

Barn Building.

The plan of barn illustrated in this issue is that of the fine structure built by Mr. J. C. Snell, and now owned by Mr. J. G. Snell, Snelgrove, Ont. It has the merit of the stabling being roomy, dry and well lighted, the basement walls being ten feet high on level ground, without the usual bank. It is intended only for cattle, but the plan might be changed slightly so as to stable horses at one end, and the box stalls in the center at each end might run back under the driveway bridge, making a large pen for feeding loose cattle or colts. The same general plan of basement stabling may also be adapted to a barn with side drives. It was from one of the latter class that this basement was copied. The dimensions are 120 x 54 feet. The corner posts of the barn proper are twenty feet high and the roof is hipped, making the storage capacity very large by the use of scaffolding over the drive-floor. A rack-lifter is used for elevating the loads of hay and grain, and is moved from one mow to another on a permanent track for that purpose. A geared windmill on the center of barn serves the purpose of grinding grain, cutting straw, pulping roots, pumping water, etc. Chutes at side of drive floor and over feed-passages and walks behind cattle serve for putting down hay and bedding, and also for ventilation; ventilating shafts run from ceiling of stables to eave of roof, but have not proved effectual, and it is intended to have others running up to the cupolas on the ridge of the roof. In addition to the windows indicated in the basement plan, there are fanlights over all exterior doors.

Annual Meeting of Nova Scotia Fruit Growers.

The thirty-fourth annual meeting of the Nova Scotia Fruit Growers' Association was held in Wolfville on January 26th, 27th and 28th, and was largely attended from all parts of the Province. While it was evident from the excellent papers and lively discussion on other subjects, that the Nova Scotia fruit-growers are well posted and keenly alive to their interests, it was equally evident that the San José scale was looked upon by all as the most important factor to be considered in the future of the industry. In his opening address, President Bigelow said: "The San José scale has invaded fruit trees in all parts of this continent, and is the most destructive and most difficult to destroy of any insect pest. It is

of Horticulture is doing excellent work, with an enrollment of 56 students, enabling young men and women to obtain free a thorough and practical knowledge of fruit culture.

A discussion of the black knot of plum brought our many points of interest, especially with reference to spraying as a means of preventing it.

Mr. C. A. Patriquin reported that in his own plum orchard during the past season three sprayings had almost entirely checked it; while in a small portion of the same orchard, which he had sold to a neighbor, and which was not sprayed, it was unusually prevalent. It was strongly urged that fruit-raisers should both spray their trees and cut out all parts showing this disease, since the two methods combined are much more effectual than either can be alone.

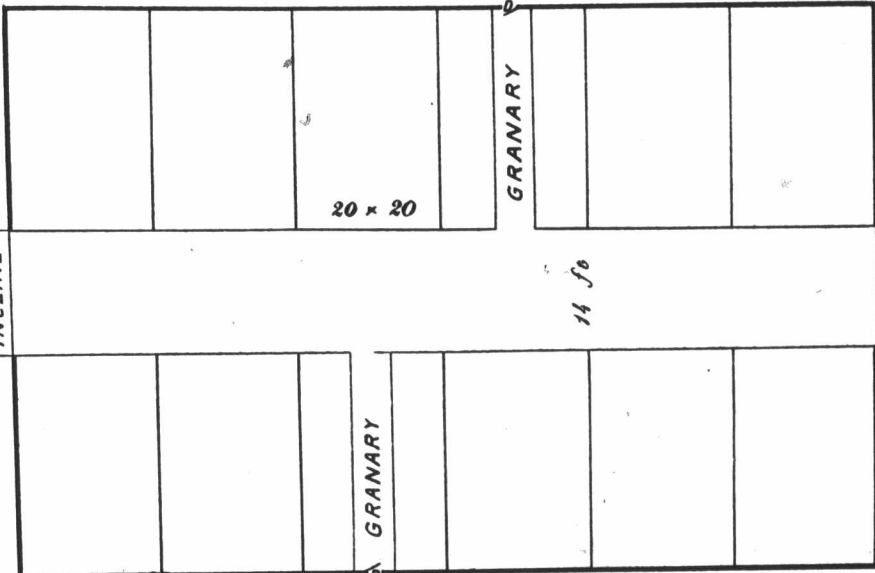
The subject of shipping and marketing fruit, more especially apples, occupied the attention of the Association for an entire session, and even then many would have gladly heard more. Mr. John E. Starr, of Port Williams, Nova Scotia, who was appointed by the Dominion Government to investigate the apple trade with Great Britain, introduced the discussion and gave many valuable suggestions as to improvements which are urgently demanded. In his opinion, the principal cause of any unfavorable results in shipping to England is lack of ventilation in the hold of the ship while crossing the ocean. At present all the skill of the experienced stevedore is employed to crowd into the ship as many barrels as possible, his value to the company depending on his success in this respect. As a result, the barrels are packed so closely that it is difficult for a mouse to crawl from one part of the ship to another, and absolute-

ly impossible that there should be any adequate system of ventilation. Some method should be provided in the way of a series of ventilating tubes or chambers throughout the ship's hold, the whole connecting with the outer air. Furthermore, it is not safe to rely on the present bell-mouthed ventilators for forcing fresh air into the hold. They will work well enough when the ship is running against the wind, but when she is running with the wind, and at about the same rate, there is absolutely no ventilation. In such an emergency an exhaust fan should be placed in every ship used for this class of freight, so that the air may be drawn out of the hold and proper ventilation insured.

Mr. Starr stated that apples shipped to England last October, and packed so as to allow a free circulation of air, arrived in as good condition as when they left the orchard. But later shipments, made at a time when there was greater demand for space in the ship, and consequently packed more closely, were very materially damaged by the heat in the hold, both color and flavor being injured.

Some measures should also be taken so secure more careful handling of apples in transit. It might be easily accomplished were there someone to look after the matter. But what is everybody's business is nobody's business, and the result is that in unloading, especially, the only object of the men is to get the barrels out of the ship in the shortest possible time and with the least labor to themselves. Barrels of apples are dropped two, four, or six feet, till the wonder is not that our apples are sometimes injured in transit, but that they are ever in marketable condition when they reach the consumer.

Mr. Starr urged upon growers not to ship their fruit first to this firm and then to that, but to select a thoroughly trustworthy house and then consign to them every year. Customers on the other side, when pleased with a certain grower's apples, would return to the same firm a second time in the hope of securing another consignment of the same fruit, and would not lose the fruit though it were necessary to pay several shillings above the market price. All this is lost if the grower does not ship regularly to the same place. Another point brought out was the importance of shipping each apple in its season. Do not hold back Gravensteins in the hope of getting a better price, and then put them on the market when Kings and Ribstones are also being shipped. The result is disastrous in every way. Varieties shipped in their proper season arrive in such a condition that they may be sold immediately, shipped to other parts of Great Britain or held for better prices, but when held too long they arrive in England in an overripe condition, and the only thing for the consignee to do is place them immediately upon the market and realize what he can for them. Fruit should always



BARN FLOOR PLAN.

GARDEN AND ORCHARD.

Every Farmer's Hothouse.

To the Editor FARMER'S ADVOCATE:

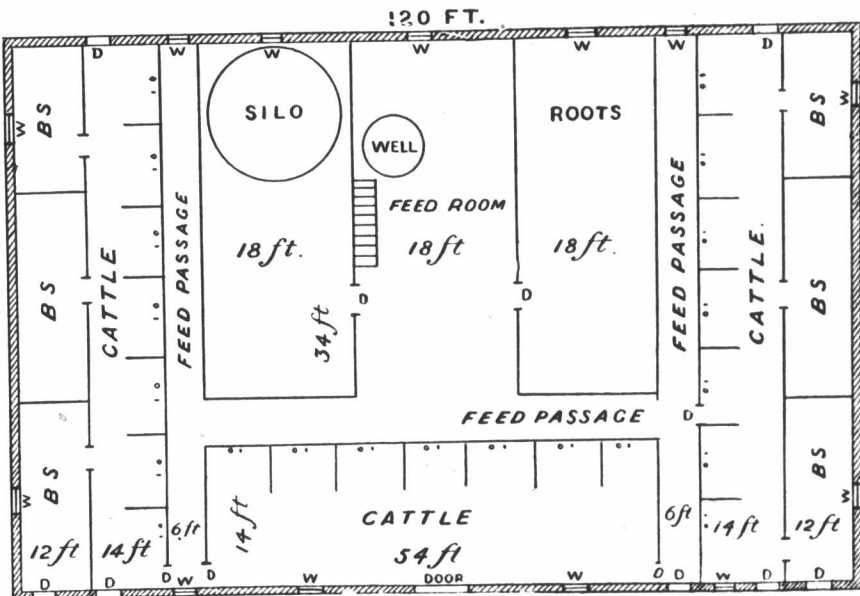
SIR,—The time has arrived when we must make preparations for our early flowers and vegetables. Unless for large gardens a hotbed is not required, as a few hundred plants can easily be started in the house. Last year I succeeded in raising sufficient for myself, with some over for my friends, of tomatoes, celery, onions, peppers, etc.; also, petunias, pansies, etc. My hotbed was composed of old shallow milk pans; these, being already well supplied with holes for drainage, were filled with light, fine soil. The smaller seed, as celery, petunia, etc., was sown on the surface, being covered lightly with a sprinkling of soil. In other pans the larger seed was sown a little deeper, and all were put in rows. Until the seed shows signs of growth, the pans may be kept under the kitchen stove or in some comfortable place. They should be watered with warm (not hot) water, the soil being kept moist, but not wet. They should never be allowed to remain wet and cold. I sometimes set them on the stove to warm up; in fact, I have left them there long enough to cook the young and tender sprouts. This is not advisable. Tomatoes will appear in a short time, but greater patience is required with celery, though the thicker the seed is sown the more quickly it will germinate. When the plants begin to appear the dishes should be set near a sunny window, and when the second leaves come, transplanting into more roomy quarters must take place. When they again become too crowded, they should be set in light boxes in rows three inches apart. This box is more convenient if the front is secured with screws, which may be removed when the time for transplanting to the open ground has arrived. The soil is then cut in squares with a plant in the center of each square. They can then be taken out and transplanted without their recognizing the fact. The principal causes of failure are too deep sowing, and a cold, wet soil. Middlesex Co., Ont.

Remedy for Plant Fungus.

Rotation of crops is one of the most effective and practical means of heading off fungous diseases. It may be applied to strawberries for the leaf-blight by fruiting the patch but a single year, and to blackberries and raspberries by destroying the patch after two or three crops have been harvested.—*Horticulturist's Rule Book.*

GEO. A. CLAPP, Edmonton, N.-W. T.:—"I have always liked your paper and would not like to be without it."

not yet known to be in Nova Scotia, and you will be called upon to recommend strong legislation to prevent its appearance here. The man who plants an imported nursery tree in Nova Scotia this year is his own worst enemy, and should be dreaded and despised by fruit-growers generally." This seemed to be the opinion of all present, and the advisability of asking the Dominion Government to pass an act prohibiting the importation of nursery stock of any kind into the Province for at least a year was strongly advocated by many. The motion was finally referred to a committee, which was instructed to draft a bill on the subject and present it to the Government with an urgent request from the Association that it be passed. The President, in reviewing the situation from the fruit-grower's standpoint, stated that while 1896 will be recorded as the most productive fruit year in the history of the Province, 1897 was the least productive in the last ten years; the export in the



BASEMENT PLAN.

former year being about 500,000 barrels, and that of 1897 about 80,000 barrels; the principal cause assigned for the partial failure of last year being the extreme cold and wet weather in June preventing the perfect pollenization of all fruits, and the exhausted condition of the trees from the abundant crop of the previous year; but with the light crop has come the compensation of high prices, so that any grower who had one-fourth of the 1896 crop will net nearly as much as was obtained for that year's crop. Gratification was expressed for the presence of the Hon. Minister of Agriculture at the Provincial Exhibition. "For the first time since Confederation," said the President, "the Nova Scotia farmer has had the opportunity of seeing a Minister of Agriculture." It was also noted with gratification that under the able management of Prof. F. C. Sears the School