

BASEMENT PLAN OF A. C. STEWART'S BARN (100 x 54), MIDDLESEX CO., ONT.

The basement ceiling is nine feet high and floor is a trifle higher than ground outside, the stables being well lighted by 12 windows (made like house windows), each 2 ft. wide by 3 ft. 6 in. high, containing four lights 10x18 in. The window and door frames are sized. The east end stable doors open in and the west doors open out. The cattle stalls are four inches longer at east than west end. The manure gutter behind cattle is 16 in. wide, with a 6-in. drop at animals' heels and 4-in. drop next rear passage. Instead of a square edge at rear, Mr. Manning, however, strongly recommends a sloping one as being much easier to clean out. The cattle mangers have an 8-in. drop from feed-alley floor, are 20 ins. wide at top and 18 ins. at bottom, and next cattle is sloping plank, 1½x14 ins. Two boards on alley side of posts keep cattle from reaching into alley, and fodder is fed under the lower one through a 15-in. space. Cattle are watered in yard at present. Between horses and cattle the partition is close boarded to the ceiling, but both are fed from same feed alley. The hay chute is not open at south side. Horse mangers are 2 ft. wide at top and 18 ins. at bottom. The bottom is slatted and is six inches above stall floor, so that dirt and dust shake through and can be raked out easily into stall every few days. The horse-stall floors are two-inch plank on cement. The south wall of stable has a foundation of cement concrete to 18 inches above ground, above that it being double boarded, with tar paper between. The foundations go two feet in the ground. Ninety barrels Queenston and 12 barrels Portland cement were used. Dressed lumber was used for siding, and the barn was decidedly improved in appearance and durability by two good coats of paint. In cleaning out stables, the horse manure is loaded in bottom of sleigh, near south-side door of stable, and then the team take the sleigh through passage in rear of cattle, when the load is taken to field or pile, as circumstances require. The east side of box-stall space is formed by a gate which, on being swung back to wall, a team can pass through, as on north side of stable. One door of each set in basement is cut in halves so that upper part can be left open on warm days. Fresh air is brought in through a 4-in. tile under feed alley, with 3-in. laterals opening into each cattle manger.

Charges for Cutting Corn.

To the Editor "Farmer's Advocate":

Your issue of Jan. 15th last contains a query made by N. R. G., of York Co., Ont., in reference to cutting corn for ensilage. My neighbor and myself have a corn-harvester, and have done considerable cutting the past season. In regard to charges made for the work, I might say that each farmer finds his own twine, and horses for half time, and we charge \$1.00 per acre where the rows are sown three feet apart, and all or nearly all plant it at this distance. We calculate twenty-two rows, three feet apart, forty rods long, an acre. We seldom find a man who plants it any closer than this distance, but where we do we charge accordingly. We consider this the fairest and best, and it is the general way in this section. We have never heard of corn being cut by the hour, and I consider it would be very unsatisfactory.

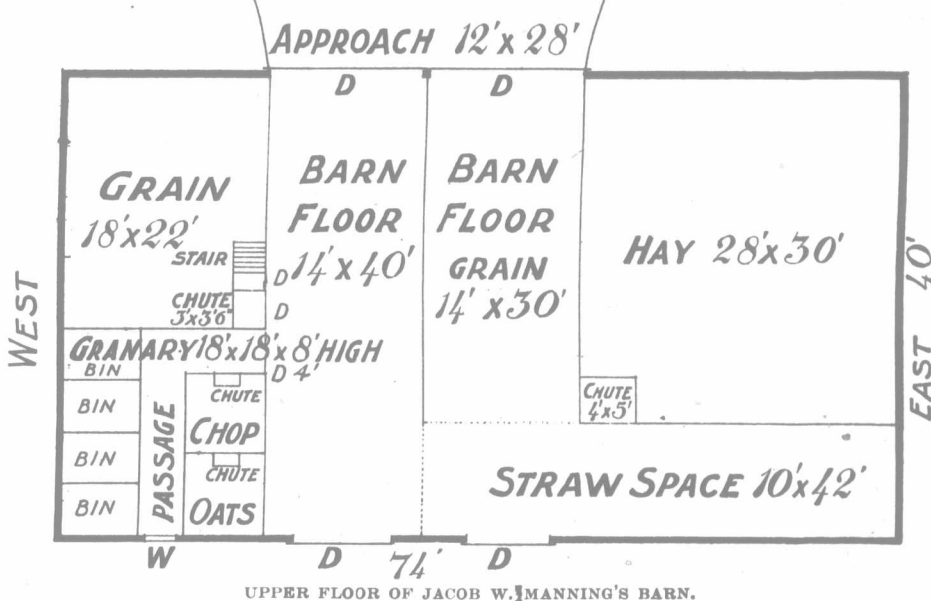
J. J. W.
Halton Co., Ont.

I still must have the "Advocate," and here-with enclose you \$1 for subscription for another year. The "Advocate" comes to me so bright and full of good things that I could not think of being without it. It is one of the very best that comes to my desk. Very cordially yours,
Preston, Minnesota. JOHN C. MILLS.

Ayrshires in Pan-American Model Dairy.

I have read with interest the articles in the "Advocate" setting forth the achievements of the different breeds of cattle at the Pan-American Exposition, and I have been disappointed to find that no abler pen than mine has recorded the success of the Ayrshires at Buffalo. Although the Ayrshires have carried off no great laurels, yet they have proved themselves to be the best all-round breed of cattle for the Canadian farmer who wants a cow whose milk in the summer time will bring him most profit for the manufacture of cheese, and in the winter the

milk of which is equally valuable for the manufacture of butter. Now, in the result of the test published in the "Advocate" it is seen that the Ayrshires were high up in the production of both butter-fat and solids. The Guernseys were first, it is true, in the production of butter, but in the whole six months the record shows that the difference between them and the Ayrshires was the nominal sum of \$7.41. And if the price as feeding value of the skim milk had been taken into consideration, as it certainly ought, the Ayrshires would have headed the list with a good margin.



UPPER FLOOR OF JACOB W. MANNING'S BARN.

Again, it is seen that in the production of solids the Ayrshires came second. A great recommendation for the Ayrshire herd is its uniformity of production. A better example of this could not be found than the small difference in net profit shown between the best and poorest cow in the five Ayrshires composing the herd at Buffalo; the actual difference being \$7.37 for six months, whereas in every other herd a difference of double and in some cases even treble this sum is shown. Now, if such a material difference is shown in such a small herd, it is easy for farmers and dairymen to conceive the great difference there would be in a large herd. One feature of the test of which I did not approve was the allowance of three cents per pound for increase in live weight, which I consider of no value to a dairy cow. For instance, the Shorthorns showed an increase in weight of 802 pounds, which at three cents per pound credited them with \$24.06. Now, I fail to see how the breeder or owner of Shorthorns is going to realize the \$24.06 allowed to him for this increase in live weight during the test. I mention this because it was solely due to this superfluous increase in live weight that the Shorthorn was able to compare as favorably as it did with the strictly dairy breeds. And whilst a dairy cow will continue to give a profitable return each six months, it is absurd

to suppose that a Shorthorn will continue to increase such weight to the same extent as it did during the first six months of the test.

STEWART CLELLAND.

Richmond Co., Que.

The Formal Opening of the O. A. C. Dairy School.

On January 13th the lecture room of the dairy building was filled to overflowing with students and visitors, gathered to hear addresses from some of the most prominent dairymen in the Dominion.

Prof. Robertson, Dr. Van Slyke (of Geneva, N. Y.), and Mr. R. M. Ballantyne were expected, but were unable to be present. However, a most profitable and lively afternoon was spent. Could it be otherwise, with Mr. Dan Derbyshire (a whole host in himself) in the chair; addresses from Mr. Woodward, official referee of the Butter and Cheese Association, of Montreal; Dr. Mills and Prof. Dean, and the following musical programme, contributed by the dairy students: Piano solo, Miss Jennie Glendinning, Manilla, Ont.; violin solo, Mr. Marshall, Niagara Falls, Ont.; piano solo, Miss Jessie Evans, Guelph, Ont.; chorus, lady dairy students; piano solo, Mr. Will Macdonald, Truro, Nova Scotia.

Mr. Derbyshire spoke of the magnificent opportunities the boys and girls of to-day have, and continuing, said: "It is the boys and girls like those before me, who take advantage of the privileges offered, who come to the front ranks every time. This is an age of specializing, and to be an expert dairymen, a wide and thorough knowledge of all that pertains to that work is necessary."

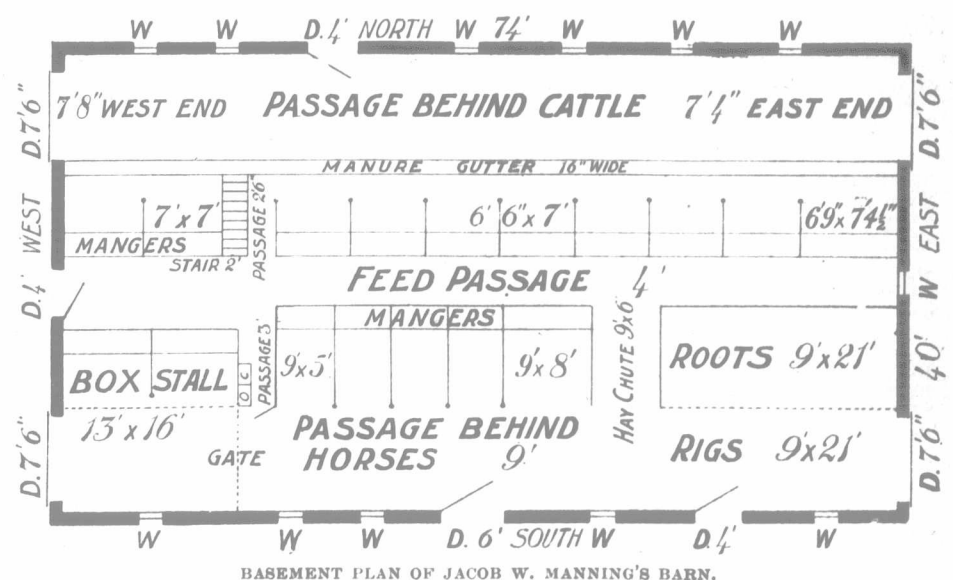
Dr. Mills' address was particularly to the students. He told them to read, to think, to observe, to have a high aim, and to be content

with only their best effort. He emphasized the importance of cleanliness in all dairy work, and said the maker should be so educated as to be a bureau of information to the patrons.

Mr. Woodward spoke largely from the standpoint of a buyer, and impressed upon his hearers the necessity of keeping up a good standard for export cheese. Much of last year's cheese was off flavor, and this was mainly due to the excessive heat and improper curing rooms. Open cheese, and mealy, sour cheese resulted largely from lack of judgment on the part of

the maker. Many were using too much starter and getting the milk overripe. Cheese should be made of a uniform size. All of inferior quality should be so marked, thus avoiding a possible cut on the entire shipment. During last season several such cuts were made owing to a few bad cheese in shipments. Cheesemaking has reached its limit. The field for buttermaking is large and promising.

Prof. Dean in his brief remarks dwelt on the power of influence each student exerted, and strongly endorsed all previous speakers had said. The attendance at the school is excellent. This department of the O. A. C. grows in usefulness each year. A course of lectures in cooking is a popular addition to the curriculum this term, and over one hundred ladies are taking advantage of its training.



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