

Scales on Barn Floor.

In our January 5th issue a subscriber asked for a description of a device for weighing farm stock in the barn, the scales to be placed upstairs in the barn, and the platform in the basement stable below. In response to our request, replies have been received from our readers having scales so arranged.

S. J. Pym, Huron Co., Ont., writes: "Make the platform below the size required for the beast to stand on, then make a frame to place on the scales above this, place two short scantlings—I have 3 x 9-inch plank, which is better, as it gives a better bearing—place these across the scales, then two long planks across these, and fasten together with bolts or spikes, this frame to be the same size as the platform below. Then, with four long rods (7-16-inch iron is heavy enough), one at each end of the long plank, run down through the floor, and suspend the platform below by each corner, so that it clears the floor nicely; a nut and washers, to be placed on either end of these rods, allows them to be adjusted properly. I have mine placed in a cow stall below. Let the cow loose, and place the scales and platform, in position. When ready, drive the animal upon the platform and slip the chain around its neck, and it is there to stay. Before putting the animal on, put a block under the platform to keep it still; before removing this, have something to brace the platform sideways and endways to prevent swinging; then remove the small block, and, when the animal is standing properly, weigh. If it is not convenient to place it in a stall, it may be placed in a passage, so that the animal is confined. I can weigh an article, light or heavy, as accurately as if placed upon the scales above."

Farmer, Huron Co., Ont., writes: "There are different ways of fixing the scales to weigh stock, but as it is something that is not used every day, an arrangement that will serve the purpose, and yet not cost very much, is the one that I am going to describe. Have the scales set directly over a passage in the stable below, thus dispensing with sides for platform. Put two short scantlings across the scales, one on each end, and bore a hole in each end of scantling, so that when the rods are shoved up through the holes in barn floor and fastened to the scantling, they will hang just clear of the passage walls, and wide enough apart for an animal to pass through to be weighed. The rods, which need not be very heavy, about 1/2 of an inch in diameter, should be long enough to reach to within at least an inch of the passage floor, so that the platform will not be too high for the cattle to step on. Have a thread and nut on each end of the rods, with a long thread on the end, which passes through the barn floor and on to scantling on scales, so that it can be adjusted to suit. Then cut two more pieces of scantling about 1/2 inch shorter than width of passage, and bore the holes so that the rods will hang perpendicular and true from the scales above. Put the plank (about 6 feet) across the scantling and fasten. The whole thing, exclusive of plank and labor, need not cost over \$1.25, as the rods can be purchased at 2 1/2 cents per pound."

J. H. Burns, Perth Co., Ont.: "I will describe one which I recently examined. The scales were of the low beam variety, but this is not really necessary. They were placed on the floor of a mow just off the barn floor, and protected from contents of the mow. Across them were placed two scantling about four feet long, and near each end of the platform. Across these, again, near their ends, were placed two more scantling, the desired length for platform below (5 to 8 feet), and bolted to them. From the latter, near their ends, were hung four wires, each made of two No. 9 wires twisted together. On these were hung the platform below, which was enclosed on three sides, thus forming a stall, into which the animal was led. It was said to work satisfactorily."

Observer, Oxford Co., Ont.: "Place scales away from main floor, if possible, so that holes will not cause trouble in handling grain. Place cross scantling (2 x 4) on each end of platform, have iron with loop over each end of scantling, and near side of platform, so as to be solid and not tip, iron to project a few inches below floor, and have strong hook or eye on lower end. Put platform in stable, place in stall or passage, unless you have a place for them to remain permanently. Have two cross pieces, 4 inch square, than width of stall, cover with plank long enough for beast to stand on; bore hole near ends of outside planks and through ends of cross pieces. Put hole through hole, with nut below, and bolt on upper end. Have four rods, or chains, long enough to hold lower platform a little from stable floor, to connect lower hooks with bolts on scales. In this way, rods and platform can be detached and laid away. Nail brackets on side of stall to prevent platform swaying and

wise. Holes in floor, which may be oblong, to let hook pass through, should be oiled, as well as parts where lower platform touches wall in swaying when beast is on, as scale will work more freely. If you intend to leave scale platform in position permanently, rods could be used without hooks, etc. For horse or cow, rods and hooks must be strong and well made. For hogs, have rack around platform."

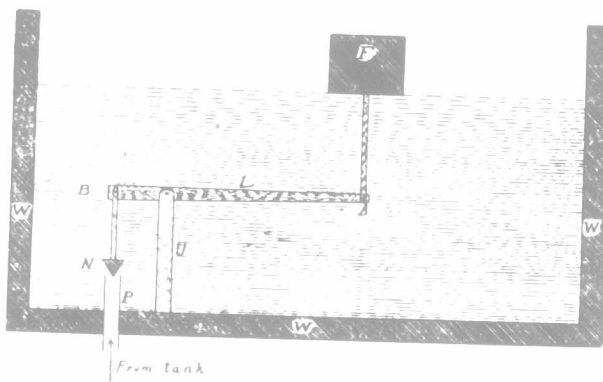
Float for Water Tank.

Editor "The Farmer's Advocate":

I built a tank, length 11 feet, width 6 feet, height 3 1/2 feet, under my gangway. It is a foot and a half higher than where I want to set my water-trough, about sixty feet away, under a shed. What is the best plan to put a float in that trough, 12 feet long by 16 inches wide, so as to regulate the trough to keep full, on an inch pipe?

Bruce Co., Ont.

Ans.—The accompanying drawing, which is a section of the trough, pipe and float, will show one method of using a float to control the supply



of water in trough. W represents the walls of the trough; L an upright fixed in the bottom of the trough; F a float; P the pipe from the tank, and N, a cone-shaped needle valve. The lever (L) works on a bolt through the upright (U). The float is attached to the lever at A, and the needle valve is attached to the lever at B. As the water rises, it will raise the float, and thus seat the needle valve (N) in the pipe (P). The higher the water rises, the tighter the needle valve will be closed. The leverage could be controlled by fastening the float closer, or farther from P. The float may be of wood, or it may be an air-tight copper vessel. In case the pipe comes through the side of the tank, instead of through the bottom, an elbow could be put on so that the pipe would turn downward, and the needle valves fastened to the lever between the upright and the float, and pointing upward to meet the down-turned pipe.

WM. H. DAY.

Corn-growing and Ensilage.

At the Eastern Ontario Dairymen's Convention, held recently, Prof. J. H. Grisdale, of Ottawa, in speaking of the feed end of dairying, said that a farmer should, as far as possible, grow his own feed, and as cheaply as possible. He said that if the statement were made that there was one particular crop that would give the best and cheapest food, that could be produced principally by horse labor, that would give June conditions in winter, and that would enable twice the stock to be carried on a farm, that one might expect farmers to say, "Let us know what it is, that we may grow it." Yet we all know what crop is referred to. It is the corn crop.

It is a matter of regret that so few of our farmers take advantage of this great crop. A few of the arguments in favor of this crop being more commonly grown are:

1. Corn can be grown successfully on any kind of soil. Of course, some soils are more suitable than others, but good crops have been grown on hard clay, on light sand, and even on swamp land.

2. A fair crop may be expected in any season. At the Ottawa farm we have never yet had a real failure.

3. It is acceptable to almost every class of livestock.

4. It is available twelve months in the year. At Ottawa it is found that cows, though running in lucious pasture, will yet relish a feed of silage.

For Eastern Ontario medium varieties, rather than large ones, should be used. Improved Leaming and American Yellow Dent are either of them.

5. It is a crop that almost any kind of soil will grow, and it may be grown after any kind of crop. It will succeed best following a crop of clover or alfalfa that has been pastured, or a crop of clover, set from which, one has a good crop of alfalfa. It is a crop that a two-acre farm can grow, and it is a crop that is

fall, winter or spring. Plow under not too deeply, about four inches being a very good depth. Spring plowing is preferred at Ottawa. After plowing, the furrows should be rolled flat. The disk should then be used to cut the surface fine, and the land again rolled. At least two diskings, with alternate rollings, should be given before the seed-bed is in perfect condition. This condition is reached only when all interstices between the furrows are filled and the ground is equally firm all over. More working than that suggested may be required to bring the land to this condition, but such work is not lost. The effect of it lasts not only for that season, but extends to after years.

If the field be dirty, plant in hills, otherwise sow in drills. All cleaning work can then be done by horse-power. Drills should be 3 to 3 1/2 feet apart, and even four feet may not be too wide. The ground will all be occupied in time by the roots, and the growth of the crop in the late part of the season is much better than when drills are closer together.

At the Experimental Farm, it is usual to sow one-fourth of the field with Longfellow corn, one-fourth with White-cap Yellow Dent, and one-half with selected Leaming. The latter is considered the best all-round variety for ordinary seasons. The latest variety ever grown there is the Early Mastodon.

It is well to harrow the field four or five days after sowing, if the weather is cool. This will warm the soil by checking evaporation, and kill weeds. After corn is up a few inches, if a crust has formed, or weather is still cool, harrow again. Cultivation should be frequent throughout the season, and should not cease until the corn is in silk. Mr. Grisdale strongly recommended the use of a two-horse cultivator which worked two full rows at a time as being very economical where large areas are grown. The later cultivations must, of course, be done with a one-horse implement.

He warned against being in too great a rush to get corn into silo. The grain should be allowed to get firm. It is better to run the risk of a little frost than to cut too early. Cut into short lengths of half an inch or less. It will pack better, keep better, and be more palatable, than if cut longer. The man in the silo, while filling is going on, should keep outside edges higher than the center, and well tramped. This will lessen moulding and waste at the sides. On the other hand, in emptying silo, the edges should be kept the lowest, to prevent freezing.

The cost of producing a ton of silage at Ottawa Farm, not including rent of land, has been carefully figured out, and amounts to but \$1.25.

THE DAIRY.

"Transitory \$2.00 a Hundred for Milk."

Editor "The Farmer's Advocate":

In a recent issue of "The Farmer's Advocate," Mr. Rice proposes the destruction of our tariff defences and the sending to the scrap-heap of all our cold-storage cars and boats used in connection with our Trans-Atlantic trade, and asserts that dairy products, turned in the direction of the American consumer, would realize two dollars a hundred. While two dollars a hundred for milk looks good, the question is, "What will we have to give in order to obtain it?"

Since the abrogation of the treaty of 1854, and until the present, representations to Washington have been met with scant courtesy. This is more remarkable when we remember that conventions were concluded with the South American Republics, and, while it would be unfair to assume that American statesmen were actuated by any other motive than simply self-interest in tariff legislation, it is, however, hard to get rid of the suspicion that some of them were working on the assumption that hostile tariff legislation would force the Dominion to become part of the American Republic. The Canadian people, in spite of American tariff hostility (it may have been an incentive), have, by courage and patriotic patience, secured such a commanding position that the time has actually come when overtures are being made from Washington.

At the central Farmers' Institute of 1891, I wrote and moved the following amendment to the report on the president's address:

"That, while we believe that it is the true policy of this country to seek an extension of our trade relations in all directions, yet we believe it is to our interests, as farmers, as well as our duty as Canadians, to consider the welfare of all sister interests. Because the interests of this country are so interwoven that we are in almost as large a degree dependent upon other interests for prosperity as they are upon us. Therefore, while requiring an extension of trade relations, we wish to place on record that our feeling is that in trade matters, no concessions should be made for which adequate compensation is not given."

In 1878 the people of Canada adopted the pol-