

there is now to be found a growing dislike to dairying, partially owing to scarcity of satisfactory help, fewer cows are kept—except by some who are increasing their acreage or going into pure-bred business—and a few are again introducing the beef type. These people will never again return to beef production wholly, if they can find a dual-purpose cattle. If they cannot, some of them will take up beef cattle wholly, while others will adhere to the strictly dairy cattle, while neither will be wholly satisfied.

This condition, which has existed for some time in some parts of Canada, and is appearing now in others, will at some time or another reach from one end of the country to the other. It is the sole privilege of Shorthorn breeders to meet this national desire. If they will work toward that end, they may establish themselves permanently throughout the land; if not, they will go to defeat, eventually, at the hands of the milking breeds on one hand, and the more strictly beef breeds on the other.

There are leading Shorthorn breeders who do pay attention to the milking function of their cattle, but they are not numerous enough to make their voice heard. How, then, can this restoration of the breed be accomplished? By the work of individual breeders. The breed has been largely transformed into a strictly beef type by one man, or a few, and it must be restored in a similar way. Let the men who have "seen the vision" follow after it. Let them, while retaining the beef form, develop the maternal capacity of their females. This is best done by the use of the Babcock test and the scales. By adhering always to the beef form and developing the milking capacity, instead of the fattening tendency, in the females a marked improvement can rapidly be made.

The present standards for judging pursued at the shows will not award high merit to the milking matron, but the exhibition of Shorthorn cows of excellent conformation, with marked mammary development, will bring its reward in forms other than the blue ribbon. While it would be entirely feasible for the breeders of milking Shorthorns to have established special awards for such a type of females, it would be preferable for them to force themselves forward in the regular classes, and thus eventually restore, not a section, but the entire breed, to its former standard.

I trust the breeders of pure-bred Shorthorns may not entirely overlook these suggestions which you have from time to time through your paper presented from outsiders to them, for these suggestions represent the pulse of the Shorthorn market.

J. A. McLEAN.

Asst. Prof. Animal Husbandry.

Ames, Iowa.

A NEW SWINDLE.

The swindler and grafter is usually up-to-date, as witness the following from the Algona, Kosuth County, Iowa, Courier:

"A trick that has the appearance of a smooth swindle was recently worked on a Lott's Creek farmer. A well-dressed, smooth-looking chap, wearing glasses and an air of authority, went through the country and stopped at several places, and stated that he was authorized to test cows for tuberculosis. He then went on with his test, or mock test, perhaps, and told this farmer that ten of his fourteen cows, the pick of the herd, were tubercular, and that he should dispose of them. The farmer felt pretty bad over the matter, and asked if he should kill them. The fellow said no, that he need not kill them, but if he got a chance to sell them to someone who would take them out of the State, he might do that and get something out of them. The fellow then went on to test other herds. It was the second day after this incident that an elderly man came along looking for cows that were for sale. He came to this farmer and stated what he wanted; and the farmer was anxious to sell those ten cows, and let the stranger have those ten best cows at \$15 or \$16 a head. The buyer took them off, and then the farmer and his neighbors began to think that perhaps the young man and the old man were in some way connected with each other. At all events, the old man got the cows pretty cheap."

Our readers are cautioned not to be fooled by any such scheme.

Owners of good mares should not hesitate to breed them to some good sire. All indications point to a good demand for horses during the next few years, at prices that will make their raising profitable. Do not, however, breed an inferior mare, nor under any conditions patronize an inferior stallion. The demand for horses, while it will increase, will become more and more discriminating in its character, and, as a result, those of superior qualities will sell better, and those of inferior qualities not so well as in the past.

THE FARM.

FORTY YEARS' EXPERIENCE WITH ALFALFA.

Editor "The Farmer's Advocate":

I am enclosing root of lucerne (alfalfa) sowed in spring of 1906, with wheat; cut for hay 1907, plowed in 1908 for corn. No bacterial inoculation here, and it is a pity that there should be so much charlatanism in advocating its possibilities. Since 1863 I have scarcely been without it, on salt-saturated sands on Long Island (a lighthouse on the farm). Then, on Utica clay, at New York Mills; afterwards near Ilderton, Ont., then here, on Belvoir Farm—all on various soils and under different atmospheric conditions, and yet never a failure.

That my soil is naturally inoculated with the bacteria supposed to be required, I enclose root previously mentioned. Also, would state that I have been cutting since May 16th, the growth being about 10 inches long, and from now out, nothing on the farm that requires feeding will go to bed hungry. It is the best soiling crop I know, yet it can never usurp the place of red clover on the farm—the one a stand-by, the other an artificial assistant. To cure it for hay requires especial attention. When properly made into hay, there is none better, none so good; but when you are told musty, black lucerne hay is all right, don't believe that man, whether under Government pay or not. It is not; it will kill your cattle. Also, that, when once frosted, it is not safe feed for any domestic animals. It has its place on the farm, but it is not a new production. Forty years' experience has satisfied my knowledge of the plant.

However, to anyone wanting to try the experiment, I will sell my farm by the bushel or carload, vouching for soil from the field of which I am sending a specimen.

Middlesex Co., Ont. RICHARD GIBSON.

MUSTARD DESTRUCTION BY SPRAYING.

Mr. G. F. Strawson, of Queen Victoria Street, London, England, has issued his ninth annual report on the destruction of charlock, or wild mustard, in grain crops by means of spraying with copper-sulphate (bluestone) solution. When he began his experimental work, Mr. Strawson estimated that ten years' continuous spraying would rid a holding of charlock, and as only another year of the specified number has to run, he remarks that those who adopted the process in the first year of its introduction, and have since continued it, will find their land almost if not entirely free from this destructive weed. He is able to report that during 1907 the spraying of charlock exceeded in extent operations in any previous year, while he anticipates that the growing recognition of the virtues of the system will insure continued expansion for many years to come. It is sometimes pleaded as an excuse for not adopting the spraying system that the expense is too great. Mr. Strawson shows that this is a mistaken idea. Supposing it takes ten years to complete eradication, during several years out of the ten the land will be under other crops than grain, and consequently spraying in those years would be unnecessary, so that the annual outlay per acre is not to be multiplied by the number of years, but by the number of cereal crops during a decade. But, restricting the calculations of a single season, he computes that the total cost of spraying should not exceed 6s. 6d. per acre, and this in a 20-acre field would amount to £16 10s.;

and, as he feels justified in reckoning the increased value of the grain on the sprayed land at 30s. per acre, or £30 per annum on the said 20-acre field, there is a substantial surplus in favor of the operation. The conclusions as to the quantity and strength of the dressing to apply, the number of applications, and the directions generally, are, roughly, the same as in previous years. The chief points of interest are that a three-per-cent. solution (15 pounds of copper sulphate to 50 gallons of water) per acre, is a suitable dressing when the weed is taken at a tender age, and that for older charlock a stronger preparation is desirable; that spraying early, when the weed is young and in soft fibre, is most profitable, although it can be successfully done just as the weed is coming into flower, or even when it is in flower.

ALFALFA HELPED A WISCONSIN FARMER.

The value of alfalfa hay as a feed for dairy cows was strikingly demonstrated by John Wealti, of Green County, Wisconsin, who, through the advice of the College of Agriculture, at the State University, saved \$300 on rations for a herd of fifty dairy cows the past winter, without any decrease in the yield of milk.

A year ago he began feeding his cows alfalfa hay. Not being familiar with the feeding value of this roughage, he gave his cows as much grain as he had been accustomed to give with other roughage. He submitted the ration to the College of Agriculture for approval, and was told that, since alfalfa hay contains so large an amount of digestible nutrients, he could reduce the amount of grain fed. He adopted the suggestion in feeding fifty of his cows, gradually reducing the grain allowance until he was feeding five pounds of grain per day less than formerly to each cow. There was no decrease in the quantity or quality of yield of milk of the cows, and the 250 pounds of grain saved each day for the herd throughout the winter feeding period, Mr. Wealti estimated to be worth over \$300.

WASTE PLACES ON THE FARM.

Many poor soils, now waste spots on the farm, would become profitable if planted with the right kind of forest trees, and cared for in the right way. Trees will often grow where grain and grass will not. Swamps, stony ridges, exhausted fields and washed hillsides need not be abandoned. There is money in most of them if they are set to work producing wood-lots and forests. But knowledge and judgment are necessary, and a bad guess may be costly.

Many trees do well in their soils, cone-bearing trees in particular. The farmer is fortunate whose land has no poor spots. Few landowners are so well off. Fertile acres are usually fairly profitable, but the gravel bars, rocky knolls, marshy swales and exhausted and eroded slopes are not. Scarcely one of them need remain unproductive. They will grow timber such as pine, locust, poplar, osage, oak, chestnut, or some other kind. But the soil must be studied, and the species selected to suit it. Failure might follow the planting of walnut on soil suited to white pine, or vice versa.

Studies of various regions and trees that suit them have been made by the Forest Service at Washington. The aim of these studies has been to point out how the farm's waste and neglected corners may be turned into wood-lots where the farmer may grow his own posts, poles, fences and sawlogs. It is decidedly worth while to keep all



A Maritime Sheep-washing.