

farmer knows from hard experience what he knows. He has worked it out with his hands. He may not have used his mind as he ought, may not have seen what science has to give him, but it is because he has had but little time to leave hand work for brain work.

But beyond this is a lack of sureness in his mind of the truth of what the agricultural teacher is saying. He is not sure that the facts which environ him are the same as those which surround the teacher. His isolation on the farm compels him to be independent and self-reliant. He can depend on no one but himself for the soundness of his judgment or a hand to execute it. He thinks that very much of what is done at Experiment Stations, taught at Agricultural Colleges, or related in dairy and farm papers, for instance, is nothing but theory. He cannot see how it is going to help him. And because he does not see he does not accept. Who can blame him? His business is to make a profit out of farm work, be it ever so small. He must earn more than he spends, for very likely there is the interest on the mortgage to satisfy. If he cannot make a margin in any other way, he must do it by hard self-denial of many comforts, and still harder work. It is hard on the wife, on the children and on himself, but there is no help for it; he must pay his debts. No wonder, then, that he cannot always see that he can follow the advice outsiders give him. Most men will not act any further than they can see. There needs to be instituted a new order of teaching agriculture in this country, such as is being done in some of the countries of Europe.

The mountain will not, cannot if it would, go to Mahomet. There should be established, at various places in each state, experiment and demonstration farms carried on by men who can correlate both science and practice. The Canadian Government, under the wise direction of Prof. Robertson, has solved this problem in one line at least. It has introduced dairying into regions where the industry was unknown, by building cheese factories and creameries, in the latest and most approved form, and placing them in charge of graduates of government dairy schools. These institutions were maintained until the farmers about them had learned the way and method of true practice, when they were absorbed by local capital. In this way the farmers learned that what they are too apt to call "theory" and "book farming" was the essence of practical method.

The *Southern Farm Gazette*, in noting the fact that the German farmers import from 4,000,000 to 5,000,000 bushels of corn a week to feed their fattening animals says:

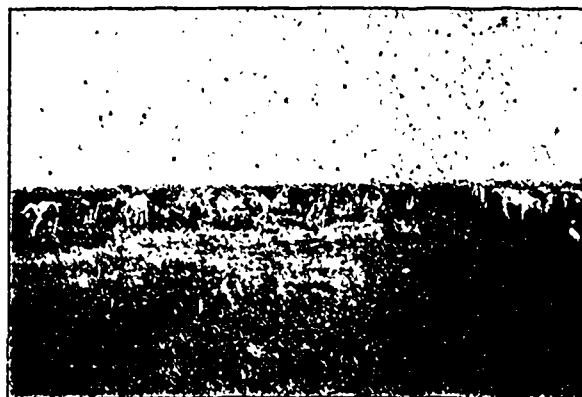
"It does seem a little strange that German farmers are able to import American corn for hog and cattle food, while Southern farmers claim they cannot afford to raise pork on corn. Where is the difference—in the stock or the feeders?"



Shire fillies, cattle and pasturage, Skimblecott.

The German farmer is a scientific feeder. He is a believer in the balanced ration. He makes large use of his experiment stations. When a little boy, he was taught the elements of agriculture in the primary school. When he became a man he was a reader and student of the science of feeding. If any professor, like Wolfe, had patiently

experimented on the feeding question, the German farmer did not sneer at him and call it "all book farming and theory." He reached out after the truth wherever he could find it. As a consequence, he can pay the freight on American corn for 4,000 miles, pay the speculator's profit for it besides, and make money by feeding it. When our American farmers evidence a disposition to respect what science is patiently doing for them, and become more studious and intelligent, they will make more money with their farm animals.



Cattle and pasturage, Skimblecott.

But something must be done to close up this gap between the farmer and what agricultural science has to offer. The Short Course in the Wisconsin Agricultural College, the Dairy School, the Farm Institutes, the Wisconsin Dairymen's Association, all aided very greatly by the agricultural press, are doing what they can to close this gap in Wisconsin. I speak more particularly of my own State because I am more conversant with the results obtained among the people. These forces are taking hold of our young men, giving them a broader idea of what it means to be a farmer, and how a better study of what science has to give will lighten their labor and increase the profit of that labor. Three great ruling objects control here: To make better farmers, and thus encourage the making of more farmers. Hard, unthinking, unprofitable farming drives the boys away from the farm. The farmer must give his boy a chance to know a little more than he can teach him about farming in these days, or he will leave the farm. The third grand result is the building up of the wealth and agricultural prosperity of the State, which comes as the crowning result of a wiser and more practical union of the farm, the farmer, and the teacher of agricultural science.

Results of the Ottawa Milk Test

We have received the following official statement of the results of the milking competition at the Central Canada Exhibition, Ottawa, from J. W. Hart, Superintendent of the Kingston Dairy School, who conducted the test:

The prizes offered amounted to \$140 in all; \$50 of this amount being given by the Exhibition Association and a like sum by the Canadian Holstein-Friesian Association, and \$40 by the Holstein-Friesian Association of America, provided the prize winners were recorded in the Holstein-Friesian Herd Book.

Ten cows entered including one Ayrshire, but the last mentioned was withdrawn before beginning the test, leaving the field to nine Holsteins. Clifford M. Keeler, Greenbank, Ont., entered "Princess Lida 4th" and "Rideau Gretqui." His cows were handicapped by having had the milk left in the udders the morning previous to beginning the test on account of judging. C. J. Gilroy & Son, Glen Buell, Ont., entered "Inka Sylvia," 41006; "Carmen Sylvia," 39060, and "Juanita Sylvia," 44825. A. and G.