

The Thistle Milking Machine.

The accompanying illustration gives a very good representation of the Thistle Milking Machine tested at the O. A. C., as reported in the ADVOCATE of September 2nd, 1895.

Ontario Agricultural College Dairy School. The Dairy School in connection with the Agricultural College, Guelph, will reopen on January 14th, 1896, and remain in session till the 14th March two months. The buildings and equipment are complete, and students are offered a very broad and thorough course of theoretical and practical instruction in dairying. In addition to the ordinary appliances, there are in the dairy stables, close to the school, a herd of thirty cows, of different breeds, for observation and instruction in the methods of feeding and caring for dairy stock; and a cream separator, run by tread power, in a room attached to the dairy barn.

attached to the dairy barn.

The course of practical instruction consists of two branches of the dairy business, viz, Factory Dairying and Home Dairying; In the former, students, under competent instructors, make cheese and butter on a large scale, learn how to run cream separators, and are given full and repeated instruction in the use of the Bahcock tester and ed instruction in the use of the Babcock tester and the lactometer, together with directions as to paying patrons for their milk in factories where the Babcock tester is used. There are five large cream separators in this department—the Danish Weston, the Alexandra, the Alpha de Laval, the United States, and the Sharples' Imperial Russian. Full and repeated instruction with practice in the running and general management of these machines is given daily. In the milk-testing room there are eight of the best makes of the Babcock tester, of different capacities, some run by hand and others by steam—all for the use of the students in attendance from year to year; and in the butter room there is constant practice throughout the session in churning, and in the working, printing and packing of butter according to the most approved methods.

Discussion on practical dairy topics, especially on the difficulties which arise in making cheese and butter, are carried on in the cheese room for an hour every afternoon. These discussions have been of much value to students. From time to time during the session this hour is devoted to the judging of cheese and butter by experts brought to the school for that purpose. The scoring of the judges is compared with that of the students, and reasons given for the conclusions in each case. In this way students get a clear concention of the difference students get a clear conception of the difference between poor, medium and first-class goods. Cheese and butter factories should encourage their makers to devote a couple of months in the winter to this course. It is not intended to take the place of practical experience in a factory, but to supplement it. It is of much practical value to those who take it, and will undoubtedly result in material advantage to the factories in which they are employed

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The Home Dairy Course is intended especially for farmers' sons and daughters who wish to learn something about running cream separators, using the Babcock tester, and making butter on a farm. The department is furnished with hand separators, butter-workers, printers, etc., and full instruction is given by a competent buttermaker in every detail regarding home dairy appliances, the handling of milk and cream, and the making of butter. Special milk and cream, and the making is also given when in cheesemaking is also given when required. Home dairy students are admitted to all lectures and discussions including practical drill by lectures and discussions, including practical drill by the Professor of Dairying, on the points and peculiarities of dairy cows, in a live stock class-room provided for the purpose. From fifteen to twenty students can be accommodated in this twenty. Applicants may enter on or after the 14th course. Applicants may enter on or after the 14th

course. Applicants may enter on or after the 14th January and remain as long as they wish—two January and remain as long as they wish—two weeks, the entire session of two months, or longer. The Instructors are:—1. Cheesemaking—A. T. The Instructors are:—1. Cheesemaking—A. T. Bell, Tavistock, Ont; assistant. R. W. Stratton, Guelph, Ont. 2. Milk-testing—T. B. Millar, Longuelph, Ont. 2. Milk-testing—T. B. Millar, Longuelph, Ont., Instructor for Western don, Ont., Instructor and Inspector of Separators—Dairymen's Association. 3. Cream Separators—Dairymen's Association. 4. Buttermaking—T. C. Creameries Association. 4. Buttermaking—T. C. Rogers, Gueiph, foreman of butter department; F. Rogers, Gueiph, foreman of butter department; F. J. Sleightholm, B.S.A., Instructor with Travelling Dairy for 1894-95.

A course of lectures will be given as follows:—
Professor of Dairying—Twenty-four lectures on
milk, butter and cheese; milk-testing, buttermak-

ing and cheesemaking; the marketing of dairy products; selec tion, breeding and feeding of dairy stock, etc., etc. Agriculturist—Three lectures on general agriculture in relation to dairy-ing. Professor of Veterinary Science—Three lectures on the diseases and treatment of dairy stock. Professor of Biology Four lectures: two on geology and two on botany. Professor of Chemistry—Four lectures on the nomenclature and general principles of chemistry and its relation to dairying. Bacteriologist—Five lectures on lacteal bacteriology. teriology. Mathematical Mas-ter—Seven lectures on mathematics and bookkeeping, explaining fully the decimal system.

Certificates of standing are given to those who pass all prescribed written and practical examinapass all prescribed written and practical examinations—some during the course and a more difficult one at the close. The standard for passing is 40 per cent.; for second-class honors, 60 per cent.; and for first-class honors, 75 per cent. To obtain this certificate, students must attend at least seven and take regular work in weeks during the course and take regular work in

all the branches of the factory course. To any who hold a general certificate of standing, a special dairy certificate of proficiency in buttermaking, cheesemaking, or both, will be granted when he has proved his ability to manage

creamery or cheese factory:—

(1) By at least two years' experience of manager, one of which must be subsequent to his college

(2) By sending monthly factory reports during at least one season to our Professor of Dairying. (3) By passing a satisfactory inspection as to cleanliness, tidiness, and quality of goods made by

him during the season. No entrance examination is required. Tuition free to residents of the Province of Ontario; to non-residents, \$5 for the course. A payment of \$3 in advance for incidental expense is required of all students in the regular course; also a deposit of \$2 to cover possible breakage. This sum of \$2, if not required for breakage, will be refunded when the student leaves. Board and lodging in Guelph (a mile and a half from the College, or close to the College grounds) may be had for \$3 per week.

College grounds) may be had for \$3 per week. Special provision is made for ladies who wish to take either the factory or the home dairy course. Special apartments have been fitted up and furnished for their comfort and convenience.

In the Home Dairy Course there is no charge for tuition; but students are charged \$1 for incidental expenses, and a deposit of \$1 is required to cover breakage. This latter, if not required, will be preakage. This latter, if not required, will be refunded when the student leaves. Farmers' sons and daughters who are engaged in the making of butter should be specially interested in the Home Dairy department, as it affords a superficient for the standard of the standa Dairy department, as it affords an opportunity for them, at little expense, to receive valuable instruction in this very important branch of farming.

With the Travelling Dairy in British Columbia.

BY J. A. RUDDICK, OF THE DAIRY COMMISSIONER'S

Our first stop was at Ashcroft, on the Thompson River and 204 miles from Vancouver. Ashcroft is situated in what is known in B. C. as the "upper situated in what is known in B. C. as the "Both". Both country," or sometimes the "dry country. terms are very appropriate, for in the first place it lies 1,075 feet above the sea level, and in the second place it very seldom has rain there. Owing to the lack of moisture, there are no crops to speak of where irrigation is not practical, but where the water is laid on it is astonishing to see what wonderful crops are grown. The finest potatoes in the world (an Ashcroft man told me so) are grown here. Certainly, they are of enormous size and prime Quality. Theard a man offer to bet that he could produce a ton of potatoes not one of which would produce a ton of potatoes not one of which would weigh less than 5 lbs. Fruit raising is an important weigh less than 5 lbs. Fruit raising is an important industry; apples doing particularly well. It was industry; apples doing particularly well. It was apple at the World's Fair came. The apples have a apple at the World's Fair came. The apples have a apple at the world's Fair came of sunshine. Cattle ranching is followed quite extensively, the Cattle ranching is followed quite extensively, the nutritious "bunch grass" affording excellent pasturage. water is laid on it is astonishing to see what won-

Ashcroft is noted for being the point of departure for the Cariboo gold fields, some 300 miles ture for the Cariboo gold fields, some 300 miles north. Besides the regular stages, pack trains and freight wagons are constantly going and coming, conveying supplies to that important mining district. Although as yet there is not much dairying carried on around here our meeting was well attended Ex-Governor Cornwall occupied the chair in a very acceptable manner. Mr. C. E. Semlen, M. P. P., Messrs. Penny, Barr, Burr, and others took an active interest in making our visit a We were informed that from 50 to 100 miles up the Cariboo trail there are several large dairy farms, where as many as 60 cows are kept on some of the ranches. All the butter finds a ready sale at the gold fields. From Aschroft we travelled down 133 miles to Agassiz. What a change! both as regards climate and general appearance of the country. In place of the treeless hills and bare look which characterize the country around

Aschroft, we find ourselves surrounded by a luxuriant vegetation, for we are now in the famous Fraser Valley, with its big trees and rank growth as a result of the heavy rainfall and excessive moisture. Ferns grow so persistently here as to become a noxious weed. They frequently attain a height of 12 or 14 feet, and are very hard to get rid of, even in the cultivated land.

The Dominion Experimental Farm for the Province is located at Agassiz. As in Manitoba and the Territories, I find this institution very popular, and wielding a big influence for good; a fact due, in a large measure, no doubt, to the wise selection of a superintendent, in the person of Mr. T. A. Sharpe.
Particular attention is paid to fruit growing at this
Particular attention and the superintendent of th Farm. The justly celebrated Harrison Hot Springs are four miles distant, on Harrison Lake, and a more beautiful and restful spot I have never seen. Altogether, the traveller who stops off at Agassiz is not likely to regret it, especially as one of the best hotels in the Province is located here. The guests of the Polls Victore elements well according at the Bella Vista are always well cared for.

at the Bella Vista are always well cared for.

Hop growing is quite an important industry just around here, but many of the farmers are turning their attention towards dairying, and there are some very good herds in the neighborhood. We had a good meeting here.

From Agassiz we crossed the Fraser River in an Indian cancer made from one of the large codar.

Indian canoe, made from one of the large cedar logs, and found ourselves in the Chilliwack district. People who live in Chilliwack will tell you that it is the best against the district in the that it is the best agricultural district in the Province. I won't dispute it. Our first meeting was held at Cheam School House, followed by one in the town of Chilliwack, and still another at a point about three miles west of the town near point about three miles west of the town near Sumas. A cheese factory was started in the district last spring, and has proved quite successful. It is the first and only one in the Province, although A. C. Wells & Son have operated a private one on a large scale for some time. Messrs. Wells have a fine farm, with magnificent buildings, silos, etc., and are well equipped with a herd of about 60 cows. A creamery was being erected in the town of Chilliwack, and it was expected that it would be started late in the fall. started late in the fall. (TO BE CONTINUED.)

VETERINARY.

Live Stock Disorders.

fatal epidemic among lambs recently broke out in Lincolnshire, England, and a large meeting of representative farmers was held to discuss the subject. One speaker mentioned the loss of 250 lambs in one lot, 150 in another, 40 in another, and 75 in fourth. The disease had thoroughly baffled the skill of veterinary surgeons and sheep farmers. He fully believed that they had a fresh disease not heretofore discovered in England, and which was contagious. Mr. R. J. Smaby administered 1 oz. castor oil and 1 oz. laudnum, and had lost none since, but Mr. John Spilman did not believe a farmer's skill could allay the disease. The ram lambs were most to suffer; and those fed the most artificial food were the most susceptible. In most cases acute inflammation of the lungs and bronchial tubes was found. The lining was, as a rule, pallid and friable, and in many cases there was a reddish effusion into the peritoneum. In some cases the common lung worm was found; in others, the lungs and pleura were inflamed, but no parasites were discovered. In one case the lambs developed a high fever, drooped their ears and frothed at the mouth. One lot only stripped their wool entirely.

A motion was passed, asking the Board of Agriculture to make a special investigation.

Swine fever, according to recent accounts, shows no signs of abating in England. During the forty-two weeks ending 19th October, 1895, it is said that two weeks ending 19th October, 1895, it is said that the corresponding period of 1894, and 4,795 in the worm was found; in others, the lungs and pleura

8,098 pigs have died from it, compared with 6,271 in the corresponding period of 1894, and 4,795 in the corresponding period of 1893. The council of the Associated Chambers of Agriculture decline to regard this in any other light than as a result of the weakening of the veterinary department of the Board of Agriculture. The expenditure of money for the stamping out of swine fever has been enorgically and the swine fever has be for the stamping out of swine fever has been enormous; and while undoubtedly progress has been mous; and ein grappling with the disease in Scotland, these figures prove conclusively that in Frederick these figures prove conclusively that in England the administrative department has completely failed in its object.

The above but emphasizes the warnings frequently uttered in the ADVOCATE, and indicates the imperative necessity for drastic measures (quarantine, slaughter and cremation) in such cases as the "hog cholera" or swine fever outbreak in Essex Co. some time ago. At the time some regard this as undue severity, but the aim is to stump out—not to spare feelings or economize in the first outlay.

Stocked Legs and "Scratches."

A great many farmers have trouble with their orses' legs for some time after autumn work ceases. In fact that seems to be the commonest season for attacks of "weed" and "scratches." At a recent farmattacks of "weed" and "scratches." At a recent farmers' club meeting several good horsemen testified to the value of giving a small handful (a large tablespoonful) of Epson salts in each evening's feed for a couple of weeks. The effect is to keep the blood cool, and the animals in healthy condition.