

So long as our neighbors are practicing a suicidal policy, let us take advantage of what they are doing and secure the possible benefits to our own farms. This means in the end hundreds of millions of dollars worth of fertility added to Wisconsin soils and taken, fortunately for us, from other regions; but if they will continue to grow wheat and flax and impoverish their soil thereby, let us make the most of the situation.

DISCUSSION.

Ex-Gov. Hoard: We stable our cattle here about two hundred days in the year, a little more some years. Have you ever made any experiments as to how much nitrogen an average dairy cow weighing a thousand pounds throws off in two hundred days?

Prof. Henry: I could get that for you. You have got to go back to the feed and figure how much nitrogen you have given her in the feed, and take three-quarters of it.

Ex-Gov. Hoard: It runs, as near as I can get hold of it, from twelve to fourteen dollars, and there isn't one farmer in Grant county in five hundred, or in any other county in this state, that makes any provisions to save that urine.

Prof. Henry: And some farmers even bore auger holes in the manure drop to let it dribble away. They might better have a hole in their pocket book and let their money dribble out.

Ex-Gov. Hoard: I think your figures indicate that for fertilizing purposes a ton of corn stubble is worth about four dollars. Now, a practical question is, Does it pay to cut corn stubble and haul it to the farm and haul it out in the manure? Doesn't it pay better to leave it right in the field?

Prof. Henry: If you leave your corn stalks in the field, you leave the fertility right there, but you leave it in a form that it is not a quick asset. The stalk has built that material into itself, and it is not immediately available. If you take those corn stalks to your barn and cut them up and put them

through your animal, they are where you can put them right back, and since the animal has only taken out a small part, you better haul the stalks to the barn and put them through your cows and have them made ready for the plant and then put them back.

Cotton-seed meal is put on the farms, hundreds of thousands of tons by those poor devils of farmers—oh, how poor they are, they won't even keep a cow to produce milk for their own table, and yet they will go and buy cotton-seed meal and sprinkle it along the rows and borrow money to pay for it. A man down in South Carolina fed a cow cotton-seed meal and milked her, and kept the manure made from a certain amount of meal and put that on one piece of cotton. Then he sprinkled the same amount of meal on another piece so that in one case it went through the cow, and in the other case it was put on direct, and they got more pounds of cotton in the case where it had gone through the cow than where they put it on direct, simply because it was more available. You have all heard the word "guano," which means bird manure. That fellow down south began to talk too about "cowano."

The Chairman: You propose that we shall learn not only to feed our animals, but to feed our plants.

Prof. Henry: Farmers, don't raise something just for the sake of plowing it under next year. Put it through the animal.

Ex-Gov. Hoard: It always pains me exceedingly to travel around in this portion of Wisconsin. I don't take any comfort at all, though I do once in awhile wander off down here, but I go back just as quick as I can and go off down into Illinois to see these great fields of corn stalks standing there, and I know it is wrong. But I might just as well whistle up the wind as to talk to a Grant county farmer on that proposition. He knows a confounded sight better, and I can't convince him, but I want to draw a comparison now, odorous as it may be. Go into Jefferson county, Wisconsin, and see if you can find an instance of that kind—but you can't. With 36,000 people and 40,000 cows; with an annual increment from agriculture

amounting to over \$5,000,000; with land selling last year, every acre that was sold, on an average of about \$100 an acre.

Prof. Henry: And it is not as good land as this down here?

Ex-Gov. Hoard: No, it doesn't begin to be. This is out of the glacial drift, and a large portion of the land in Jefferson county is sandy and gravelly. Grant county land is a king to it, but the Grant county men have been for years and years confining their thought and their judgment to beef and pork, and I tell you when a man acts from the standpoint of beef and pork, he is going to constantly study to do just as little work as he possibly can. But when a man comes abreast of the proposition, when he associates with the cow, the cow is a great deal like the wife, she will hook him out or scold him out or get him out some way, and the man can't be half as lazy with a cow and a wife as he would without either. I wish I could take the Grant county farmers to the right about bodily, and set them down in Jefferson county and see them figure out the proposition of dollars per acre. I want to get this thing down where it will stick, if I can—it doesn't make a bit of difference if you get ever so mad at me, because I have borne the wrath of this state once and I can stand anything. I want to get it down where it will prod. Think of a cow throwing off \$13 worth of nitrogen in two hundred days—and in that particular I want to say to you that my own Jefferson county people, many of them, are only beginning to wake up to that, are just as remiss as they are anywhere else.

Now, I buy land plaster and pay \$9 a ton for it, and I sprinkle those gutters twice a day with land plaster for the purpose of absorbing, taking up, that nitrogen and holding it till it goes out every day onto the field. Men say to me, "Hoard, can you afford to do it, can you afford to pay \$9 a ton?" Well, it will amount to \$18 or \$20 a ton when I have saved up the fertilizer. We cannot afford to farm any longer in this country with this total indifference as to where our interests are. That same indifference has taken fifteen hundred million dollars out of New York state in the price of her farming land. That is what careless farming has done for New York. The other day

in New York I was offered a farm for \$2,200 that once sold for \$7,500, and I saw any number of farms through there that I remember forty years ago selling for \$100 and \$110 an acre, which I can buy today for \$25 and \$30; buildings galore, magnificent markets all around them, and what is the matter? Farming with no thought, no idea of the future or any remembrance that there is a God in Israel who will avenge his people. Now, these things apply to Wisconsin farmers just exactly as well as anywhere else, and I am glad that the Professor has called for a class of old farmers up at Madison this year. If there is anybody on earth that needs to repent in sackcloth and ashes, it is us old fellows.

Prof. Henry: I have probably about two hundred men in my class up there and none of them under twenty-five.

Ex-Gov. Hoard: I thank God that this awakening of thought on this question has come, and I can see it before I close my eyes finally. I thank God that I can see that the spirit has taken hold of the people of this state and is advancing ideas of agriculture and that it has come to be true that the older men are getting interested.

Prof. Henry: I did not make one point strong enough. If a man had a farm within fifty miles of New York, he would expect to get some advantages from his proximity to New York. If you lived in California, you would expect to get some advantages owing to the proximity to the Pacific ocean. Now, Wisconsin is doubly blessed from her location in several particulars, with our great rivers of transportation, our great lakes and our proximity to the wheat fields. As long as our friends out West are going to sell that bran in such quantities, it is the part of Wisdom for us to reach out and get all of that bran we can and put it onto our fields. I know a young man, who some years ago put an arrangement across the Chippewa river so that he caught the slabs that were drifting away, and he kept at it and picked up that stuff and he had an income of nine dollars a day from the waste pieces going down from the sawmills. Now, look at the stuff that is coming from the mills of Minneapolis, pouring by railroad trains across Wisconsin to feed the

cows and fertilize the land in Michigan and all over the East. We are nearer those mills than those people. Let us dump the fertility of the Red River country upon the soil of Wisconsin. We have a chance that no people in this world have. I am trying to help you farmers. You go to a lawyer if you need one and put your case in his hands, and he studies it and tells you the difficulties that he finds. Now, I can't go down into Grant county or a good many other counties of the state, but I want to leave this thought burning in your minds. Next year the farmers of Dakota will grow thirty millions of bushels of wheat and thirty-six pounds out of every 1000 is fertility. It is for us to reach out and get this gold mine of fertility and pour it over the Wisconsin soil, and as the Red River country grows poorer, as it is bound to do, Wisconsin will grow richer and richer until our farmers are the richest in the Union.

Ex-Gov. Hoard: There were four hundred carloads of bran unloaded in Jefferson county in one year.

Prof. Henry: I was talking with one of the rich men of central Illinois, a long-headed business man. He says, "Our corn lands are dropping. We have learned how to get bigger crops, but they are going back; you can work the machine harder every year, but you can wear it out faster. We are doing better work, better cultivating and every other kind of work, but it is draining the soil of its quick assets and you will see that land in a few years producing less and less." That is for the men who raise corn to consider. Of course, when you begin to feed it, you can raise those big crops, because you are taking off a little fertility and putting back a great deal.