should be fat. I have found that a fat fowl at the opening of the winter made a better breeder in the spring than one that was lean and weak. If the fowls are not fat and healthy, they should by all means be got in that condition by the beginning of cold weather, by a liberal supply of grain.

The poultryman who has his fowls properly mated and gives them the care they require, will surely carry away the blue ribbons and cups at our next season's shows.