THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

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0. THE FARMER'S ADVOCATE AND HOME MAGAZINE

in published every Thursday.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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must be more. Their calves, reared on skim milk. liberally supplemented with good farm feeds, will fill the bill on the block almost as well as bullocks which have sucked the cow for eight or nine months, and will show far better balance sheets.

In our former article allusion was made to certain dairy authorities who have been kind enough to delegate the sphere of beef production to special-purpose, beef-bred stock. We are asked to mention their names, but propriety restrains us from thus introducing personalities. They have been numerous enough, in all conscience, particularly among the professional and journalistic class.

Standing back, watching the calves help themselves, is a very easy and pleasant kind of animal husbandry, but not a very profitable one on highpriced land-and the land of this country is cheap to-day compared to what it will be in twentyfive years. It is all right where a man can sell a bull calf at a premium as a herd-header, but wide-awake Canadian farmers are no longer so much inclined, as they used to be, to buy herdheaders that have been reared in that way, or from herds bred in that way. They are commencing to look for bona-fide dual-purpose cattle, and it is up to the breeders of Shorthorns to supply that demand with the real goods. Argument, without evidence, will not do. Prospective buyers have been too long cajoled with dual-purpose talk by breeders whose tacit ambition was beef type, and that alone. The Shorthorn breed has been dual-purpose in the past, and, fortunately, is yet in occasional instances, but has been gradually losing the reputation, and only earnest, energetic, systematic effort on the part of the breeders can redeem it. Just recently we heard

another one of a great many instances in point. A thrifty Middlesex Co. farmer, of Scotch descent, who had been using a pure-bred Shorthorn bull in his herd for many years, was obliged to acknowledge, on the strength of repeated testimony of the women folks, that his Shorthorn-grade cows were not the milkers they used to be. Reluctantly deciding on a change of breed, he went down into Oxford Co. to buy a Holstein bull, and was astonished to find one breeder after another reeling off information about the official milk and butterfat tests of the dams and grandams of the male calves he was shown, and the youngsters were priced largely according to the records of their female ancestors. That appealed to him as businesslike, and he bought a bull on the strength of ancestral performance. It is safe to say he got more than a pair of horns.

We do not take much stock in the argument that the average dairy cow does not pay, and Mr. Campbell does not, either. He is using it, perhaps, fairly enough, as a talking point, because some dairymen, in their zeal for improvement, have made the startling assertion. In a sense it may be true that the owner of the average dairy cow does not make out of her full current rates of interest, wages, taxes, sinking fund and running expenses. Probably that is true of the average farmer in any line; but if so, it is particularly true of the man who is raising commercial beef cattle. That even average dairying is more remunerative than average commercial beef-raisingnot beef-fattening, for that is a speculation, the profit being made not out of the increase in weight but the increased value per pound of the original carcass-no sane man will seriously deny. beef-raising is a more congenial and less-exacting means of earning a living, is equally true. believe a considerable number of farmers will find their most acceptable course to be a combination of the two lines, providing they have the right kind of a cow with which to prosecute them. Thus they may relieve themselves and their families of some of the exactions of specialized dairying, and at the same time insure a more liberal income, and make far more profit out of the land than by attempting specialized beefraising. But they must have the right kind of cow, and she is not a cross of Hereford and Holstein, but a good grade or pure-bred Shorthorn, bred and developed along dual-purpose lines.

Two influences are opposed to the development of the dual-purpose capacity in Shorthorns, to wit: the conservatism of established practice, and, secondly, as Mr. Campbell frankly avows, a disinclination on the part of breeders to forsake the easy way of letting the cows suckle their calves. These influences will, however, be eventually overcome by the enterprise of the breeders, individually and collectively, and by the financial emoluments accruing to those who meet the unmistakable demand. The demand for poor-milking Shorthorns is small, and growing less; the demand for high-class dual-purpose stock is widespread, and growing stronger. Economic necessity is behind the change. Good beef is economically bred and reared on valuable land only by dual-purpose stock. Give us beef form, with dairy capacity.

FIRST IN AMERICA.

While at the Pennsylvania State College, during December, January and February, I was glad to be able to see a copy of "The Farmer's Advocate" each week in the library. The leading professor told me that your paper was the best publication that came to the College, and they have a great many from the United States. I was pleased to learn that "The Farmer's Advocate" takes first place among the leading agricultural papers in America.

Brant Co., Ont. J. W. CLARK.

A VALUABLE REFERENCE WORK.

I have taken "The Farmer's Advocate" for eighteen years, and having the numbers all on file, find it to be very useful for reference. D. McLELLAN. Hants Co., N. S.

"ALFALFA OR LUCERNE."

"Alfalfa should be very carefully tested en many farms throughout Ontario. Its large vields of nutritious feed for farm stock, its perennial character of growth, and its beneficial influence on the soil, are all features which commend it very highly for those farms on which it can be grown successfully."

These words are quoted from Bulletin 165, on "Alfalfa or Lucerne," by C. A. Zavitz, Professor of Field Husbandry at the Ontario Agricultural College. It is a crisp, compact, readable bulletin, based largely on the results of investigative work done at the O. A. C. While not pretending to be exhaustive, it presents much practical information in plain language, and is well calculated to interest and instruct busy farmers concerning this invaluable crop, as well as acquainting the general reader with gleanings from the experiments conducted with it at Guelph. The bulletin may be had on application to the Ontario Department of Agriculture, at Toronto, or the Ontario Agricultural College, Guelph.

To summarize this little treatise fully, would make quite a long article, and, as much of the information has already been reiterated through our columns, we will merely select a few pickings:

Good results should not be expected from sowing alfalfa on a cold, sour, wet subsoil. It is probably safe to say that the under soil has a greater influence than the soil at the surface, in making the conditions favorable or unfavorable for the successful culture of these deep-rooted

On the fifty-acre field of gently-sloping clayloam soil, in the experimental department at the O. A. C., part tile-drained, and part with a fairly well-drained subsoil of varying character, alfalfa thrives fairly well on all parts of the field except on the low land, which will not permit of being underdrained to a depth of more than eighteen inches. On this low land it seldom lives more than two qr, at most, three seasons. On the other land it appears quite hardy. Since 1888, well-established alfalfa at the College has been badly winter-killed only once, and partly winterkilled twice.

In the ten years' experiments with different seedings, in different parts of the experimental grounds, the crop being always sown in the spring of the year, at the rate of 18 or 20 pounds of seed per acre, usually with a bushel of barley per acre, the average annual yield of alfalfa per acre per annum was 21.67 tons of green crop, and 5.27 tons of hay. In each of eight years, three cuttings were produced, but in 1907 only two, while in 1896, the spring of which opened early, four cuttings were obtained, the first being secured on June 1st. The average dates of cutting, one year with another, were: First cutting, June 21st; second cutting, August 2nd, and third cutting, September 21st; stage of cutting, early bloom; first cutting gives about double the yield of the second, and the second about double the yield of

Experiments are being conducted with different varieties and strains of alfalfa. In 1907, the second crop on each of a number of plots was allowed to go to seed, and the hope is expressed that in time we shall be able to produce in Ontario a good supply of seed of the very best strains of alfalfa. Meantime, the common variety is as good as any.

Inoculation is touched upon, and Bulletin 164, by Prof. S. F. Edwards, Bacteriologist of the College, is referred to. On the experimental plots at the O. A. C., artificial inoculation is not necessary, as the plants produce abundance of nodules without.

A clean seed-bed is important. At the College, and in other parts of the Province, Canadian blue grass often causes some trouble, by growing in among the alfalfa plants. A thoroughly-cultivated hoe crop is a first-class preparation.

Autumn sowing, with or without nurse crop, did not give nearly such good results as spring seeding. In an experiment with spring wheat, barley and oats, compared as nurse crops, spring wheat gave the best, and oats the poorest, results, the latter having a tendency, especially if thick, to smother out the young alfalfa plants. All nurse crops used with alfalfa should be sown quite thinly. In another experiment conducted in