

A Visit to the "Model Barn" and the "Model Dairy"

ONE of the exhibits that attracted the attention of thousands of Ontario farmers and roused the interest of hundreds of those who are planning to build during the coming year, was the model barn erected on the Exhibition grounds this year, near the dairy stables.

Every ambitious farmer aims to have the barn he puts up as near the ideal as possible, not only in the matter of convenience, saving of labor, etc., but with regard to cost, ventilation, light, sanitary appliances, and the hundred and one little things that go to make the building as near perfect as possible.

Several of our big manufacturing firms combined this season in erecting and equipping on the grounds, a farm barn with practically every approved up-to-date convenience in use on the most up-to-date farms. A short description of it then should indeed be of much interest to the readers of *Dairy and Dairy*.

A Made-to-Order Barn

The day has come when the Ontario farmer can order his new barn just as a few years ago he requested his local carriage maker to furnish him with a pair of sleighs. So too he can secure a made-to-order barn, just to suit his particular needs. For these are modern days.

The idea of a barn constructed of iron and steel is a big step from the old log one hewed from massive timbers that our fathers and grandfathers used to build. But why should we not build a barn of steel? It is

Of course the most important part of the all-steel barn was the frame work. The illustration herewith shows the simplicity of this more clearly than description. The trusses were of double-angle steel, which made the whole framework perfectly solid, and the arrangement as shown, gives a clear floor from end to end, without any of the old-fashioned cross beams. A convenient and roomy barn frame is the result.

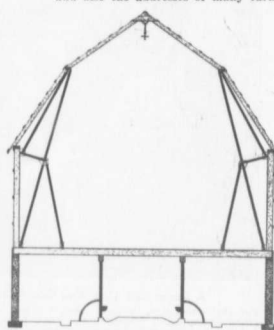
But these are not the only points of advantage. Where it took weeks to get out the timber and getting the framing done (to say nothing of the "raising") three or four men can now put up the whole building in a few days. Every farmer knows what this means in both time and labor, especially during the busy summer season.

On the outside there is not a bit of wood, from the ground to the tip of the ventilator. The building is thus fire-proof from without, and according to Prof. Day, lightning conductors from the eaves to moist soil, makes it practically lightning proof.

The siding of this model barn is of Acorn Corrugated Iron—the kind of galvanized iron sheeting that is going on to hundred of new barns each year. The roof is made of the safety locking shingle though some of the barns being put up is of the same material as the

next year should not fail to know more about this one before he decides. As one farmer was overheard to say in leaving, "I got the worth of my fare just from seeing this barn and the things in it."

The "Steel Truss Barn" is the name of the attractive building in which the Metal Shingle & Siding Co. tell all about this type of building. A card will bring it to prospective builders, and also the addresses of many farm-



Steel Truss Framework—Note Absence of Crossbeams

ers who have put up these barns. It's worth a trip to see one of them.

The Foundation and the Silo

The walls for the basement of the barn are different from those to be found on most Ontario farms. They are built of Natico Hottel's Tile (clay), manufactured at Hamilton, Ontario, by National Fire Proofing Company of Canada, Limited. The dead air spaces in the tile provide insulation against heat, cold and moisture, and the walls will not steam up as in the case of a solid wall. The tile surface is scored both without and within, and stuccoed over with cement plaster, giving a neat attractive surface, which can be marked off to represent stone, if so desired. This type of wall is growing in popularity every year, for every farmer knows the value of an air space in the wall of any building, either house or barn. It is the same principle as in the thermos bottle-keeping things hot in cold weather and cold in warm weather.

The silo too was neither the stave nor the cement kind found on most Ontario farms. It was built of hollow tile, somewhat similar to those in the wall with the exception that the exposed surfaces are glazed. The hollow wall is always desirable in the silo in preventing freezing and the glazed surface on the inside absorbs absolutely no moisture. Thus practically every bit of the silage around the walls comes out just as good as that in the centre. The silo erected at Toronto was 28 feet high and 12 feet across, holding sufficient silage for 18 to 22 head. The National Fireproofing Company of Canada, Ltd., have this year placed about one hundred of these silos on Ontario farms, and the excellent satisfaction they have given recommends them to every farmer or dairymen who is planning to put up a corn tank next year. One of these is illustrated on the front page of *Dairy and Dairy* of Sept. 3rd. It is that of John Wilson, of Oakville, Ont., who is an enthusiast of this type of silo. The total cost of the hollow tile silo, including labor, etc., is little if any

greater than for cement, and any handy man can put one up. Look for descriptions of the Natico Hottel's Silo or of Natico hollow tile in any issue of *Dairy and Dairy*. The silo can be secured by writing to their Toronto or Hamilton office.

The Machine that Fills the Silo

THERE is only one firm in Canada that makes a specialty of ensilage and feed cutters. It was one of their men that came to make up part of the equipment of the "Model Barn." Bell ensilage cutters are well known all over Ontario—known for one of their particularly strong points—they are credited with being the lightest running cutting machine offered for sale. And it is whispered about that it was for this reason they were asked to demonstrate their machine as part of the "Model Barn" equipment.

This firm makes several types of cutters and in every size—in fact they make nothing but feed cutters of one kind or another—exhaust blenders, fly wheel blowers, carrier elevators, traveling elevators, stationary, unmounted cutters or mounted on either 2 or 4 wheels. They make every size of machine from the one for the man who wants to cut a little feed by hand to the travelling silo filler, whose wheel can fill a silo in as few hours as possible. The number 60 size of fly wheel blower (mounted as shown at the exhibit) has been selected for two electrical traveling power outfits, one in Dorchester Township and one in Norwich. Each outfit will consist of a mounted transformer, a mounted motor and the mounted blower as above.

The cutting knife of the Bell ensilage cutters is the same of course in every type of machine, and accounts for its requiring less power to drive it. This knife is crescent shaped, and cuts with a shearing slant. The wear is so very even as noted in old knives that it shows the design must be lost. Of course it is well known that less power is required with a carrier elevator than with the blower, and it is for this reason that the former is well adapted to the needs of the farmer with a 4 or 6 horse-power engine, and who does not wish to depend on the silo cutting gang. Every machine has a safety lever that instantly reverses the feed rollers—but their booklet explains this in many other points and will come in response to a request to head office, St. George, Ont.

Cork Brick Flooring

HOW would you like your cattle to sleep on a cork floor? Several of the stalls in the basement were floored with cork brick, and it was interesting to see interested farmers chat with the men who were their merita and demerita. They all agreed it would be much easier on the cattle's knees, and a lot more comfortable than the cold cement.

This seems to be the accepted opinion of dairymen, and is making this flooring very popular in the best stables of Ontario and Quebec. The bricks are manufactured from ground Spanish cork and asphalt compressed into brick form. This makes them perfectly waterproof, lasting and sanitary, yet giving the comfort that "makes for more milk." Dairymen and others can secure complete information about this new durable stable flooring from the Canadian Sales, de Kent Co., Ltd., of Montreal who have supplied large numbers of these brick to various dairy barns and horse stables over Canada. Any particulars, catalogues or even a sample of this cork brick, can be sent to the company to any one wishing to

investigate this style has proved to be quite other materials for the the man who is planning it is well worth looking over the usual bricks are the usual in wear on a cement floor will wear for years.

The Stalls, Stanchions

One of the accessories given a general outline arrangement. It provided a row of cross beams to allow for plenty of light leaves less odor from the ventilators open at the sides and reduces labor in feeding by having feed passage. At one stable was shown the single horse stalls and stall. In practice of course it is not to be these would be at all barn. They would be separate building, but were for demonstration other end of the building the maternity stall for ing the time of calving constructed per for several of lighter material valves.

The firm that drew plan and which supplied material such as stalls, steel needs no introduction farmers. The Beatty Barns have their stable equipment every township over their workmanship is for every farm building of situations. The entire stable was designed for cleanliness and low. More sanitary and used and yet at the same time arrangements that the labor will be a minimum. The stalls are the 18" steel girders—the galvanizing gives them a particularly attractive appearance at the same time preventing the swinging of the plenty of freedom for the and the light steel construction make it possible every part of the stable light. This is in big contrast of the dark, musty corners of our barns at present.

The feeding manger is of a justable kind, that allows to be swept out from end to work of feeding is made use of a feed truck. This is a barn would have feeding. There would be trips or more to the feed silage. The truck holds the whole herd. The new semi-individual andjection hold a cylinder a silage. No sheatharrow or ing this stable. For not so handy as a good over carrier, either to the man



Early Visitors to the "Model Barn"

but a step in the economy of nature's products. From year to year we see iron in so many forms superceding wooden work on the farm—steel fences, steel waggon, even to the all-steel stone-bolt. Metal must necessarily supercede as our supply of lumber diminishes. Moreover steel construction has many advantages, and the credit of introducing steel framed and steel clad barns to the farmers of Ontario must go to the Metal Shingle and Siding Co. at Preston. During the past two years this firm has expended much thought, time and money in perfecting this model type of barn that has met with the hearty commendation of many farmers over Canada who have them in use. "The Model Barn" erected by them on the Exhibition Grounds was convincing enough to the thousands of farmers who saw it. It was 36 feet wide by 56 feet long and 16 feet to the plate—about the size of the average Ontario barn, though these buildings can just as easily be made into any other size desired.

sides, except of slightly heavier gauge to stand the wear and tear.

Most farmers now demand a good ventilation system in their new buildings. The architect, Mr. Gilmore, was provided for this with a thorough system by means of 18-inch galvanized pipe that collect the foul air from the stable, carry it up along the wall and roof, where it escapes through two ventilators. Fresh air is supplied to the cattle through ventilating ducts built into the stable wall. Even the windows in the roof and in the basement have metal frames all through, and are numerous enough to provide an abundance of light. The roof windows are controlled by a rope pulley from the barn floor.

It was a pleasure for the writer to visit this model barn together with a score or more farmers, and to have it's construction explained in detail by Mr. Gilmore. It is a type of building that has deservedly become very popular all over Canada, and the man who has in mind a new barn for