

FARM BUILDINGS FOR KANSAS.

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1. Introduction.
- II. General rules that must be followed.
 1. Where shall they be built.
 2. Nature of grounds, grainage, etc.
 3. Qualities that a good building must have.
 4. Number of buildings; one large building for everything or smaller buildings for different stock, grain and implements.
- III. Different kinds of buildings with drawings showing examples.
 1. For horses.
 2. " cattle.
 3. " hogs.
 4. Corn crib.
 5. Silo.

FARM BUILDINGS FOR KANSAS.

This subject can be treated in a general way only in a paper of this kind. No hard and fast rules can be laid down to be followed by all farmers in all parts of the State. Nevertheless there are a few principles that must be considered before the buildings are begun.

The very first thing to be considered is the location of the buildings on the farm, i.e. site or building place. This position cannot be decided upon without taking into account the shape of the farm, the nature of the ground, the lay of the land and its position in relation to the public road. In order that all fields shall be easily reached these buildings should have central position on the farm but should not be in the exact center for that would be too far back from the road. If there is a place slightly elevated above the surrounding fields, so much the better, as it will make the subject of drainage much more simple. Good drainage is one of the prime requisites in keeping the buildings, yards and grounds in proper condition. Nothing lends so much to the appearance of buildings, health of animals and the contentment of those who do the work as clean, well drained grounds and yards. Muddy yards covered with trash are sights which will tempt some of the best of boys to leave the farm in sheer disgust. If there is little natural drainage the only thing to do is to put in artificial drainage.

A good building must among other things fulfill the following requirements:- 1st. They must be made strong enough to sustain the weight of the structure itself and the contents. 2nd. If for

stock it must shelter thme against the inclemency of the weather. Must be warm in winter and cool in summer. The ventilation must be ample so as to supply the animals with plenty of pure, fresh air and carry off the air that has been breathed and the odors arising from the bodies of the animals and from the excrement. Plenty of light must also be supplied to make the interior of the building inviting, check the growth of bacteria, molds and fungus growths and to make the animals comfortable and healthy.

Another question which naturally comes up under farm buildings is whether a large barn shall be built which will accomodate all the different animals on the farm and also the feed for them or on the other hand make smaller and separate buildings for each kind. Each plan has its objections as well as its particular advantage over the other. In the combined building we have the advantage of having everything close together so there will be less time required for feeding and caring for the animals, and much more space can be covered with the same amount of roofing. The disadvantages are that where one barn is built for so many different things details which are the very essentials must in many cases be sacrificed. Sometimes it is light, sometimes ventilation and again it is the space taken up by the partitions between different animals and other apartments.

Where a general barn is wanted it should be planned so that it could be divided into departments. These departments should not interfere with each other in any way. This ideal cannot always be accomplished but it should be approached as closely as possible. Have one wing or side built especially for cows; another for the work horses; and one for the brood mares and colts.

This kind of a barn can be built most easily where there is a

side hill so that the second floor can be reached without having to build a grade or bridge. Then the second floor should be planned to hold the feed for all animals, the different machines for preparing the feed and the tools needed in the farm work. Such a barn in order to be convenient would have to be made very large and very heavy timbers would have to be used in its construction. This makes it a doubtful question as to whether space or money either would actually be saved in combined buildings.

The objections to separate buildings for each kind of stock are, 1st. That they make more work for those who care for the stock. 2nd. That it costs more to build them and 3rd. That the buildings cover too much ground. The advantages are these; they can be planned for the particular animals for which they are wanted and every detail could be worked out with that end in view. This would make it possible to attain the very highest grade of perfection. The amount of space required for grain, hay and bedding could be calculated almost exactly, and each thing could be so placed and arranged with reference to the animals that the time lost in going from one building to another would be more than made up for again. Besides there must be yards around the barn for the animals and these can be managed so much better where you do not have to worry about running into or against other lots. This arrangement will do away with the trouble of having the different animals getting mixed up and worrying each other. Furthermore, if disease should break out among the cows, horses or hogs it could be more successfully dealt with where different buildings were used, and in case fire should start in a combined barn the chances are that everything would be destroyed. While in separate barns such would not be the case. If one building should catch fire one's whole

attention could be centered on that one building and perhaps the fire could be put out and the building saved. The other buildings would be practically out of danger unless there should be a high wind blowing.

These separate buildings should not be scattered around indiscriminately but should be arranged according to some general plan. In this plan there should be some central point and all buildings should be placed with reference to that point. This would make the grounds and yards look so much more pleasing to owner and visitors. Every farmer should try to make his surroundings such that life on the farm will be a pleasure, so that boys and girls will not be anxious to leave it. It is the unhandy, untidy, ill-looking and mean smelling farmyards that fill one with disgust and discontent. This is not poetry but facts that must be taken into consideration by every live farmer if he wishes to keep his occupation out of the old beaten path of drudgery. There is nothing to lose and every thing to gain for those who will at least try to make life on the farm pleasant as well as profitable.

The farm house has not been considered in this paper but that not because of its unimportance, but rather on account of its great importance. Make the building of your home one of the prime objects of your life.

Now the different kinds of farm buildings will be taken up and described in detail in connection with drawings illustrating some plans that are considered as hints to builder and not to be taken as ideal. There is nothing that cannot be improved upon.

HORSE BARN.

Length - - - - - 48 ft.
 Width - - - - - 36 "
 Alley - - - - - 12 "
 Stalls - - - - - 8 X 12 "
 Office and Harness 8 X 12 "
 Water trough - - - 4 X 4 "
 Feed Bin - - - - - 8 X 8 "
 From ground to plate - 24 "

Upper floor for hay. End elevation shows the doors and windows.

Upper door for taking in hay.

Nos. 1 to 6. Stalls for mares.

7. Place for breeding purposes.

8. Stall for stallion.

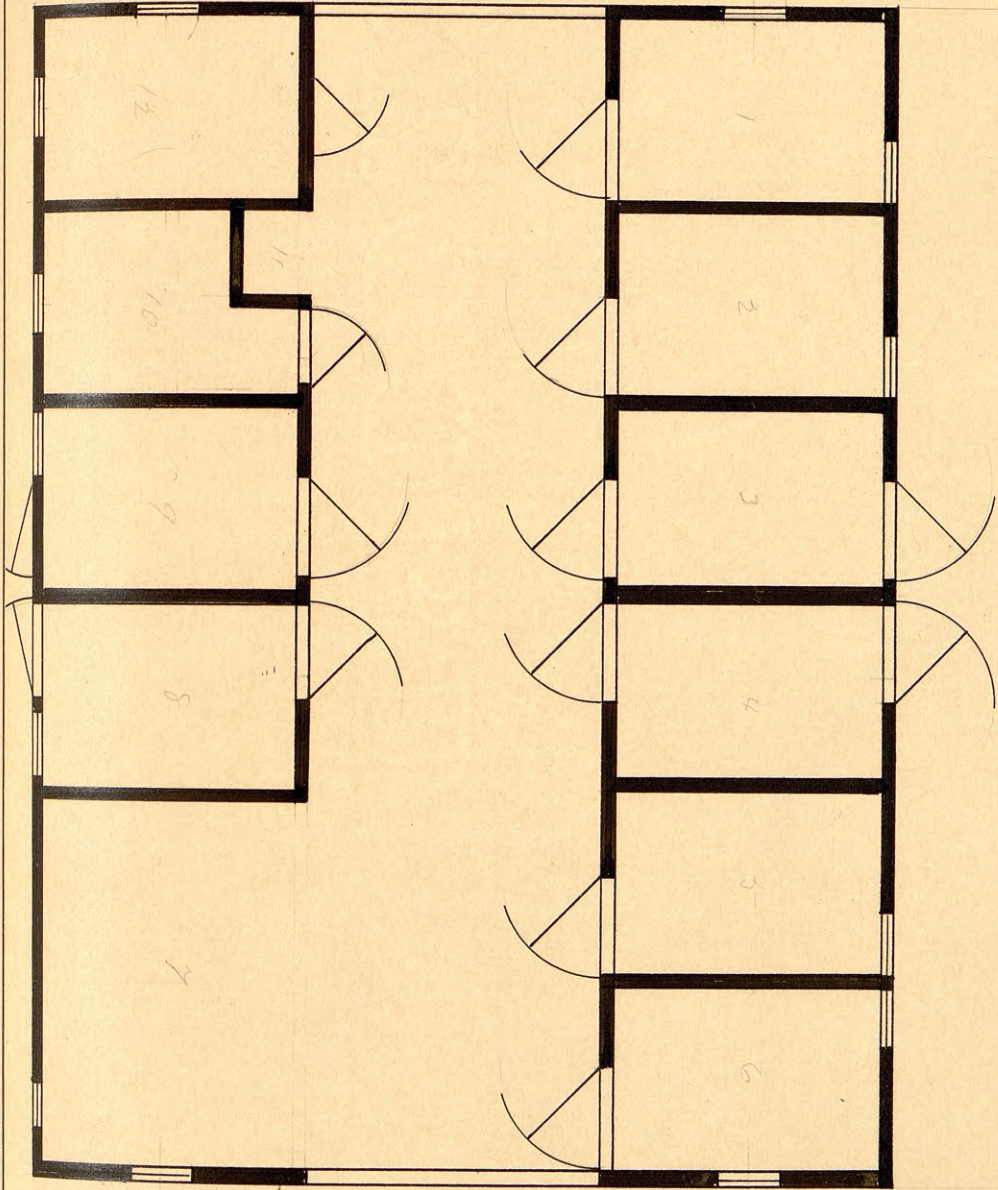
9. " " jack.

10. Feed.

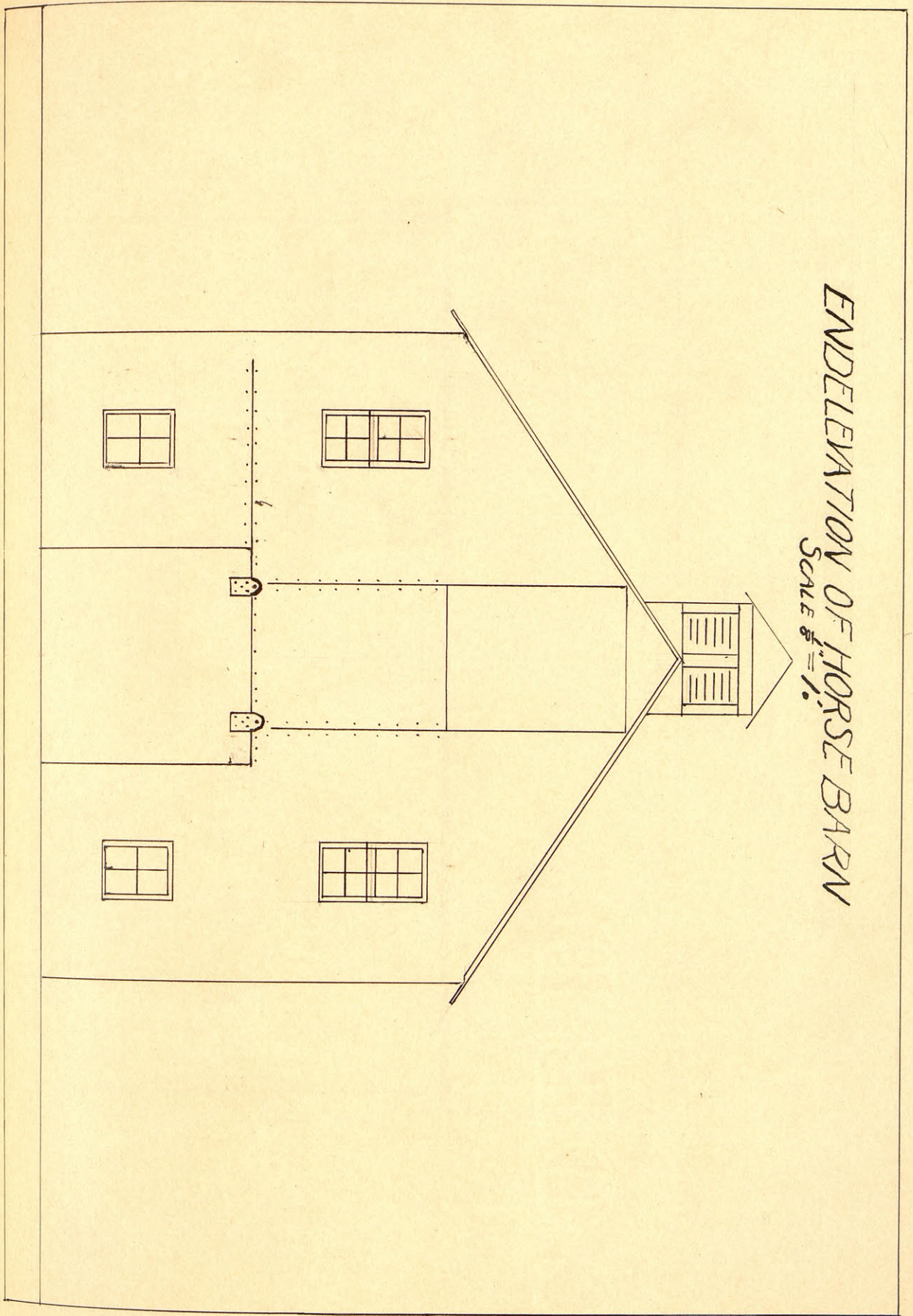
11. Water.

12. Office and harness.

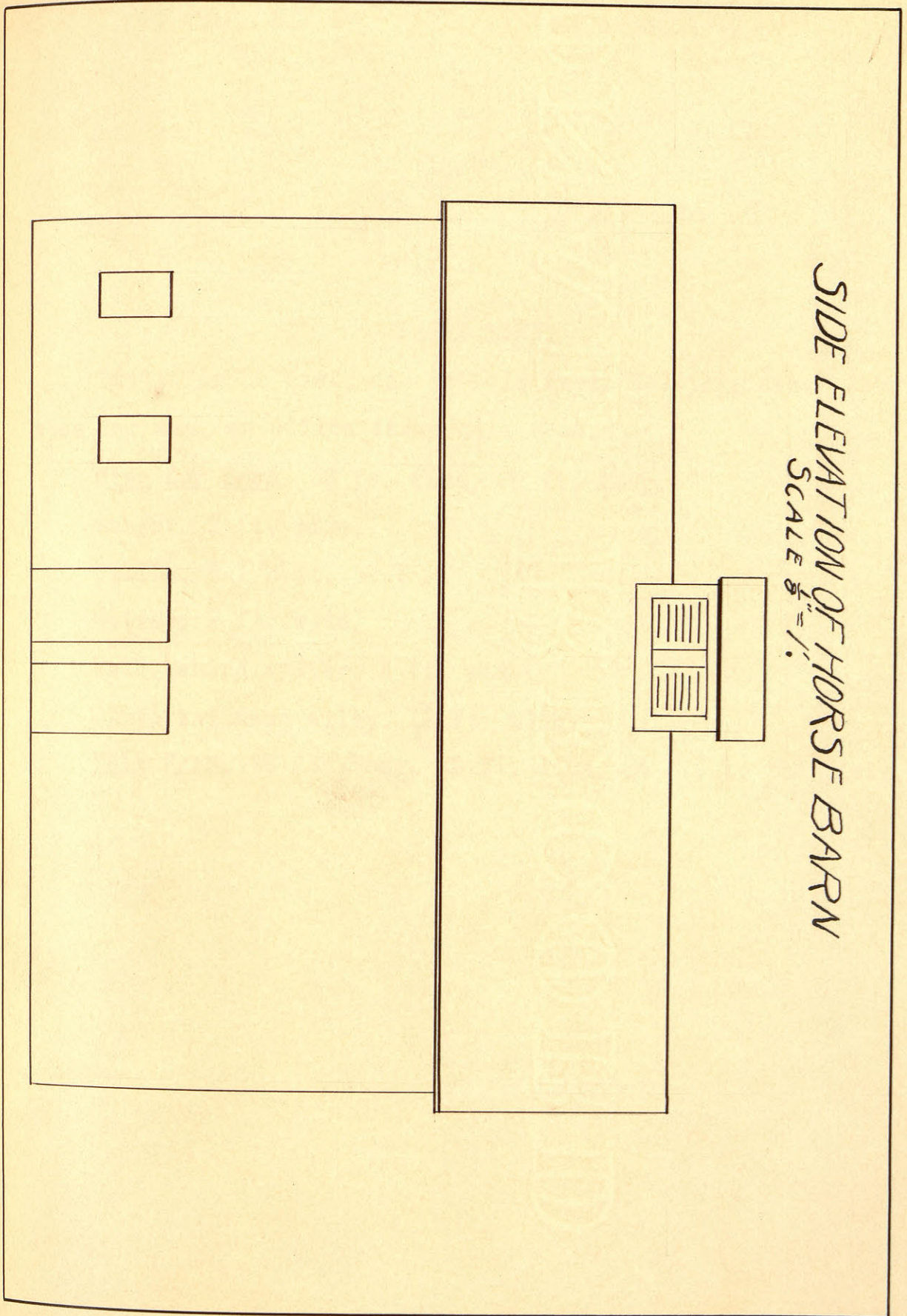
PLAN OF HORSE BARN.
SCALE $\frac{1}{8}'' = 1'$.



ENDELEVATION OF HORSE BARN
SCALE $\frac{1}{8}'' = 1'$



SIDE ELEVATION OF HORSE BARN
SCALE $\frac{1}{8}'' = 1'$



DAIRY BARN.

Built for 20 cows, and to hold feed, bedding, etc. Also room for man, an office and a milk room.

Wing for Cows. 38 ft. wide, 39 ft. long.

Manger. 2 ft. wide.

Stalls. 3-1/2 ft. by 5 ft.

Gutter. 2 ft. wide.

Walk behind gutter. 4 ft. wide.

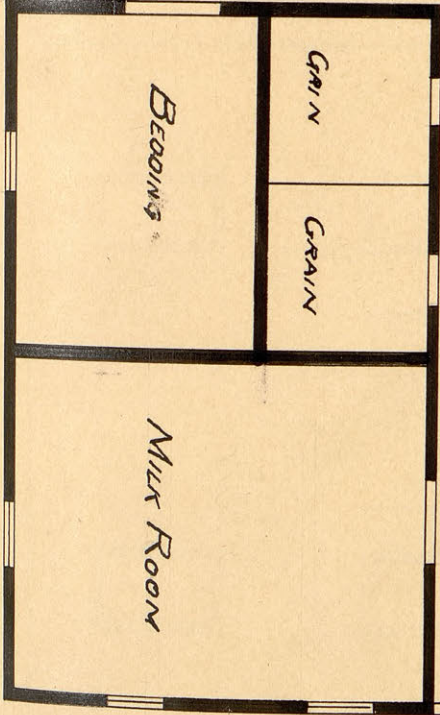
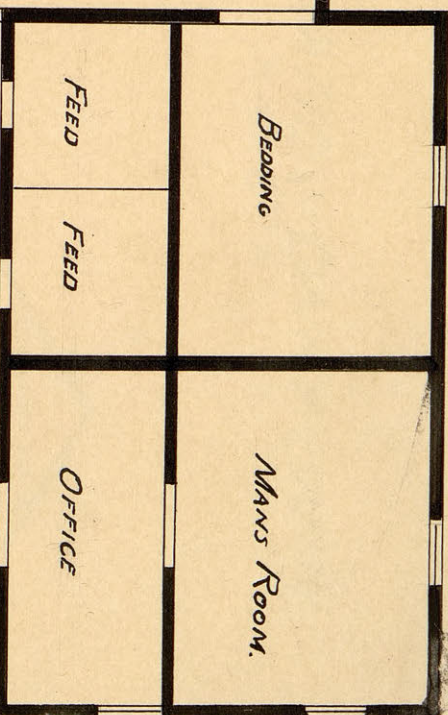
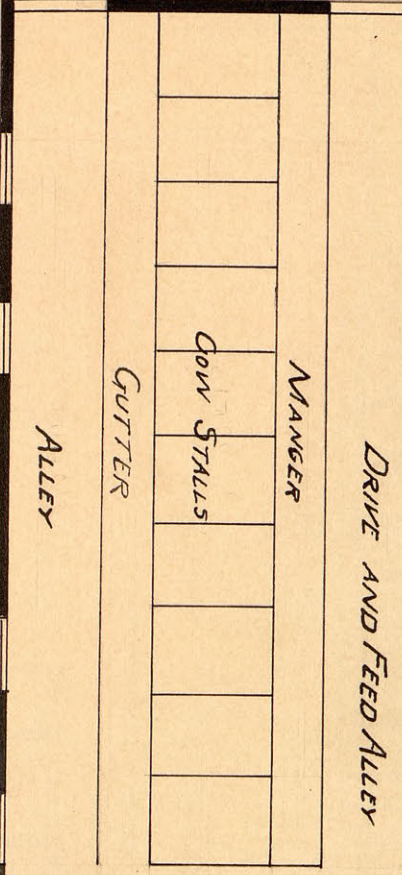
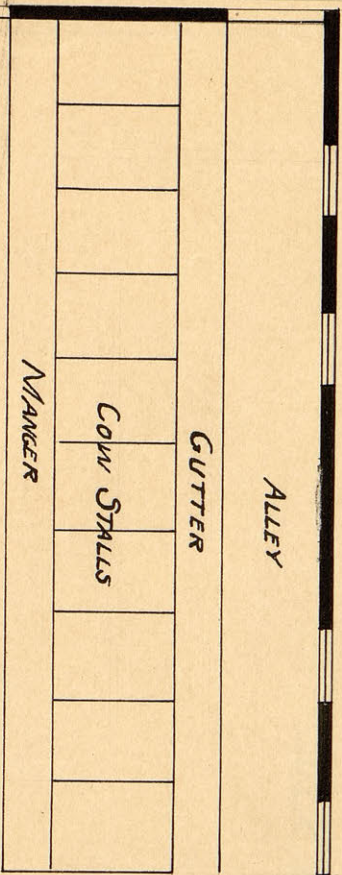
Drive and feed alley. 12 ft. wide.

Main Barn. 48 ft. long, 28 ft. wide, 24 ft. to the plate.

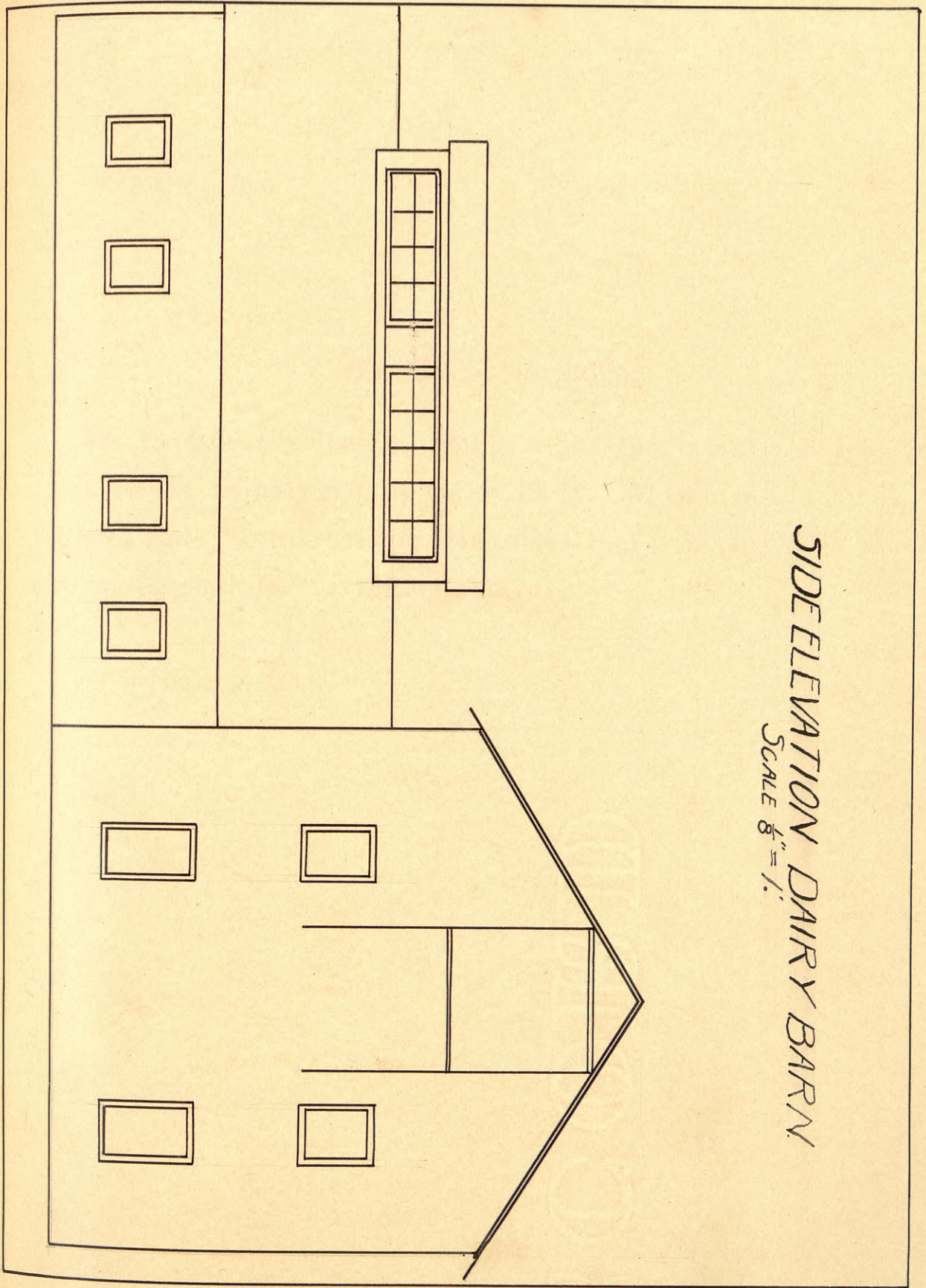
OPEN SHED--FOR CATTLE.

Can be made any length. Posts eight feet apart. Height in front 12 ft; in back 8 ft.; width 16 ft. Closed on all sides except front. Front boarded down five feet. A very good and convenient shed for fattening cattle.

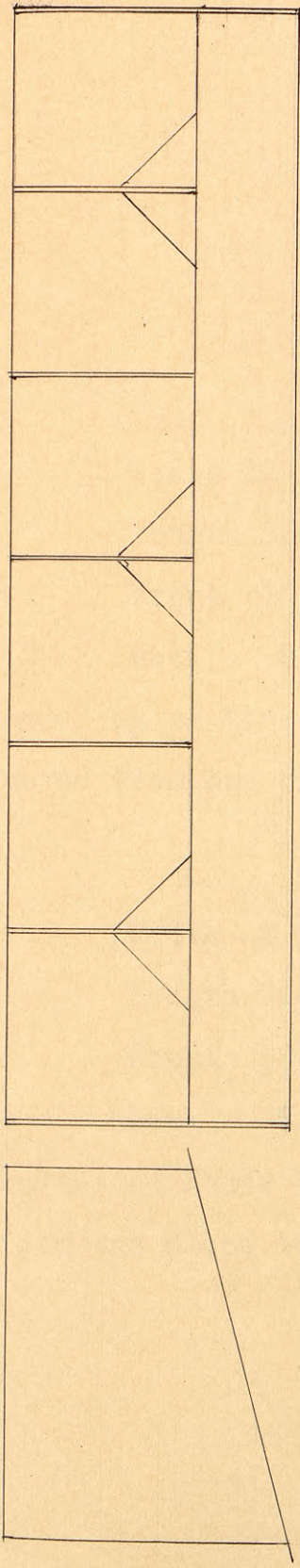
PLAN OF DAIRY BARN
 SCALE $\frac{1}{8}'' = 1'$



SIDE ELEVATION DAIRY BARN
SCALE $\frac{1}{8}'' = 1'$



OPEN SHED
SCALE $\frac{1}{8}'' = 1'$



HOG SHED.

Width 12 ft.

Length 32 "

Front 10 " high.

Back 8 " "

Boarded up on three sides and half way down the front. Shed can be moved from one place to another entire.

HOG HOUSE.

Width 8 ft.

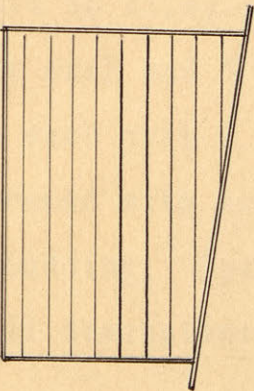
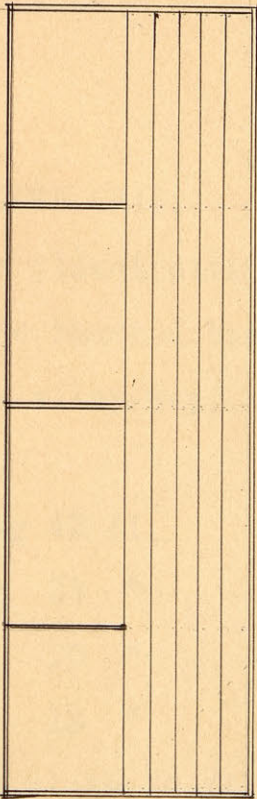
Length 24 "

Front 10 " high.

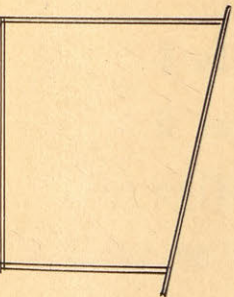
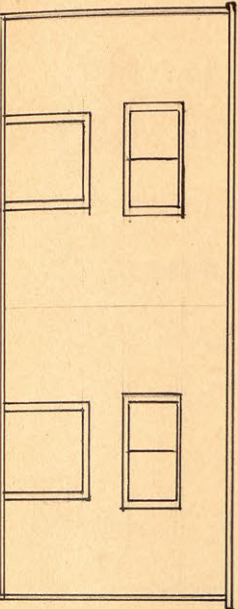
Back 8 " "

A convenient house for brood sows or little pigs. Can be moved easily from one place to another.

HOG SHED. SCALE $\frac{1}{8}$ "=1'



HOG HOUSE. SCALE $\frac{1}{8}$ "=1'



CORN CRIB.

The corn crib in this illustration is to hold ear corn. It will hold about thirty-five hundred bushels. One half of this amount on each side of the alley-way.

Dimensions:

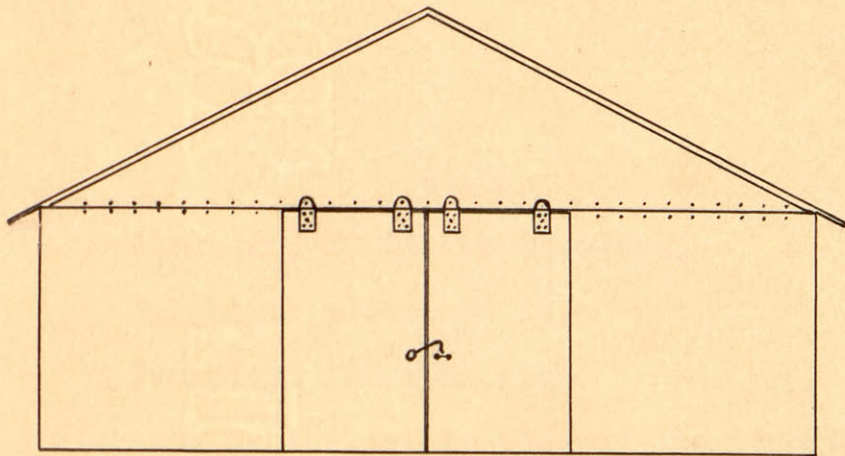
- Length of building 42 ft.
- Width of building 32 "
- " " cribs 10 "
- " " alley 12 "
- Height of crib to plate 10 ft.
- " " " next to alley 12 ft.
- 2 sliding doors at each end 6 X 10.
- 2 inside doors in each crib 6 X 4.

The cribs are to be braced with smooth wire at six feet above the floor on every third studding. Space above cribs can be used for storing implements. All dimensions timber 2 X 6.

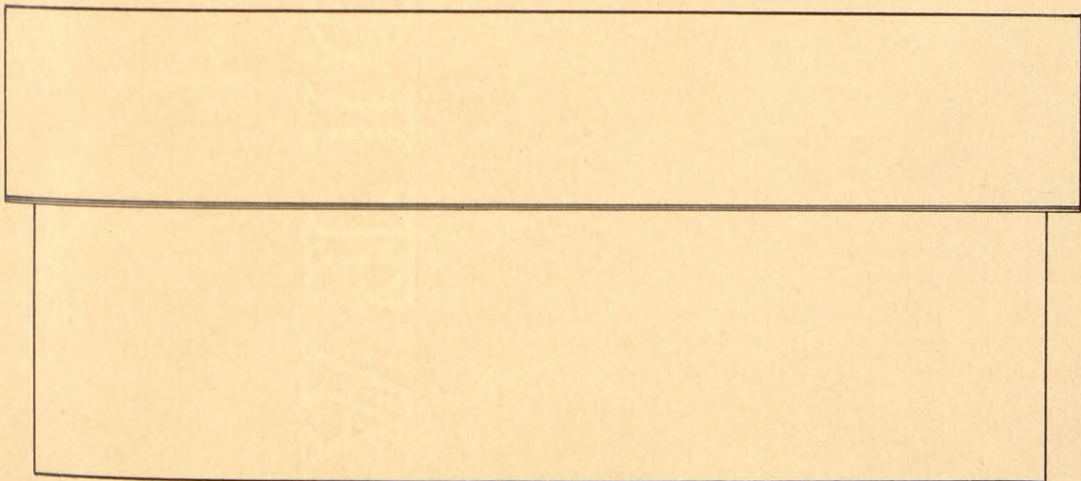
PLAN OF CORN CRIB.
SCALE $\frac{8''}{1'}$.



END ELEVATION OF CORN CRIB.
SCALE $\frac{1}{8}'' = 1'$



SIDE ELEVATION OF CORN CRIB.
SCALE $\frac{1}{8}'' = 1'$



SILOS.

Circular, 20 ft. in diameter.

Height to plate. 30 ft.

Capacity. 150 tons each.

The difference in the two is the way the foundations are built. Made of 2 X 6 dimensions. They are sided up on the outside and lined with a layer of inch boards, then with tar paper, then another layer of boards.

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