

agriculture are concerned, England is worse off than almost any other European country. And yet, in spite of all this, the agriculturists in every country in Europe readily acknowledge the pre-eminence of the English farmer. Are we to conclude from this that experiment stations and schools of agriculture are not so efficient after all as they are claimed to be? Far from it. The British farmer is pre-eminent for his accurate calculations and thoroughly scientific methods. He is successful because he is well versed in the lore which schools of agriculture and experiment stations are designed to teach. He has learned the lessons, but not at Government expense, but through the outlay made in the same direction by intelligent and enterprising land-owners of practically unlimited means, who have for years been expending large sums on the conducting accurate experiments covering a very broad and comprehensive field of practical research both in agriculture and stock breeding. Thus it will be seen that in England the work which we are trying to do through the agency of Government institutions has been and is being done by private enterprise. We have not the landowners of unlimited wealth in this country to carry on practical research and conduct agricultural instruction at their own expense, and we must therefore do our best to secure the assistance of the Government to carry on the work.

At the same time every farmer can do something in this direction, no matter how limited his means. His every-day operations, if carefully noted, will furnish him many a valuable hint worth giving to the public through the agricultural press. The farmer or stock-breeder of more ample means often makes experiments for his own information, but when it is all over he stores up the information for his own use, but it never occurs to him that he might reach thousands of interested readers were he to send an account of his experiment to the CANADIAN BREEDER.

Ontario is making very good progress in the direction of agricultural instruction, but much remains to be done. The Government is doing its share nobly, and now let us hear from the farmers and breeders who will supplement the information furnished by the Government with the results of experiments of their own.

DAIRY PRODUCTS OF EUROPE.

France exports more butter than any other country in Europe—her average for ten years ending 1883 being over 90,000,000 lbs. annually, the average value being \$17,300,000. From this sum, however, must be deducted about \$3,500,000, the average value of her yearly imports. France imports four times as much cheese as she exports.

Denmark is also famous as a dairy country. Her exports of butter were well maintained up to 1883, in spite of her butterine exporting neighbor, Holland, though prices were not quite so good as ten years ago; on the other hand they were better in 1883 than in 1878. The export of Danish butter reached the lowest point in the decade in 1878, and the year before the great increase from this side of the Atlantic occurred. It has increased

regularly since until, in 1883, it exceeded that of any year in the decade in quantity, though twice exceeded by other years in value, attaining the very large amount of 37,952,842 lbs., valued at \$8,719,892; closely approximating in amount our two largest years, 1879 and 1880, and largely exceeding our largest year in value. It should be noted that Denmark is also an importer of butter on a moderate but increasing scale. In cheese the Danish export trade is insignificant and largely exceeded by the imports.

Great Britain, though producing large quantities of butter and cheese, is always ready to accept the surplus products of other countries. Her imports of butter amount to more than the aggregate exports of France, Denmark, the United States, and Canada, and a good customer, indeed, would she be for these countries were it not for the enormous amount of butterine from the Netherlands, which is included among her imports of butter. This latter country's exports, in quantity, approximate those of France, but the value shows the price per pound to be less by 25 per cent., which betrays the butterine story. Great Britain is also a great consumer of foreign cheese, for which she pays from \$23,000,000 to \$25,000,000 yearly; add to this the annual value of her butter imports, and we have a total of about \$80,000,000 yearly paid by Great Britain and Ireland for butter and cheese; her exports of either are comparatively trifling, aggregating barely \$2,000,000 yearly. Of the Netherlands butter, or rather butterine exports, we have already spoken; of cheese she exports more than any other European country, the average for five years being about 56,000,000 lbs., which is over 9,000,000 lbs. less, however, than the average for the five years preceding, while Switzerland, which comes second as an exporter of cheese, shows a steady increase.

AMATEUR AND PROFESSIONAL.

One of the peculiar and distinguishing features of the history of farming and stock-breeding during the past ten years has been the tendency of retired merchants, lawyers, doctors, contractors, and others of their class to take up these pursuits with the view of combining pleasure with profit. At first sight, one would suppose that, in competition with the experienced "professional" farmer, these amateurs would have but slender chances of success; but the facts of the case usually prove the reverse; for, as a rule, the amateur makes more out of the capital he has invested in the business than does the man who has been following it for a livelihood from his youth.

There are several good reasons why the amateur should succeed better than the average professional in stock-breeding and agriculture. In the first place, the amateur seldom undertakes the work without plenty of capital to carry it on.

Though he starts with little or no practical experience, the amateur has no ignorant prejudices to overcome, he is willing and anxious to learn what experts can teach him, to read standard works and periodicals embodying the experience of hundreds of intelligent and practical men, and embracing the results of valuable agricultural and stock-breeding experiments made in almost every quarter of the

civilized world. Is it surprising that such a man succeeds better than the so-called "practical" farmer, who thinks that the whole secret of success is to grub and toil with the hands from dawn till dark, and carefully and reverently to follow the methods of his father, grandfather, and great-grandfather before him. The "book farmer" is to him an alien, an apostate, and an outcast. If he succeeds better than his hard-grubbing neighbor, it is "luck, pure and simple." The book-farmer's cows yield double the quantity of butter that can be got out of the "practical farmer's" herd, but this teaches the straw-stack dairyman nothing. He scornfully but confidently asserts that his neighbor's cows consumed double the amount of feed that could be bought for the butter they made, and therefore he is happy and contented. The "book-farmer" buys more stock and adds farm to farm, but the "practical farmer" consoles himself with the reflection that his neighbor is running himself hopelessly into debt, and that next week, next month, or at the latest, next spring, the sheriff will come along and "fire him out," after which he will wander upon the highways an outcast and a terrible example to all upstart, irreverent book-farmers who dare to depart from the traditions and methods of their ancestors. Of course, this prophecy is never realized, but the prophet goes on dreaming it over and over, looking every month for its fulfilment to the day of his death.

And why should anyone wonder at the success of the average amateur as compared with the average professional farmer? The former utilizes all the available manure by means of barn-yard cisterns while the latter, if he uses the manure at all, only uses it after half the plant food it originally contained had been "leached" away in a spongy, foul smelling, undrained, uncomfortable barn-yard.

The amateur feeds and fattens with his farm produce a race of cattle that have been bred by generations of shrewd and intelligent breeders with the sole object of producing the greatest possible amount of choice beef on the least possible feed. Is it surprising that he fattens his cattle with more profit than the man who feeds the veriest scrubs, bred in the most haphazard fashion without reference to anything in particular?

In the same way the amateur makes butter from cows bred especially for that purpose, or cheese from a race of cows that have been proved by numerous carefully conducted experiments to be pre-eminently qualified for economical and profitable cheese production, while the "professional" makes butter, cheese, and beef, all from the same coarse-boned, thick-hided, hungry scrub—a "general purpose" cow with a vengeance.

We might continue the comparison all over the farm, including the horses, sheep, fowls, swine and implements, with similar results, but we have gone far enough to point the moral.

The amateur may make a few mistakes at the outset, and sometimes they are pretty costly ones, but he succeeds in the long run because he really profits by the researches, experiments, and experience of thousands, while too many of the professionals never go outside their own experience to learn anything about their calling.