

# A Model Barn for the 100 Acre Dairy Farm

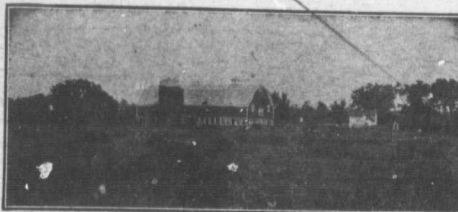
That of L. H. Newman, of Grenville Co., Ont., is Convenient, Comfortable and Commodious — and is Not an Expensive Barn as Dairy Barns Go — By S. R. N. Hodgins

As one travels about the country he becomes impressed with the variation in dairy barn construction, as well as with the number of more or less expensive dairy barns which have been built, apparently without any definite plan and in the building of which a little planning might have wrought a great improvement. In planning the dairy barn we should bear in mind Horace Greeley's pithy remark, that "If a man's foresight were as good as his hindsight, he'd be a darn-sight better off." A good barn is something that the farmer is not going to build every day. It is going to tie up a lot of his working capital, and upon the plan followed will depend largely the amount of labor that will be necessary in his dairy practice during the life-time of the barn. So when one finally comes across a really handy barn and one which at the same time may be built for something like a small fortune, he feels as if he should pass it on for the inspection of prospective builders.

There is, of course, no barn plan that may be fitted to every 100-acre dairy farm without some minor alterations, for local conditions, as well as the type of dairy farming followed, must always be taken into the reckoning. One barn, however, which I have had the pleasure of visiting recently, appeals to me as combining more attractive dairy-barn features than many I have come across. This is the barn on Elmhurst Stock Farm, near Merrickville, owned by Mr. L. H. Newman, who is well known to Canadian farmers as secretary of the Canadian Seed Growers' Association.

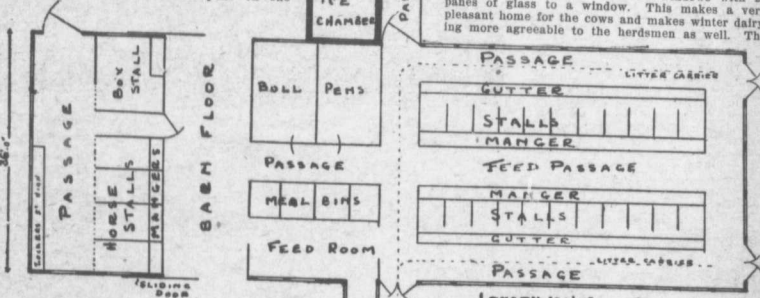
The Newman barn, as will be seen from the accompanying illustration, is attractive in appearance, and the good impression that it gives on the outside is strengthened by its inside layout, as well as by the substantial construction which characterizes the whole building. In it Mr. Newman has all his stock under one roof. The barn is set north and south, with the cows in the southern portion and the horses in the north. Thus the cows have that abundance of light and sun necessary to comfortable winter dairying, and during the time of year when their quarters would be too hot they are at pasture. On the other hand, the horses in the north end have quarters that are always cool during their busy time in the summer season. Besides the cow stable and horse stable, the barn proper includes granary and feed room, and furnishes ample room for the stables for the storage of all the roughages necessary for the herd. But perhaps the most pleasing feature of the whole structure is the combined ice house, refrigerator and milk house, which is attached as a wing on the east side of the barn. The fact of having all the processes in connection with the production of the milk carried on under one roof, as well as the numerous little labor-saving devices in the barn, makes this plan a particularly attractive one to dairy farmers, whose profits bear a close relation to their skill in the use of labor.

The barn is of frame construction. It was found



The Most Outstanding Feature is the Abundance of Light in the Stables.

that in this particular district a timber frame could be erected at less cost than the plank frame construction, which is now becoming so popular. It is 36 feet wide by 103 feet in length, with 15-foot posts, and is 25 feet from ridge to floor. The barn is divided, as will be seen from the plan, into an 18-foot stable, a 12-foot threshing alley (also used as a feeding alley for the horses and as a general room in which grain may be cleaned, machinery repaired, etc., for it is well lighted by windows in the large sliding doors), next is an 18-foot portion, divided by a passage with bull pens on one



side and the feed room on the other, the latter opening into the silo chute and connected by a stairway with the root cellar underneath, and the remaining 55 feet comprises the dairy stable proper. Underneath the feed room and extending far enough under from this floor, is an 18 x 20 foot root cellar, well drained and equipped with stone walls, while above the feed room a granary has been partitioned off from the storage room. This granary has a four-foot passage

the barn floor is no basement. It is the experience of dairymen generally that a concrete or stone basement where a "bank" barn is erected, is one of the most expensive items in the construction of the barn, and there is always difficulty in keeping the walls dry. In the type of construction followed by Mr. Newman, the cow stable is light and dry. The cost of erection has been considerably lessened through the elimination of the basement, and with the 15-foot posts and hip roof construction there is ample space for all the roughages required. If more cows require housing than the present facilities will accommo-

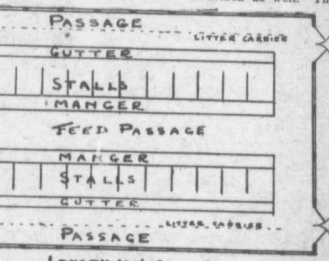
date, the plan used will allow it to be extended to the south without great expense and the added storage room will always keep the storage end well in advance of the number of cows. The dairy is well ventilated by the Rutherford system, the outlet chute is air tight and insulated, and no drip has ever been experienced. Windows have been used freely in all parts of the barn, and its well-lighted mows and floors constitute one of its greatest charms. The barn is well roofed with steel, and the walls are kept nicely painted and attractive in appearance.

## The Dairy Barn.

As this is a dairy farm, most of the attention in building the barn was given to the southern half where the cows make their home. The 36-foot width of the barn is conceded by most dairy farmers as the best width for a two-row cow stable. In this barn the cows face in. Taking all the arguments for and against, this arrangement seems to be the best on the ordinary dairy farm. There is less confusion when the cows are coming in, there is a great saving of time at feeding, and you have the light on the business end of the cow. The only drawback which Mr. Newman has found to this system is that the rear walls become spattered, even with a fairly wide passage.

The most outstanding feature of Mr. Newman's dairy barn is the abundance of light. A glance at the accompanying plan will show that there are the utmost number of windows in this end of the building which can be installed without weakening the structure. In fact there are 23 windows with 20 panes of glass to a window. This makes a very pleasant home for the cows and makes winter dairying more agreeable to the herdsmen as well. The

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walls of this part of the stable are constructed with four-ply of lumber with building paper between and a dead air space in the centre. The concrete floor runs through the whole barn. The floor of the dairy barn is roughened to prevent accident. The passages are all five feet wide, with the feed passage 15 inches higher at the top of the manger. This places it on a level with the top of the manger. The length of the platform where the cows stand varies from 4-ft. 10-in. to 5-ft. 2-in. to accommodate the different ages of cattle. The stable has 18-inch gutters, sloping toward the side next the litter carrier. It has 24-inch continuous mangers and is equipped with steel stanchions and stalls and a litter carrier. One of the points to be noted in the construction of the manger, which holds the bedding and which tends to keep the cows standing level. This ridge comes just far enough back that it is behind the shoulder when the cow is lying down and so leaves her comfortable. The ceiling is 8-ft. 9-in. above the outside passage and 7-ft. 8-in. above the centre passage. It is important in dairy barn construction to get the proper height of ceiling. If a ceiling be placed too high, there is too much space to heat and the barn is never comfortable in cold weather.

## The Commissariat.

The feeds are mixed in the feed room, which is connected by the chute with the silo. In this feed room is situated the grain grinder operated by a shaft which runs through from the engine in the dairy. Along one side of the feed room are four meal bins with pipes leading from the grain bins in the granary above. Underneath the feed room is the

(Continued on page 9.)



The Manger Construction is the Simplest and Most Sanitary Possible.