

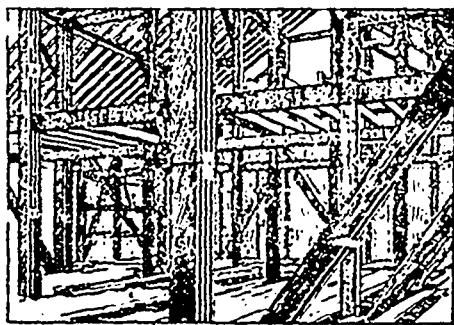
Intensive Farming.

Henry Stewart, in a recent issue of *Home and Farm*, writes of this subject as follows: "Intensive culture of the soil is such a system as shall conserve the fertility of it, as it was in the beginning, when man first took possession of it and redeemed it, as we say, from a state of nature. This redemption indeed, as we are in the habit of saying, was quite a different thing from what the common meaning of the word implies. It has been, in fact, quite the opposite, as we may see any day by gazing upon one of the common, old fields and comparing it with what it was when nature had it under control and the land was burdened with the native products of it, making hard work necessary for the changing of it to man's uses. When thus, as we say, it was redeemed, it was overflowing with fertility. It gave to the hand of the husbandman freely all its reserved riches, accumulated during centuries of a natural process which was the very opposite from that of its culture by man's hands. Nature was saving and accumulating. The mineral elements of the soil needed for the production and support of vegetable life had accumulated for ages, and the wealth of the atmosphere vitalized by the sun's warmth and brought down by the ample rains which had supported during we know not how many centuries of luxuriant growth of the forests and prairies, mixed with these, were all at the service of the cultivators of the soil. But, alas! how extravagantly has this rich inheritance been administered. For years; nay, centuries, we have been as busy as possible exhausting this ancient store without a thought beyond how soon we could get the whole of it and turn it to our uses."

It is much easier to exhaust the ancient store of fertility in the soil than to restore it again. But this is what the farmers in the older sections of the country will have to aim to do if they ever expect to get their farms back to their former productiveness. This is the most important problem that confronts the modern farmer, and when he has once solved it his future success is secured. By conserving one's energies and not spreading out over too much ground a great deal can be done. One of the difficulties in the older parts of this country is that many farmers are endeavoring to work too much land. Farm labor is getting scarce and to work some of the large farms as they should be worked, requires more help than the average farmer has at his disposal.

Plank Frame Barns

In our issue of May 16th we published a short account, with illustrations, of plank frame barns. Since then we have received a letter from a farmer at Leamington, Ont., asking for more detailed information regarding their construction. As far as we can learn there are none of these barns in use



Looking Through the Plank Frame Barn. Fig. 316.

in Canada and therefore we have to go outside of Canada for our information and give it for what it is worth.

Last fall the *Rural New Yorker* took up the question and gave some particulars regarding the construction of plank frame barns, from which the accompanying illustrations and the following description is taken, and which we

think will supply our inquirer with the information he requires:

"In regard to the manner of construction, Mr. Woodward says that, in building this kind of barn, there are no 'steps' in the work of erection; it is rather a weaving together continuously, one plank at a time. There is no such thing as putting a bent together and then raising it as under the old square-timber system. In Fig. 313, the outside plank of the corner post may be set up in place, toenailed at the bottom to the sill, and stay-lathed. Then a single plank of each of the other parts in that end of the building may be set up in the same way, and one or two of the nailgirts (the horizontal pieces) may be nailed on. After that, any half-finished mechanic can see how to proceed, one plank at a time, to the finish, stay-lathing each part until one or more tie-planks have been put in place to hold the thing together. It will be seen at the left of Fig. 313 that the several planks of the post, the brace, and both the upper and lower ties are all interspaced, and these are nailed at each and every joint or crossing, and thus all the numbers are woven together, and the frame grows increasingly rigid. With each added plank, the nails should correspondingly increase in length. Bolts are usually recommended, and he believes, used, but he prefers the wire nails and spikes."



Broadside of the Plank Frame Barn. Fig. 316.

Mr. J. A. Woodward, referred to above, superintended the building of a plank frame barn at the Pennsylvania Agricultural College, and writes as to its value as follows: "Skilled labor is not needed in framing; any apprentice or day laborer who can handle a saw and square and drive spikes is a good hand. We used spikes instead of bolts. It is the strongest frame of its size I ever saw, very much stronger than any square timber frame of the same size. I have examined the barn in company with the superintendent of our college farms, and, though our crops have been immense, and the barn is filled to its utmost capacity (it is 93 by 108 feet in size), there is no sign of strain or yield about it. My opinion of the plank frame is so favorable that I shall use it exclusively in any building in which I may hereafter be interested."

Mr. S. G. Gilcrest, of Ohio, built a similar barn last year, and describes its construction as follows:

"Last November, I built a barn with a frame after the plan of Mr. John L. Shawver. This frame is made entirely of planks—2 x 4, 2 x 6, 2 x 8, 2 x 10, and 2 x 12 inches, but very few of the latter size, only the collar beams. The posts are 2 x 8, the joist beams 2 x 10, and the braces are of the lighter timbers. This barn is 40 x 80 feet, with 24 foot posts. There is a basement eight feet high throughout the entire building, with a 12-foot driveway through the