

hardly say that, the slope being already there, all the outlay required is for the gutter-cutting. How many thousand acres in the Townships, at present barren, may be made to grow large crops of hay by these simple plans, I do not know; but if any one will take the trouble to drive along the upper road from Richmond through Compton to the province line, he will see hundreds of springs performing only a part of the functions for which nature intended them. Look, again, at St Hilaire mountain, at Reugemont, and other like spots: a vast amount of wealth is passing away out of our reach every day, as long as the copious streams which flow down the sides of these hills are not utilised. The cost of levelling and guttering, in Devonshire, varies from \$3 to \$8 per acre.

In an experiment, made by Mr Pusey, M. P., a well known practical agriculturalist in Wiltshire, the following almost incredible results were arrived at: one meadow, of two acres only, kept seventy three sheep for five months!!! Now, in Lincolnshire, an acre of good turnips is expected to keep ten sheep for five months—compare the two! If used in this way, namely for sheep, the best plan of treating a water-meadow would be to hurdle it off, and pass the water over the fed off portion for twenty four hours after the sheep have been shifted. This would wash the manure into the land and

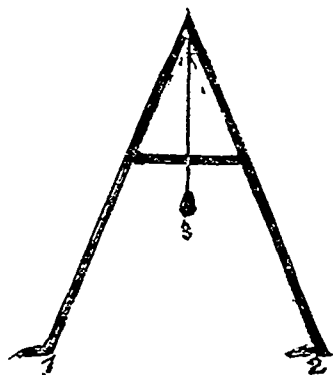
and immense crops of mangels, rape, and oats grown. The engraving "a catch-work water-meadow" will almost tell its own story: *ab* is the main conductor, the curved line of which is supposed to be caused by various irregularities in the fall. the level of the land *must* be preserved. At *b*, the water should flow along the feeders *b c*, and *b d*; overflowing here, it finds its way into *e f*, which, when full, sends its water on again to *h g*, and so on to *i* and *k*, until at last, the main drain *m* carries off the whole into the parent stream at a lower level.

If the water flows unequally, stops, stones, bits of turf, or anything of the sort, should be placed in the feeders to retard its velocity. Feeders should vary in distance from each other according to the fall. The engraving no. is intended to show the level used in guttering.

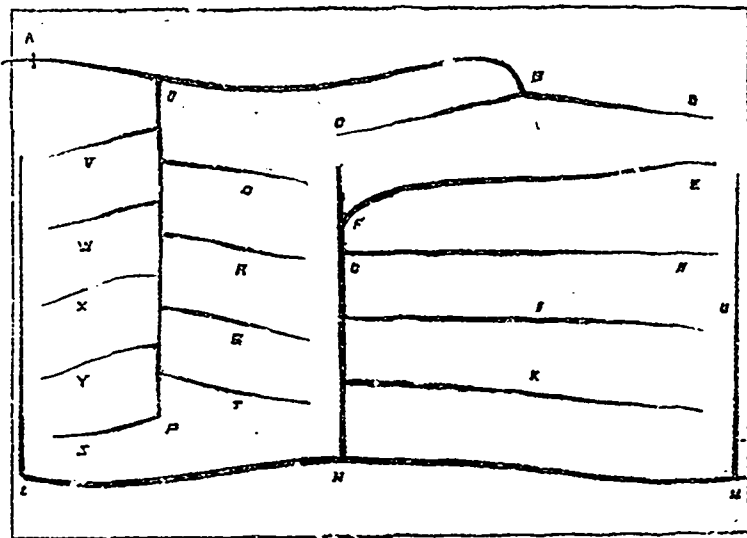
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Cider-making.

There is a good deal of cider made in Canada and in the New-England States when apples are plentiful. Very little is good for much: it is either mawkishly sweet or as sour as verjuice. I never taste the fine dry cider—more like a wine than anything else—our Gloucestershire tenants make a couple of pints of which will seriously affect a man's temperament. I was



Level for guttering



A catch-work water-meadow

prevent waste of ammonia, the smell of which is very evident in every sheep fold. In summer-watering, the land should be only "damped;" if it continues flooded more than two or three days, at the utmost, a scum forms on the surface of the ground and the grass is injured.

Where the brook runs through, or near, the farm-buildings, the liquid manure should be allowed to pass into the stream when it is flooding the meadow. Here, a tank to contain the urine would be most useful, as the whole could be preserved till spring, and all the bother of hauling it out, or pumping it over the dung in the pit, would be done away with.

It is very curious, that though water from a stream which has run through a bog is injurious to land, water supplied by the drainage of a bog makes good grass. Lord Hatherton's meadows, at Teddisley, Staffordshire, are entirely irrigated from this source. A bog of eighty acres, which produced nothing but a few wild-ducks, was drained, the water of drainage turns a twelve horse-power wheel, which does all the work of threshing, grinding, and chaff-cutting, required on the farm, and then is used for flooding eighteen acres of as fine meadows as can be found in England. The bog is cultivated,

immensely amused on my arrival in Canada, some quarter of a century ago, to find that cider as a drink was permitted to the most rigid teetotaller! Well, the cider, I soon found, was pretty harmless—there had been precious little sugar in the fruit originally, and, therefore, very little alcohol had been formed, and the greater part of what had been formed was converted into vinegar by a bad system (there was no system at all) of fermentation. Cider won't make itself any more than wine will, and according to the treatment and care it meets with will be its quality: it is either delicious or horridly bad.

Now our Gloucestershire and Herefordshire men deal with the fruit after this fashion:

Gathering the fruit.—Men beat the trees with long poles, which are sometimes armed with an iron hook to enable the labourers the better to lay hold of and shake the branches of the trees. The apples are gathered into baskets, and placed in heaps to mellow, remaining in the heap from three to five weeks, if the fruit is kept too long, good cider cannot be made from it, as some of the apples will be rotten. If, on the other hand, time is not allowed for mellowing, the conversion