

MEANS OF PREVENTING HOG CHOLERA. BY D. W. DENNIS.

During the spring term of 1894 I gave twelve chapel lectures at Earlham College on the conquest of disease. In one of these lectures I discussed the late cholera pestilence in Hamburg and presented a bulletin like those posted up throughout the city, directing the sterilization by boiling of every article of food and drink and of all infected utensils and clothing. I called attention to the fact that science had not only kept the plague from crossing the ocean, but had limited it by a single street in the city of Hamburg itself.

Mr. Porter Cook, of Wilkinson, Hancock County, was a student with us at that time. His father, Mr. Lorenzo D. Cook, had lost by hog cholera what he supposed was at least 50 per cent. of his hogs for the ten previous years. The disease had been among his hogs every year, and he had lost some years as high as five out of every six. It was the habit of the disease to break out during the summer months among the hogs destined for the following November market. When Mr. Cook returned home at the end of the term he found the disease beginning among their hogs as usual. He at once determined to try the effect of sterilizing all the drinking water given to the hogs by boiling it with a little corn or wheat in it to give the hogs a relish for it. The two that were then sick of the cholera got well and there has been no cholera on his place since. He has never permitted his hogs to drink anything but boiled water since.

During last month a neighbor on the west has lost seven out of eighteen; a neighbor on the north had a hundred head; the cholera broke out among them and he sold all but twenty-five, and of this number he thinks four will recover. A third neighbor has lost eight out of seventeen. There could not be a more satisfactory single experiment tried.

On a farm that had not for ten years escaped the disease, no case has occurred since the water has been boiled, *i. e.*, for two years, and during these two years every adjoining neighbor has been continuously troubled with the disease.

Mr. Cook says that his hogs have contracted a liking for boiled water and that they will not drink rain water when it gathers in pools in the fields, but wait for watering time instead. Two other facts which have come to my notice strengthen the view that boiling the water will entirely prevent the disease. A farmer in Wayne County never has had the cholera among his hogs. None of his neighbors' hogs have escaped the disease. Their hogs all drink from the neighborhood streams, his from a spring in his field. A farmer near Hillsboro, Ohio, when the disease was prevalent, divided a drove of 100 into two parts; half he watered from his well and the others at a stream. Of those watered at the well none died; of the others more than half. I have within the last week instituted a number of experiments, similar to the one Mr. Cook tried, in different

parts of the State where the disease is now prevalent, and I submit that the splendid results above given demand that a fair and extensive trial be made. In a large part of Indiana, namely, where there is natural gas, the experiment will cost but little either in money or trouble, and if it is efficacious as it seems to have been in this one case, to arrest the progress of the disease after it breaks out in the drove, it will very richly repay the expense and trouble in every part of the country. The question does not alone concern the farmer whose hogs die; it is the policy of many raisers to sell fattening hogs as soon as the disease breaks out, and there can be no question that much diseased meat is every year on the general market.

Prof. Noyes, of the Hygienic Laboratory of Ann Arbor, writes me, under date of December 20th, that he does not know of any experimentation on a large scale along this line. He has, I know, given much attention to the diseases, and would be likely to know of such experiments if they had been made. Both the general government and the governments of several of the States are spending large sums of money at experiment stations for the arrest of this disease. The results so far reached, interesting from a scientific standpoint, are useless in the field because of the skill and expense which the application of the remedies requires. The purpose of presenting this paper here is to secure, if possible, the co-operation of a hundred stock-raisers in different parts of the State, and differently surrounded, that a demonstrative test of this simple remedy may, in the next twelve months, be had. The animals experimented upon must be isolated from all sources from which they can obtain drink, and given only water to drink which has just been boiled; it should be served as hot as the hogs will drink it in clean troughs. Can we secure these experiments tried in this way. Six dips in Jordan and one in Parphar will be no experiment at all. It would be worth while for us to show, if we can, that on the White River, also, the simple is the sublime.

THE "HOPKINS SEASIDE LABORATORY" AT PACIFIC GROVE, CAL. BY B. M. DAVIS.

[ABSTRACT.]

The great variety in fauna and flora, both in inland and marine forms, make the Pacific Slope and Coast, particularly that included in California, attractive to naturalists. As soon as Dr. Oliver P. Jenkins and Dr. Chas. H. Gilbert took their places in the Stanford faculty they recognized the resources of the coast from the standpoint of biologists. They immediately began to consider plans for establishing a biological station on the coast, and, after a careful survey of the whole coast, decided on Pacific Grove as the best location. The first substantial