

riodical, on Lawes' experiments on growing turnips; in it will be seen that the manure for turnips is phosphoric acid.

**Butter.**—Never has good butter been so easy to be found in Montreal as this last spring. Is it possible that good makers are really being paid decent salaries? They will not, we hear, work for the wretched pay offered them, in some places, of late years, and it is the same in the States, as the following, from *Hoard*, will show:

"While it cannot be said that good wages will always secure a competent buttermaker, it stands to reason that such a man will not accept low wages. This is the way Mr. S. put it:

"Several creamerymen have written me asking for a buttermaker for a few months at \$35 or \$40 a month, and I have written them that I am not recommending that kind of butter-makers. I struck one creamery that failed, and wanted to start up again. Happening to meet the manager.

"I want a good buttermaker," said he.

"What'll you pay?" I asked.

"Well, we paid the other man \$40 a month, and could not make the creamery go at that, so I don't see how we can afford to pay any more."

"Well," said I, "you got a forty dollar a month buttermaker and you'll fail again. I won't recommend anybody for less than \$60 a month."

"But," said he, "we won't get but about a thousand pounds of milk to start with."

"That's all right," I said, "but you won't get that much unless you have a good man to make it into butter that will sell. The best way to get more milk is to get somebody who can handle it and make money."

**Hampshire-downs.**—As we have been asked several times for the names of the best flockmasters of the Hampshire-down country, we give the following list of prize-winners at the late county-show:

**CLASS PRIZES.—SHEEP.—Hampshire downs—Shearling Rams:** 1, J. Wrightson; 2, R. Coles; 3, J. East; r, T. F. Buxton; hc, J. A. and T. Palmer; c, M. Arnold, T. F. Buxton.

Rams, any age: 1 and r, T. F. Buxton; 2, C. Coles, c, W. T. Twidell.

Three Shearling Ewes: 1 and r, J. Flower; 2, J. East; c, A. de Mornay.

Ram Lambs: 1, J. Flower; 2 and r, T. F. Buxton; 3, E. Whalley-Tooker; hc, J. East; c, W. T. Twidell, A. de Mornay, J. Barton.

Three Ram Lambs: 1, T. F. Buxton; 2 and c, J. Flower; 3, C. Coles; r, J. A. and T. Palmer; vhc, H. N. Carlisle; c, J. Barton.

Three Ewe Lambs: 1, T. F. Buxton; 2, J. Flower; 3, C. Coles; r, A. de Mornay; vhc, J. East.

**A simple barometer.**—A barometer is an instrument used to determine the relative weight of the air. As usually made, it consists of a cup of mercury with which is connected a graduated glass tube. From the upper part of the tube the air has been exhausted, thus forming a vacuum, and the height of the column of mercury in the tube denotes the weight of the atmosphere.

Dry air is heavier than moist air; just as a bushel of dry wheat weighs more than a bushel of damp wheat. The drier, then, the air, the greater pressure it exerts on the surface of the mercury in the cup, and the higher the mercury rises in the glass tube.

But a very much cheaper and almost equally serviceable barometer can be

made at home. Take a wide-mouthed glass jar—a pickle-bottle will do—a clean Venice oil flask, and half a pint of clear water. Pour the water into the jar, letting it come to within one third of the top, and insert the oil flask upside down in the jar, so that the neck of the flask will just enter the water. Voilà tout.

If the atmospheric conditions are favorable to clear, fine weather, the water will rise in the flask; if, on the contrary, a storm is approaching, the water will fall. The air affects the water just as it affects the mercury.

**Second crops.**—You have sent your early potatoes to market: why not try for a second crop of some kind? There are ten weeks of growing-time, at least, before you: suppose you follow the potatoes with a little rape. It is not costly to grow, as of course the potatoes had dung applied for them, and the horse, and hand-hoing, the digging and harrowing in getting up the crop, will have rendered the land extremely friable. The preparation of the land seed, etc., will come to something like this per acre:

1 grubbing.....	\$0.30
2 harrowings.....	30
6 pounds of seed and sowing.....	80
1 rolling.....	20

\$1.60

And for this trifling sum of one dollar sixty cents you will have hearty food that will finish off your lambs in such style as will content the butchers who buy them and the people who eat them.

If your land is very stiff, clay soil, it must of course be ploughed instead of grubbed, as it would be dangerous to let it lie on the flat without water-furrows during the fall rains. This would add to the expense, but the sheep would pay for it, and the gain in the next year's grain-crop would be great.

**Canadian vs. American cheese.**—Here is a pretty story: from the *Vermont Farmer's Advocate* too:

Canadian cheese has a higher reputation in England than American, although, in point of fact, there seems to be no good reason for this preference, as will appear by the following statement, made by Mr. Jennings, in regard to some cheese that was recently shipped to England.

"It was said by some who claimed to know, that when the Northern New York cheese were on board the ocean steamer, or after they had reached their port of destination, the American factory brands were removed and Canadian brands affixed, thus assuring their sale as "Canadian Full Creams" in the Liverpool and other English markets. But there is no doubt but, on quality alone, the cheese would have easily passed as Canadian as it was equally good. These figures show that, so far as Northern New York cheese is concerned, the statement made by a speaker at a Western dairymen's meeting, not long since, that Canada cheese outsold the American product in the English market by a cent a pound, was incorrect."

The deduction from the premises seems curious.

**Professor Huxley**, the great philosopher, is dead. In the *Vermont Farmer's Advocate* he is correctly described as an agnostic, but we doubt Dr. Hoskin's derivation of the term, which he says "comes from the Latin *agnosco*, I acknowledge, and not from *ignosco*, I am ignorant. The true de-

rivation is from the Greek *agnōstos*, not knowing, ignorant of, from a privative, and *gignōskō* to understand, to gain knowledge of.

**Alsike clover.**—Has any one had any difficulty with making butter from milk produced by cows fed on Alsike clover? And what is the new theory about the Jerseys overcoming difficulties? Does any one expect to make really fine butter on clover alone?

**Alsike and Butter.**—I have heard farmers say that alsike clover makes poor butter. I have grown it for 15 or 20 years, but have not noticed bad results from it. I keep Jerseys and they always make hard butter, summer and winter. Some say it makes soft white butter, not fit to eat. E. H. Rose, N. Y. (When cows are fed a highly nitrogenous ration, the butter is not so firm and aromatic as when fed on a carbonaceous one. The Jersey breed of cattle measurably, though not entirely, overcome this difficulty. We presume the alsike clover is mixed with grasses and other plants and therefore does not have the deleterious effect that you speak of. Certain it is, that clover and grasses mixed make better butter, as customers judge it, than that made from clover pasture alone.)

Country Gentleman.

**Dairy Short-horns.**—"Some of the devotees of the old-fashioned Shorthorn dairy cow appear to have awakened at last to a perception of the fact that breeding and handling for beef and prizes in the show-ring have not tended to conserve and much less to improve the performances of their favorites at the pail and the churn. The Breed-Tests at the Columbian Exposition and other influences have stimulated some of our Short-horn friends to make an attempt to recover some of the ground lost, and to this end recourse has been had to some of those herds in England noted for creditable dairy performance. It is said that Mr. John D. Wing of Millbrook, N. Y., has already received a consignment of fifteen cows and a bull thus selected, and that another breeder expects a similar consignment at an early day.—*Hoard*.

If this is a true statement we rejoice at it. We only hope Mr. Wing knew where to go for them. (1)

**Grains.**—What a happy State must be Vermont, for:

There are no breweries or distilleries in this State, except those of an illicit character, and so, there is little danger of cattle being fed on refuse taken from such places, except, possibly, along the line contiguous to other States and Canada. Nevertheless, the following from *Hoard's Dairyman* will be of interest to those who may remember the great outcry that was raised against distillery fed cows, and "swill milk" by the New York press a number of years ago, and which, for once, showed the power of the press in suppressing the unhealthy practice, and it further shows that evils that are checked in one quarter will crop out in another, if there is the slightest opportunity.

Senator Morrison, chairman of the special committee of five members of the Illinois legislature appointed to investigate the feeding of cattle on distillery slops, has submitted a report signed by all the members of the committee. The report says the commit-

(1) See the sale of Mr. Buxton's Dairy Short-horns, p. 159 of this number.—Ed.

tee recommends legislation which will prohibit the feeding of wet refuse from breweries, distilleries, or factories, to animals. It recommends this, having in view the public health.

Wet refuse taken from breweries sours and ferments and in that condition is not a food which should be fed to cattle giving milk. In this condition germ life is rampant and bacilli rapidly form. Taken into the animal the principle secretion, milk, must be and is affected. That milk is then brought to the centres of population, and a very large proportion of it fed to the most delicate human organism, the infant. It sets up pathological conditions which largely increase the death rate."—*Vt. F. Ad.*

But are they not over-doing it? Care for the health of cattle is all very well, but the principle of paternalism, or, as we English think it, *Grandmotherism* may be easily carried too far. Too large rations of brewers' grains are not healthy, but a moderate quantity, say, 2 pecks a day with plenty of other food, of a nitrogenous kind, such as beans, pease, clover, &c., will injure no cow, and really, as far as regards food, cowkeepers may safely be left to themselves. When at Kingston, we saw daily 800 or 900 head of steers, cows, and old bulls, eating, or rather drinking, all they could hold of slop, and fattening as fast as any beasts we ever saw. More healthy animals could not be. We engage to say that every cow-keeper in London and its neighbourhood employs grains or wash for his cows, and the breweries in Montreal and Lachine get rid of all their refuse for the same purpose.

**Oatmeal.**—It is a very curious thing that the quantity of oatmeal consumed by a man who lives principally if not entirely on it, varies with the kind of soil the oats grow on. Stephens says an ordinary week's consumption of a Scotch ploughman is 14 pounds, but it makes a great difference whether the oats come from clay or sharp gravels, in one case they do best for porridge, in the other for cake. Apparently, our Canada oatmeal does not answer so well in Britain as the Scotch meal:

"I am pleased to see Professor Wrightson's remarks on oatmeal, and I think I can still further corroborate what he says. I referred in my previous letter to an article on the subject I had written in the *Gazette* some years ago; the said article was prompted by reading the remarks of an American medical man on the use of oatmeal as food. He had nothing but evil words for the same, and condemned it as totally unfit for human consumption. This was so contrary to the experience of generations of North-country men and to the teaching of our medical authorities at home that I set about looking up the matter, and I came to the conclusion that the American man's remarks were quite true about American oatmeal—the porridge made from it is entirely too thin, and if one wanted a variety which would stick to his ribs, and enable him to set his face to a day's work, he must "gang North" for a supply. Some fifty years ago Canadian oatmeal began to be imported into Scotland, but people who bought a boll of it for porridge and cakes did not like it, and though it has improved since then, it is still quoted at 4s. to 5s. per sack (280 lbs.) less than home grown.

The differences between home and foreign meal, and between different samples of the home variety, are indeed very striking; and I have no