



A Capacious Octagon Barn.

THE barn, of which Figure 1 gives a perspective view, is forty-four feet across from side to side, with a wing twenty-eight by fifteen feet. The basement, Figure 2, is of stone, laid in

lime mortar, but in situations where gravel and cement are abundant it may be built of concrete. Passage ways, A, are provided with tramways upon which a feed-car may be run, affording ready communication between the feed-room, B, and the various stalls, of which those marked C are for horses and F for cattle. At the intersection of the tramways is a turn-table, I, by means of which the feed-car may be run upon either lateral track. The spaces marked H may be used for box stalls or pens for pigs, sheep or calves. The feed-room, B, is provided with the boiler, K, a chest, L, for cooking and steaming feed, and the water-tank, M, which may be supplied by rain water from the roof or a pump operated by a windmill. In the rear of the horse stalls at the left of the main entrance is a harness closet, D, well lighted and roomy. Adjoining are the calf-pens marked E, and at the ends of the further range of cattle stalls are two others. The inner and outer doors are all indicated by a letter J. The basement of the wing, N, is devoted to corn-cribs and the storage of wagons and implements. Adjoining it and beneath the inclined driveway is a root cellar, O. One section of the roof is extended downward to form an open shed, P.

through it any feed may be dropped directly into the feed-car below. The shutles marked E lead to the hay-racks of the horse stalls in the basement. A large ventilator, D, extends to the cupola on the apex of the roof and also serves as a shute for hay and straw. The doors on the floor are all marked F. In the wing, the large room, H, is for tools and small machinery, and G is a general repair shop with a chimney, L. A narrow corn-crib, K, extends across one side of the larger room, filled from the outside room. The drive-way and bridge are respectively marked J and I.

The barn was designed by Sheldon F Smith,

ness free from dust and ammonia, and a work-bench may be put in for repairing harness when there is not much else to do. There can be no excuse for allowing machines and tools to lie out in the fields or about the out-building, as there is ample room on the two floors of the annex. On lower floor one can drive in with large machines and wagons, unhitch, and allow the horses to go directly into the stable. In the drive-way to the barn floor an opening should be made, through which to unload roots right into the cellar. The latter being near the feeding-room they can be fed with no waste of time. Between the tool-room on the second floor and the

work-shop is a wide sliding-door, which allows any machine or tools to be repaired or painted with little trouble. A stove can be put in during the winter. The granary being over the feeding-room and connected with it by shutles, all feed can be dropped direct into mixing-box. In threshing, the grain can be easily put in by one man." — *American Agriculturist*.

EXCESSIVE gum on cherry trees seems to be due to lack of potash. At least a bushel or so of unleached wood ashes worked well into the soil about the roots of a tree that was badly affected caused it to heal over smooth, grow vigorously and bear abundantly.

THE acidity of soils, or their sour condition, has to be taken into account in judging of the effects of lime, potash and soda.

The *American Agriculturist* has already published some interesting results at the Rhode Island station on the value of lime in correcting this acidity. Another year's results with vegetables indicate that soda is inferior to potash, but to what extent, if any, it is important as a plant nutrient in connection with potash in addition to the soda already existing in our soil, can only be ascertained by a repetition of the

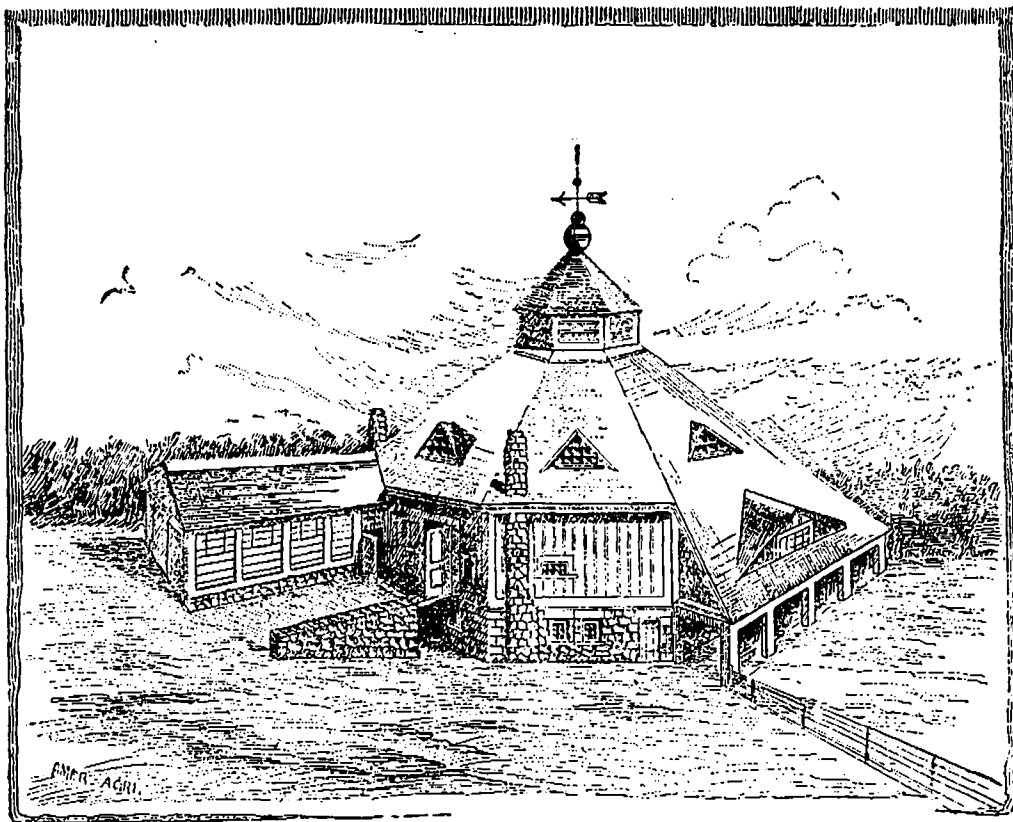


FIG. 1.—PERSPECTIVE VIEW OF OCTAGON BARN.

York Co., Pa., who writes us as follows concerning the general plan: "The live-stock of whatever kind can be fed from the alleys conveniently and in the least possible time. If desired a tank can be built over the work-shop in the wing, and water run to the feeding room and each stall, which will give the stock water at all times. This is better than to allow milch cows in winter to go to the watering trough in

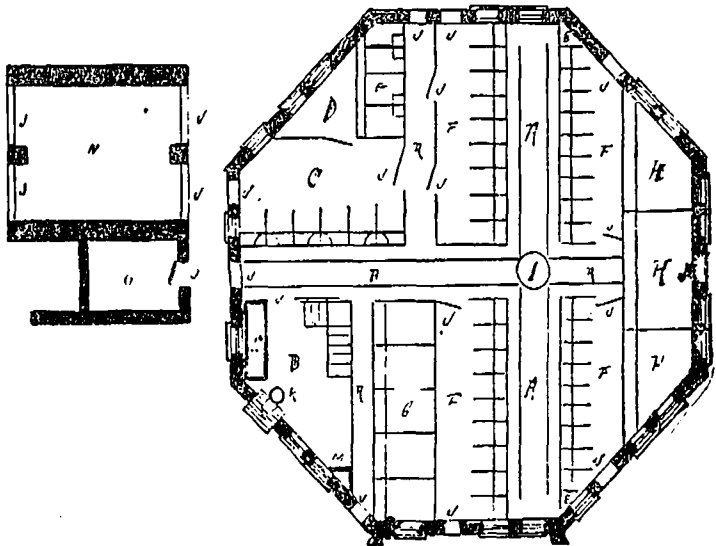


FIG. 2.—PLAN OF BASEMENT.

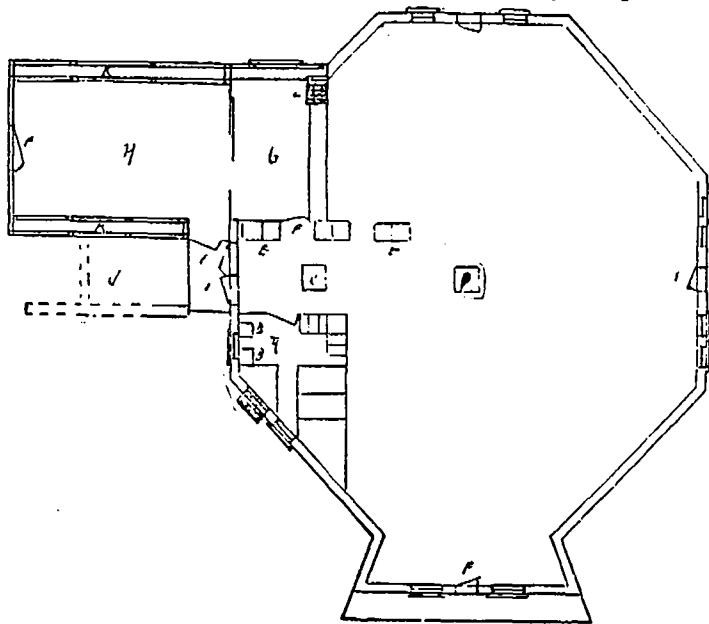


FIG. 3.—PLAN OF FIRST FLOOR.

The main floor, Figure 3, is devoted principally to the storage of hay and grain. The granary, A, is furnished with bins for various kinds of grain and feed, and two shutles, B, B, lead to the steam box in the basement. A hatch-way, C, opens directly over the tramway and

the barn yard, waiting to have the ice broken before they can get any water, which then chills their system and seriously checks the flow of milk. The partition between the horse and cattle stable should be made to separate them entirely. The harness room keeps the har-

periment, perhaps for a number of years. Though the direct object of the experiment was not to compare the action of the chlorides and carbonates of potassium and sodium, it was evident that the latter produced much greater yields with certain crops than did the chlorides.