

The productiveness of seed was not an inherent quality, but depended on the conditions under which it was grown."

Without a more detailed report of Prof. Robertson's address it is not possible to make any comment, favorable or otherwise, in regard to his claims. Suffice it to say that the theory in regard to the growth and selection of seeds, which he has elaborated, is somewhat at variance with generally accepted beliefs and practices in this country. That this is so, however, in no way affects this new theory; and on the other hand, that a line of practice has been followed for a number of years and has become the generally accepted one does not prove that it is the best practice to follow and that there is nothing better. There is always a tendency on the part of farmers to become wedded to certain practices and systems because they are the generally accepted ones, and to follow them somewhat blindly believing that there is nothing better. Therefore, a new theory or practice advocated will do good if it only leads people to think and look beyond their own spheres.

There is one point in this new view of seed growth and selection that we might mention just here. In raising live stock it is claimed that "feed is half the breed." And may not the same thing apply to "raising" seeds? No matter how good his breeding may be, an animal must have a sufficient supply of the right kind of food in order to maintain his natural vigor and strength. And might we not look upon a seed in the same way and claim that no matter what the climatic or local conditions are surrounding its growth, if it is not supplied with a sufficient amount of the right kind of food, it will not come to that vigor and strength required in a seed in order to produce vigorous and robust plants. This view applied to any one locality or to any particular farm might show that the soil of that locality or farm had not within itself the food constituents necessary to produce vigorous seeds and the result would be a supply of seeds with less vigor and vitality than the ones sown. This, however, could be avoided by the farmer, in adopting Professor Robertson's plan of having a seed plot, seeing to it that the soil of this plot is well supplied with the foods necessary for vigorous plant growth and in this way maintain and increase the vitality of the seeds.

The whole question opens up a wide field for thought and we shall welcome a further and more detailed statement of Prof. Robertson's address on the subject.

Plank-Frame Barns

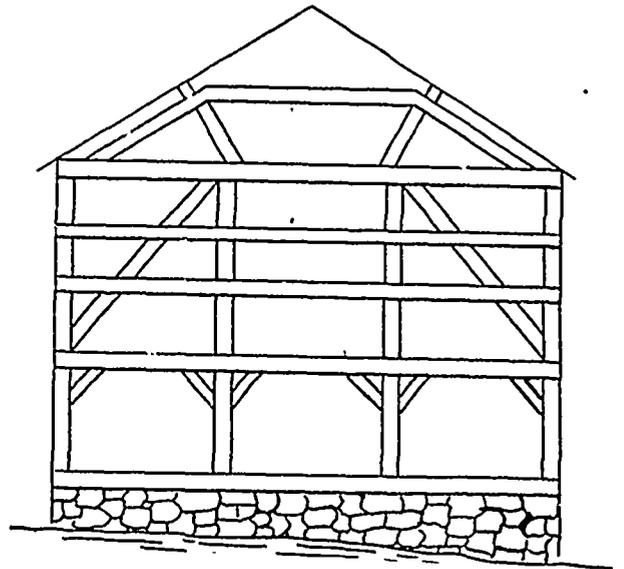
A New System That Meets the Need of Districts Where Timber is Scarce

In this country, as well as in many others, barn building is becoming a serious problem where good timber is scarce. In the older parts of Canada tall stately trees suitable for barn timber are becoming less in number every year. In fact in some localities farmers who have to remodel their farm buildings or to build new ones have very great difficulty in finding timber suited to the work. Hence any system of barn building that will do away with the necessity of long or large heavy timber cannot help but be of distinct advantage to the farmers of this or any other country.

In several of the states of the Union a new system of barn building has come into almost general use and is meeting the conditions caused by a scarcity of good barn timber. By this system, which is known as the Shawver-Lockhart system, planks are substituted for heavy timbers. We reproduce a description of the system by the inventor, Mr. Shawver, together with illustrations taken from the *Michigan Farmer*, as follows:

The constantly increasing scarcity of timber, even in localities once covered with stately trees, has demanded some improvement in barn framing that would call for less material in its construction. This demand has been met by what is known as the plank-frame, or Shawver-Lockhart system of construction. The entire structure is made from planks two inches thick and of various widths. The sys-

tem has been in use in central Ohio for fifteen years, and presents so many advantages that few who learn of them,



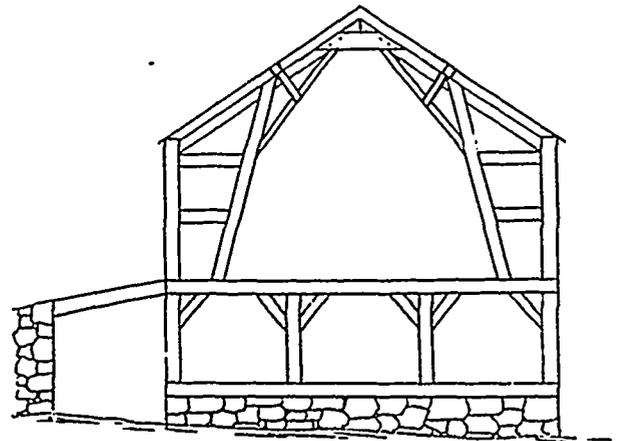
End Bent

and none who once understand them, would think of building a barn in the old way.

Let us enumerate some of the advantages: First, the saving of timber. Since planks are used in constructing all the timbers, and these are filled in with blocks and tenons, a post is made, say, 8 x 10, yet it only contains material enough for a solid stick 8 x 6, securing a saving of 40 per cent. Then by the method of supporting the roof and inserting the braces in and through the beams and ties, another big saving of timber is secured, so that in a structure of any considerable size fully one-half of the timber is saved. To illustrate: In the spring of 1894 we built an addition to a barn 60x60 that would have required, if framed of old style timbers, 40,000 feet of timber; as it is, it required less than 20,000.

Second, less danger of decay. The two-inch planks season readily, and there are no mortises in which moisture can collect from leaking roofs, or from rain or snow blowing in through cracks, blinds, ventilators or open doors. This has always been a fruitful source of trouble in solid timber frames, and few barns are up over twenty-five years without some of the tenons having become decayed.

Third, no timber in the way. In this, as in other self-supporting roofs, there is no timber in the interior bents to interfere with the storing away of grain or hay, or in getting grain to the threshing machine. Horse-forks and slings are used here to the best advantage.



Interior Bent

Fourth, saving of time. Since it requires so much less timber, it takes much less time to place the material on the ground; but, what is of much more importance, it requires much less time to "frame" it and make it ready to "raise." To illustrate: It took us four days to get our barn ready