DAIRY FARMING Pointers on Building up a Dairy Herd-Oare and Good Feed Essential

Few other branches of agriculture present greater advantages than dairying. The production of milk and butter-fat and the disposal of these to cheese factories and creameries is one of the most profitable of the activities of the farm. Then, the feeding of skim-milk, buttermilk and whey along with alfalfa and clover to calves and pigs increases the profits very largely. Again, no other branch of farming surpasses other branch of farming dairying as a means of building up dairying as a means of building up and maintaining soil fertility. The wise policy for the farmer is to transform his grain into meat, butter, cheese or other products ready for consumption. Selling grain is merely selling soil fertility. It is wasteful and at the same time does not bring in as much money as it would if fed to stock.

Improving the Herd

The easiest, most satisfactory and economical way to build up the dairy herd is through the introduction of pure bred sires. In grading up a herd there are a number of things that a farmer must take into consideration to obtain the greatest success. First of all, of course, he must make a choice of breeds. Then, having made that choice, he should not change unless for very important reasons. For example, some far-mers change from one breed to another every few years simply because their neighbours take a fancy for some other breed. As a consequence, they never have anything but mongrel stock. The breeding of a pure-bred herd requires years of patient effort. The secret of success lies in the ability of the farmer to set an ideal and then work intelligently towards accomplishing it.

A new sire should be selected for part of the herd, at least every three years. A good one should be retained as long as possible. In selecting, care should be taken to get one like, or a little better than, the former one. Pedigrees should be gone into, and in no case should an animal showing signs of a poor constitution be bought. pays too, to buy of a reputable breeder.

Again, the farmer must constantly keep weeding out the poorer individuals of his herd. If this is done carefully, a few years effort will cause a vast improvement.

success in dairying depends as much on the kind of care and management bestowed on the herd as upon the breed. Ordinarily, much too little attention is paid to these very important matters. Apply the principle of "the golden rule" in the dairy stable at all times. It will pay big dividends.

Liberal feeding of the dairy herd is always essential, but is of especial importance in winter. The dairy cow is a sort of factory for transforming food into milk, and the factory should be kept running to its full capacity.—J. F.



One of the difficulties that face most farmers is the lack of some simple means of advertising their The illustration given herewith shows a method that a number or farmers have used with good results. It is simply a small blackboard fastened up at the farmer's gate. The name of the farm and of the farmer and the words "for sale and "wanted" should be painted on it. The articles wanted or for sale may be written in with chalk. This little device will prove a big help during the busy seasons. By the way, it is a good thing to have enough pride in one's farm to give it a suitable name.

An Opportunity for the Rural Minister

Farmers, as a rule, do not lead farmers, and in that is the minister's opportunity. The country minister should become a leader in the better farming movement. For this leadership he has some distinct advantages. He is associated with the adults, with the young people, and with the children. He is likely to be less migratory than the country teacher, and is trained for leadership in some directions which will help him to lead in others. In too many instances he does not know agriculture as he should know it. He should strive to know more about the things with which the farmer is closely associated; the crops; plants of the field; the soil; the live stock. He must be in full sympathy with; must understand; and live the daily life of those with whom and for whom he works. If he is able to counsel and advise the farmer counsel and savise the larmer regarding things which pertain to his material welfare, the farmer will be more ready to assist and co-operate with him in his efforts to advance the religious and spiritual welfare of the community. —F. C. N.

It costs 6.25 cents to produce a quart of milk from the average cow, that is one giving about 3,200 lbs. of milk a year, according to the dairy department of the Ohio State University. Where cows that produce much more than the average are kept, the cost of production per quart is greatly creased.

Co-operative Protection Against Forest Fires

One of the most encouraging signs during the past year, in con-nection with better fire protection in eastern Canada has been the organization of the St. Maurice organization of the St. Maurice Forest Protective Association. This Association is composed of limit-holders in the St. Maurice Valley holders in the st. manner vaney Quebec. A manager, three inspec-tors and 50 rangers for patrol work were employed during the past season. As a result while 97 fires were extinguished, only one attained proportions of any consequence, and this was in an old cutting. In addition to patrol, a start has been made in the construction of permanent improve-ments such as trails, telephone lines and lookout stations. The cost is met by an assessment upon limit-holders in proportion to acreage, aided by a contribution from the Quebec Government, in consideration of the protection Provincial property. It is greatly to be hoped that the activity of this association will be extended, and that others will be formed.

The rapid development of the co-operative idea in the fire pro-tective work in the United States is shown by the fact that the subsidiary organizations compris the Western Forestry and Con-servation Association last season patrolled approximately 20,000,000 acres holding fully five hundred billion feet of timber or one fifth of the entire supply of the United

They kept about 450 patrolmen in the field, supplied these with the

necessary extra help to handle fires and built hundreds of miles of telephone lines and trails. What is more to the point, they kept the area of merchantable timber, burned over down to 14,000 acres, or about 1-16th of 1 per cent of the area protected. Only about 700,-000,000 feet of timber was damaged logged without loss. The actual destruction was only about 76,000,000 feet, or about 1.70th of 1 per

by fire, and most of this will be cent. They spent, to make this a remarkable record, about \$200,000 or a cent an acre for the entire area guarded, although, as it was necessary to protect fully double the area that actually contributed. the cost to association members averaged about 2 cents an acre on

OIL-BURNING LOCOMOTIVES

their own holdings .- C. L.

The efficiency of oil burning locomotives in connection with the prevention of forest fires is well illustrated on the Great Northern Railway in British Columbia. Oil has been used for fuel on the locomotives operated by this company during the past two years. Since the installation of oil-burners, no fires have been reported as starting from locomotives, whereas previously they were fairly frequent during the dry season and caused much damage.

The use of oil has also been very effective in this respect on the main line of the Canadian Pacific between Kamloops and Field, British Columbia, where oil-burners have been installed during the past season .- C. L.

Some Contrasts of Interest to Farmers The Right and Wrong Ways of Doing Things and the Difference in Dollars and Cents

Cost of ploughing one acre with a double plough, \$1.35. Cost of ploughing one acre with a single plough, \$2.00.

Cost of discing one acre with a double cut-away, 45 cents.

Seeding with a three-horse machine, 18 acres can be sown per day at a cost of 22 cents per acre.

Cost of cutting one acre of hay with a seven-foot cutting bar,

To cut one acre of grain with an eight-foot binder costs 26 cents.

Harrowing one acre with sharp toothed harrows (once over), 15

A good mixture of grasses and clovers sown 20 lbs. to the acre will give heavy crops.

Heavy seeding smothers weeds and adds humus to the soil.

A one to two-year-old sod when ploughed under will enrich the soil as much as would manure applied at the rate of 10 to 12 tons per

On breaking a new meadow it is easy to secure a fine seed bed.

Cost of discing one acre with a small single disc, 90 cents.

Seeding with two-horse machine, 12 acres can be sown per day at a cost of 25 cents per acre. Cost of cutting one acre of hay

with a four-foot cutting bar, 55 cents. To cut one acre of grain with a six-foot binder costs 40 cents.

Harrowing one acre with dull

toothed harrows (twice over necessary), 30 cents.

Timothy and clover sown 6 to 10 lbs. to the acre will give a medium crop in a good season, but will be a total failure in a poor season.

Light seeding encourages weed growth in the vacant spaces and adds little fertility to the soil.

Old, worn out sod harbour weeds and insects, and is of little value as a fertilizer.

To obtain a good seed bed on an old meadow a great deal of extra labour is required .- J. F.