

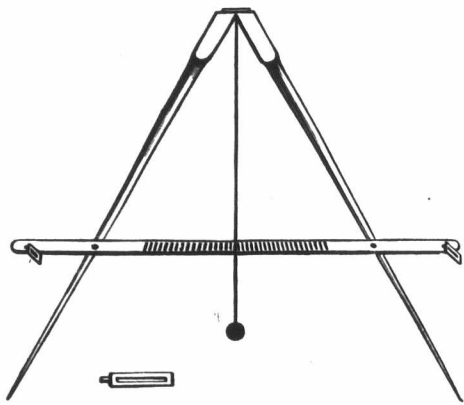
enterprise. It would be well to select and prepare your soil two or three years before you seed down; but meanwhile you should sow a plot, embracing a few acres, convenient to the stables, which you will find useful for calves, or for turning the horses into during nights. If you have a piece of land which is too hilly or heavy, or otherwise unsuited for cultivation, you will find it profitable to turn it into permanent pasture. A location well defended by belts of trees is preferable.

No return should be expected from the permanent pasture the first season, for the grasses will not be sufficiently grown to be used for soiling, and it should be pastured as little as possible in the fall, as the tramping of the stock might injure the tender grasses; and if the grasses are eaten off too closely the roots will not have sufficient protection against the inclemencies of the winter.

Cheap Drainage Level.

The accompanying cut illustrates a drainage level, or a level that may be used for any purpose whatever. You can easily make this instrument yourself, and if well made, it will be as accurate as it is simple.

Our artist has drawn it with a hinge on the top and bolts in the cross piece; but these are



only necessary when you wish to take it apart for convenience in carrying or storing. You will not even require a spirit level to adjust the parts when you are making it, but such a level would be convenient to test its accuracy.

Let the string hang from the exact centre, and make the distance from that point to each of the bolts the same. Place the instrument in such a manner as will let the string fall exactly in the centre between the two bolts, and for greater accuracy, see that the distance between each of the bolts and the point where the string joins the weight, is the same; then mark the centre on the cross piece which will be under the string, and you may graduate the scale to suit your purpose. Arrange the cross piece in such a manner that the part at the bolts will not project from the legs, causing the cross-piece to interfere with the free action of the string.

The sights at the extremities of the cross-piece explain themselves, being used for taking the level of the field. The small cut represents one of them more accurately. The slits through the sights may be say one-eighth of an inch wide and two inches long. The ends of the legs are made sharp so that they can be firmly planted in the ground while you are levelling, but when you are digging the ditch, you may use the instrument, as a means of getting the

proper fall, by fixing the legs into a straight-edge ten or twelve foot pole, using it along the bottom of the ditch. This will give you the fall with greater accuracy than by using thick extremities without a pole. A convenient distance between the extremities of the legs would be about 3½ feet.

Mr. H. S. Losee's System of Farming

Mr. H. S. Losee, of Norwich, an illustration of whose dairy barn appeared in our last issue, is one of the most successful farmers and dairymen in the Province. His success is almost entirely to be attributed to his own exertions and forethought, and his advanced system of farming is the offspring of his own experience, aided largely by what most farmers decry as "book-farming."

His parents emigrated from Dutchess Co., N. Y., on the Hudson River, in 1811. They, with their family, were the earliest settlers, and had to undergo the privations incident to backwoods life. The portion of the extensive possessions which fell into the hands of the subject of this sketch consists of 105 acres, the soil being a clay loam with a subsoil of heavy clay; but about 14 acres of the farm is a vegetable soil.

"Is it not usual," inquired we, "for the big farmers in this section of the country to have over 100 acres of land?"

"Yes," said he. "but I don't measure my land by acres. Fifty acres of my farm is thoroughly underdrained, and I wouldn't plug up those drains for the best 100 acres in the county of Oxford. There may be more renown in broad acres, but I want deep acres, because there is more money in them. I can't afford to spread my operations over two acres when I can make more money out of one with less labor."

DRAINAGE.

He then went on to say that his drains were four rods apart and three feet deep, with 6-inch tile for the mains, and 3 and 4-inch tiles for the laterals. He asserts that some of the drains paid the cost of construction the first year, and at the end of the second year none of them failed to return all the money expended. On his vegetable soil, which was wet, waste land previous to drainage, the drains were dug two rods apart and 2½ feet deep, and now he regards this the most productive portion of his farm, maturing two crops of timothy and clover each season, and yielding over four tons per acre. This was lately broken up and seeded to orchard grass, sweet vernal, creeping bent, timothy, and alsike, which he intends to use entirely for soiling.

PASTURING AND SOILING.

He pastures 15 cows and 12 young cattle on 8 acres, making up the deficiency of grass with soiling crops. Rye is sown in the fall, and is used for soiling in April, and usually the first week in May. He commences cutting as soon as he can get a swarth, and the rye season lasts 8 to 10 days. His orchard grass comes in almost as early as the rye, and lasts about three weeks, and then the red clover takes their place into the first week of July. He sows a mixture of peas and oats at three different intervals between the last week in April and May 20th, which furnishes soiling food until the corn comes in, thus having abundance of

green fodder until the arrival of frosty weather. After this the succulent foods are continued in the shape of mangels.

WINTER FEEDING.

His fodder is all cut, the corn stocks, hay and straw all being mixed in equal proportions before being fed to the cows. The other parts of the rations consist of mangels, bran, and pea and oat meal. The meal and bran are moistened and mixed with the cut stuff. He finds no money in low feeding.

RAISING CALVES.

He feeds new milk for 10 days, changing to skim milk or to whey. As he feeds scientifically—that is, supplying the constituents taken from the milk, the rules we gave in our last issue may be followed. He uses ground flaxseed and oatmeal cooked. He never lets his calves suck. He keeps them in the stable during fly times and soils them.

HIS SYSTEM OF ROTATION.

Commencing with the meadows, broken after the second year's crop, he sows corn, followed by oats or barley, and finally fall wheat, which he seeds with timothy in fall, and clover in spring, mixing a little timothy with the spring sowing, and harrowing it in.

HIS DAIRY.

In addition to our last month's remarks about Mr. Losee's dairy, we may add that he keeps 103 hogs, which feed on the whey from his factory. He turns them into a field of red clover, keeping them on one patch at a time, by means of hurdles, and moving the whey trough from place to place. In this manner he enriches and cleans 6 to 8 acres of his farm every year, and prepares the land for an enormous crop of corn. Hereafter he intends to put rings in the hogs' noses to keep them from rooting up the clover.

Mr. Losee has also a fine fruit orchard and sugar bush, the former being protected by wind breaks of spruce and pine. The proprietor of "Prospect Farm" is an advanced thinker on the science of agriculture and dairy, and he persistently goes against the advice of his neighbors in his enterprises. This is likely the reason why he gets so far ahead of them.

Twenty-five distinct species of grasses, counting upwards of 1,000 separate plants, have been found on a square foot of turf, and yet many farmers are afraid to sow half a dozen varieties.

It is almost appalling, says the English Live Stock Journal, to note the extraordinary magnitude the American agricultural imports have attained. Ten years ago we were paying over £63,000,000 to the U. S. for the produce of their farms, and in 1881 the sum was not far short of £100,000,000 sterling. There was a slight downward tendency in 1882, but still in that year our bill to America exceeded £81,000,000. For the past ten years the average has been about £75,000,000. This is a vast sum, certainly, and its magnitude becomes all the more fraught with significance when it is observed that it is more than double the amount we obtain from America for goods exported to that country. The annual value of our exports to the U. S. does not much exceed £32,000,000, so that the Americans have the best of the exchange to the extent of about £33,000,000 a year.