

then remove them as you want them to the roof, and fix with cut tacks. This is in case of great hurry; otherwise it is better to allow the tar to dry on the paper before putting on the roof, and better still to give it a second immersion.

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Architect.

The arrangement I propose may not suit the requirements or taste of all Agriculturalists, but they may be modified to any extent desired. The internal arrangements must, of necessity, be altered to circumstances, and also the external appearance. Some parties may condemn the plan as being too expensive for anything like general adoption; others may find it not equal to their taste or desire. I have not given any fixed height for the barn ranger or cattle house adjoining. I have adopted 30 feet as the usual width. The height and width, however, may be determined by parties building, to suit their own wishes and convenience. It is necessary to have a cellar under the barn for roots, and from which there may be communication to the cattle house. This accommodation may be had sufficiently large for ordinary farms without incurring any great expense. Of course it must have means of drainage, but if the drains upon the farm are kept in good order, the cellar under the barn may be drained. If the cellar cannot be excavated much below the surface it may rise over the surface, and be made sufficiently safe from extreme cold to preserve roots. Such cellars should not exceed 32 degrees of heat if it could be kept about that temperature. If not built with stone, the excavation might be lined with cedar or plank, and there should be certain means of ventilation provided. A cellar or other convenient root-house is a necessary appendage on every farm where roots are provided for feeding live stock.

I shall now give a concise description of the farm buildings, as they are enumerated in the plan:

1. A coach house to open towards the dwelling house, and not into the farm yard.
2. Tool house, with necessary appendages for small tools, nails, &c., and with a lock on the door.
3. Fowl house, fitted up in a proper manner, with lock on the door. It would require a long notice to give a full description of what a fowl house should be, and as the fancy of the lady who may be the mistress of the establishment will probably have considerable influence in the manner of arrangement, I shall not presume to offer my suggestions, but leave it to the good management of the ladies who may take a very laudable interest in such matters.
4. Fowl yard.—I propose on the plan that the shed in rear of Nos. 1, 2 & 3 should be closed in by wire fence, or laths of wood, to keep the fowls confined when thought necessary, and this yard might be divided if it was required. There should be an outer door to this yard, facing the dwelling house, to allow ladies to visit the establishment without going

through the farm yard. This yard is the suitable place for feeding, except in very cold weather. Means should be adopted to keep the fowl house sufficiently warm in winter; situated, as proposed, next to the horse stable may contribute to this.

5. Horse stable for 6 horses, with stalls 6 feet wide and ceiling 8 feet high; the mangers for hay placed on a level with flooring; the trough for oats, water and roots above the first; the manure put out in the rear.

6. Covered shed for manure.

7 and 8. Harness room, and room for grain and other provender, &c. Doors from stable to harness room.

9. Covered sheds for carts, &c., with a gate-way from the farm yard.

10. Cattle house for two rows of cattle, fronting each other, with a passage between 6 feet wide. I recommend separate stalls for each, extending backwards about half the length of the animal. I have found this mode advantageous, as it prevents animals from interfering with each other in feeding. Three doors are necessary,—one to each end for the cattle, and one to the centre passage. The manure to be all put out at the rear, into the covered shed. There should be two or three small windows with glass. The loft should be 8 feet high, with means of ventilation through it, and out at the roof. Hay and straw may be supplied from the loft, let down to the passage at the one end of it. Roots may be supplied from barn cellar by the passage marked No. 14.

11. Covered shed, extending for 60 feet in rear of cattle house, barn, &c., for keeping manure.

12. Calf house, to be arranged in a suitable manner, with racks for hay, troughs for milk, roots, or grain. Two separate boxes should be provided for veal calves, sufficiently large for the calf to stand and lie down, but not turn round. Doors from cattle house to calf house.

13. An hospital for a cow near calving, or an animal requiring to be separate; door from passage No. 14; window in front to light Nos. 12 and 13.

14. Passage to cellar under barn.

15 and 16. Two feeding-boxes, with 2 doors from passage No. 14. These divisions I propose for stall-feeding two animals at a time. There should not be any flooring, and they might be excavated two or three feet below the level of the flooring. The manure is not to be removed until the animals are raised too high in the boxes. They are to be kept well littered, and ventilation may be had by connection with that from the cattle house. One small window, with glass placed in the rear, would light both boxes. Means for removing the manure, when necessary, should also be provided from the shed in the rear.

17. Barn of a size to suit requirements. There should be a communication from the barn to supply hay and straw, when necessary, to the lofts over cattle houses, &c. I propose to have two batteries or threshing floors.