

eat. the cereals of the ed for uniformity of ed, vary more ac- situation. English rest to an average ng qualities; and if est-price flour, it is skill or judgment on eat-corn of southern warm periods of on and hardness of tries and cold, wet eats of Venezuela, n, who chiefly illus- t they yield over 20 nce when chemically ordinary condition, y uncertain. What- percentage of flesh- t from the sunnier per cent. must be But when the kernel this it is altogether a large quantity of mixed with it. We ly suitable for mak- and similar pastes; ssian corn, coarsely best substitute for t is found too heat- dren, as experienced Scotch physicanstell us is sometimes the case.—*The Sanitary Record.*

Choked Cattle. The following recipe should be printed at least once every year, as it is a sure remedy:—Take of fine-cut chewing tobacco enough to make a ball as large as a hen's egg, dampen it with molasses so it adheres closely; elevate the animal's head, pull out the tongue and crowd the ball as far down the throat as possible. In fifteen minutes it will cause sickness and vomiting, relaxing the muscles so that the potato or whatever may be choking it will be thrown up.

Canadian Stock Sales.

The great Canadian stock sales take place this month. Capt. Chambers, of Spring Vale, East, the 13th of June, ther with Cotswold riage horses. ne, Simon Beattie, l in Toronto, on d of Shorthorns. ng represents one of posed of. We give

SS 2nd.
r 7, 1871.
DALE (28450).
Oxford (18774).
Clifton Duke (23580).
Duke of Athol (11376).
ke of Oxford (9046).
eveland Lad (3408).
ail (382).
d Hubback (1423).
ond Earl (1511).
rske (418).
Ketton 1st (709).
Comet (155).
(252).
ail (189).
urrite (252).
ubback (319).
J. Brown's Red Bull (97).
ls in Mr. Cochrane's
as good and per-

haps as valuable beasts, as the above really first-class cow.

The Hon. G. Brown will sell 50 head of short-horns in Toronto, on Thursday, 15th.

Messrs. Jno. Snell & Sons and W. T. Benson will sell 40 head of shorthorns in Toronto, on Friday, June 16th.

There will no doubt be an attendance from all parts of America, and perhaps foreign countries, of gentlemen interesting in stock breeding. The week will probably be memorable as the greatest for shorthorn sales that we have ever had in Canada.

Messrs. Long and Thompson will sell at St. Mary's, on Saturday, June 17, 34 shorthorn cows, and one Gwynne bull.

Canada as a Dairy Country.

The dairy interests of Canada are destined to supersede all others as the mainstay and support of our country. The great timber interest is limited, the fishing interest is now divided, other countries can compete with us in manufactures and in all other productions, but in butter and cheese we can compete with the world. We have the largest tracts of available land for dairy purposes. Our climate and soil are both suitable. It is only a matter of time, and Canada must have a world-renowned name for her dairy products; in fact, as we now stand, we can compare most favorably with any country. In no part of the world has there been such information gathered or spread as at our conventions. Our appliances are unsurpassed—the old system has been found much more remunerative. Large factors have succeeded better than small ones, still many prefer working on their own capital. Machinery of every kind is produced to facilitate operations. Perhaps one of the greatest aids is steam-power. The time is near when most good farmers will have their steam engine for cooking the feed for their stock. For the dairy interest it is particularly essential. We now give you the representation of one of the cheapest and best boilers for a small farm and dairy. Those boilers occupy but little space, are strong and efficient. The heating surface is very great, as the heat has to pass between the numerous tubes; thus it requires but little fuel. The steam can be conducted in tubes to any place where it may be required, either for cooking food or driving machinery. The cost is only \$130. We are indebted to E. Leonard & Sons, of this city, for the accompanying engraving. Larger establishments require larger boilers and engines attached. As steam power has facilitated all other kinds of mechanical productions, it must facilitate the farmer in his labors and increase his profits. So important a branch is the dairy interest that we employ the best Canadian and American talent to furnish matter of interest and importance to our readers.

Water Supply.

Pure water and plenty of it is perhaps the first requisite to perfect health. On the contrary, impure water conveys disease to the very citadel of life, and is one of the most fruitful sources of blood poisoning—diarrhoea, dyspepsia, dysentery, malarious and typhoid fevers. Pure water is much more scarce in the country than in town, in fact, it cannot be had at any price in many places. And yet there need be no scarcity in any part of England. The question is merely one of sinking or storing. There is abundance of water alike above and under the earth. The average rainfall of England is 32 inches a year; each inch is equal to 23,000 gallons, or to about a weight of 100 tons per acre. Even our driest counties have 20 inches of rainfall, in addition to dews, or over 2,000 tons per acre. It is calculated that we use less than a seventieth part of the rainfall, or, in other words, that the twenty-five million inhabitants of England and Wales use for all their machinery, cooking, washing—throwing all the beasts in to drink with us—only three hundred and sixty-five thousand million gallons of water a year; whereas the supply by rain alone is twenty-seven million millions of gallons, or one hundred and eighteen thousand four hundred millions of tons. And then we draw from wells, streams, rivers, reservoirs also. No doubt a good deal of this is rainfall at second-hand; and the water may be best at times at second-hand. Some authorities affirm that the best drinking

water is that drawn from wells not exceeding 30 feet in depth. The great danger of wells arises from the filtration of the filth of cesspools into them. This often occurs when it is least expected. At a farmhouse near Bedford a water-closet was put up, and the excreta conveyed into a large pond or moat over 100 feet from the well. An outbreak of illness occurred, when it was discovered that the well had been poisoned by human excreta. Reservoirs for the storage of rain-water, are, however, frequently the only resource, and could often be formed at trifling expense. Again, the storage of water in tanks from the roofs of houses is a simple matter, and a tank ten feet deep and six feet over can be made in stiff soil by simply plastering the sides and bottom with three coats of Portland cement, for an outside cost of £2. Of course in light soils concretes or bricks would be useful. Such a tank would be found sufficient for ten cottages. It would hold 1,000 gallons for every foot in depth, and the roof of an ordinary cottage, covering only 2½ poles of ground, would furnish 7,000 gallons per annum where the rainfall was only 20 inches, and more in proportion. A farm-



BOILER FOR FARMERS AND DAIRMEN.

house and out-buildings covering but ten poles would furnish 28,000 gallons a year. Of course in constructing storage-tanks and reservoirs great care should be taken to exclude impure filtrations, and the troughs and roofs would also occasionally have to be looked over and kept clean. It would also be desirable to pass the water through a filtering-bed of stones and charcoal.—*London Gardener's Chronicle.*

Liquid Manure.

It is generally known that it is only when dissolved manure is available as plant food. Until dissolved it lies inert in the soil to which it has been applied; but then the salts, in which its fertilizing power consists, being set free, are available for plant food, and—in the liquid state—are absorbed by the rootlets of the growing plants. Hence the immediate benefit derived by young plants from the application of liquid manure. A mode of applying it, though on a small scale, is given by a correspondent of the *New England Farmer*, as follows:

I saw, in a late number of your paper, an inquiry of how much soil to put with a bushel of hen

manure to make it safe to put under corn in the hill. I tried this experiment once, and but once; the result will explain why. I took about ten bushels of muck to two bushels of clear hen manure, in April, put together in a compost heap, added two bushels of ashes and a little unslaked lime, shovelled it over several times, so as to get it well mixed, and put about half a pint to each hill and covered it over with dirt, before dropping the corn. The corn came up well, but in less than a week after I found that my manure was killing the tap roots as fast as they reached the manure, and the result was that not one stalk in fifty lived to produce corn, and I lost my corn crop. It being so late that I could not plant to any other crop, I sowed the field between the rows to English turnips, the ground having been, previous to planting corn, liberally treated to manure, broadcast, and well plowed under. I got a large crop of turnips, there not being corn enough to shade them.

The best use to which I can put a small quantity of hen manure is to take a barrel, put in say one bushel, set it in the garden, fill it nearly full of rain water, stir it up well, and when your vegetables are well up, water them once or twice a week with this solution, taking care not to pour the liquid on the plants, except on squashes or cucumbers. You may use it so without fear of injury, as it will have a good tendency in keeping off the striped bugs, though not an infallible remedy. (Plaster of Paris or flour sifted on when the dew is on, being the best remedy for these pests, to be repeated as often as it is washed off by rain.) When the liquor is exhausted in the barrel, add a little more hen manure, and fill up with water again, using the liquor till the vegetables get so well started as not to require any more of that kind of stimulant. This use of hen manure I find pays well, with my experience with it. If I had more than I could use in the way last mentioned, I should put it on the compost heap with other manure, and spread it broadcast on the land and plow it under.

Decrease of Population in Farming Counties—Farmers' Prospects.

The State Census in New York shows that there has been a decrease of population in ten of its agricultural counties in the last five years, amounting to 6,177. All the counties having a large city, except Jefferson, show a decided increase, which reveals the fact that the tendency of our population is more and more towards cities. All the increase of the State in the last five years, which amounts to 322,000, has been in cities and villages. This tendency has been marked in New England for the last fifty years, and is destined to go on in the future. Nothing can be more certain than that in the older States the consumers of agricultural products are rapidly increasing, or barely holds its own. It follows from this that farm products must increase in value. The demand for them grows faster than the supply. Within fifty years the price of many of these products has doubled, and some of them quadrupled. Veal and mutton were thought to be well sold at 4 and 5 cents a pound, cheese at 6 cents, eggs at 10, butter at 12½, poultry at 10, and beef and pork at 5 or 6 cents. Animal products are, without doubt, destined to advance in price still further. If prices go up as consumers multiply, farming must pay better in the future than it has in the past. The young men who, during the centennial year, will make up their minds as to their business in life, should take these facts into consideration. There is to be a harder struggle for bread, and the comforts of life, in the large cities, where consumers are so rapidly multiplying. Labor will not be so well rewarded there. All farm products will be in greater demand, and will bear higher prices, while the cost of production will not be materially increased. The comforts of life have greatly improved in our farming districts, and in most of them in the older States, the style of living is much above that of laboring people in cities. To those who stick by the farm, and cultivate the paternal acres, the future promises an abundant reward.—*American Agriculturist.*

The report from the Niagara District is that fruit trees of all kinds give promise of a good crop. Peach trees look quite healthy, having suffered very little during the winter.