

knocked off of them before they left the field, and they were stacked in a damp condition, it is not difficult to understand why 'the sheep and the chemist do not tell the same story' in regard to the value of the straw. On our own farm we have found pea-straw from a luxuriant crop of peas, cured without rain, nearly as valuable as clover hay.—*Am. Agriculturist.*

## CHURNING.

During the process of churning, a certain uniformity of temperature must be observed, or the butter will be soft and spongy, instead of being firm and compact. The agitation, also, of the cream should be regular—neither too quick nor too slow. If the agitation is too quick, the butter will make and unmake itself before the churner is aware of it, as too rapid motion induces fomentation, which, when it has reached a certain point, is entirely destructive of anything like the possibility of making even moderately good or good tasting butter. If, on the other hand, the motion be too slow, the agitators in the churn fail to produce the desired separation of the component parts of the cream, and the consequence is, that after a good deal of time spent in lazy action, the churner is just as far from his butter as he was at the beginning of his labors. The best temperature for the cream in churning, is from fifty to sixty degrees.—*Willard's Dairy Husbandry.*

## FOOD FOR COWS.

Professor Cook stated before a Pennsylvania farmers' club, that in Scotland he saw in their native locality the celebrated Ayrshire cows. He described these as a small size, varying from 600 to 800 lbs., live weight, and milking on an average, twenty quarts per day. They are fed largely on cabbage, which is considered there the best food for producing milk. Our dairy farmers here would no doubt find equal benefit from feeding cows on cabbage. As with turnips, there will be no taste in the butter from the cabbage if the cows are milked before feeding them. Another fact stated by Professor Cook, was that in the best dairies in England and Scotland it was considered most profitable to give the cows all they could eat, and to induce them by change of food, etc., to eat all they could.

The soiling system is of course practiced—and he had seen hundreds of cows tied up in stalls, where they are kept from year to year, no disease or other drawbacks resulting from confinement. They are not only "healthy," but "thrifty"—and never leave the stalls till they go to the butcher.

## KEEP SHEEP.

Farmers should all keep sheep, so should all horticulturists and market gardeners, for the following reasons:—

There are no droppings from any animal, size considered, that will enrich as much as sheep and do it as well. There is no animal that will eat as great a variety of food, let it come as grain, herbage, roots or fruit. Most kinds of weeds are palatable; nearly all kinds of briars, cockle burrs and most other burrs cannot flourish, or grow even, in a sheep pasture. On the farms they may be turned into a weedy corn field at the proper stage of the corn, and they will destroy a great amount of weeds, very little to the injury of the corn. In a small grain field they are better gleaners than hogs. Meadows will grow good grass longer by being pastured with sheep after mowing. Pasture for horses and cattle will grow up to different kinds of weeds and become almost worthless where sheep are not kept.

In orchards they are useful and dangerous; useful in eating all fruit as it droops and destroying great amounts of troublesome insects, dangerous, for harmless as they are said to be, they will bite the back of fruit trees if they remain too long at a time.

But, joking aside, sheep of some kind should be handled on all farms. On poor, worn-out farms, if one had as many as he could pasture, and buy some winter feed, the farm would be largely the gainer and the owner no loser. There is very little inducement in plowing and working a poor, hilly farm; and on that kind of farm sheep of any kind do better than on level, rich lands.

On rich lands there will be much that is wasted every year that sheep will do well on, and if for nothing more, they serve to keep the pasture and fence corners clean.

Market gardeners can keep sheep to first rate advantage on the refuse and waste of their vegetables. The manure of sheep put in casks, watered, and sprinkled on plants will

give them an astonishing growth. Sheep well cared for will always pay, though one may not handle so much money, for there is not much outlay in feeding sheep and harvesting wool, so that when you sell it is nearly clean profit. Sheep, after six months old cannot die in debt to the owner, for the wool or pelt will pay all expenses no matter how soon they die.

The kind of sheep one should keep I will not say; for the reason that one locality is better for one breed of sheep than another. One man is better fitted for handling one kind than he would be for others. The best plan, where one wants to begin with sheep, is to ask some experienced sheep man who is acquainted with his farm, what he shall keep. If he knows no such, write to some sheep farmer, describing his land and location.—Wool growers are very willing, generally, to answer all questions.

In conclusion I may state that it was demonstrated in England forty years ago that an acre of land capable of maintaining 1,000 sheep one year, would, by being thus appropriated, maintain 1,365 sheep the next year. The same is true in other stock, though to a small degree.—*V.P.R. in Western Rural.*

## BREWERS, GRAIN FOR COWS.

A correspondent to the *Country Gentleman* writes, Brewers' grains stimulate the flow of milk in a rather remarkable manner; cows will probably do better on them as regards quantity of milk than on any other feed, except, perhaps, the succulent growth of grass in June; the milk has no disagreeable taste as from turnips, cabbage, &c, but is pale in color and poor in quality, and the butter made from it is pale and of poor flavor. The cows fed on it keep in pretty good flesh especially when fed a little corn meal with the grains, which also greatly improves the quality of the milk, and is consequently practiced by the best feeders. The cows need some hay or grass or other rough fodder, in connection with the grains; otherwise they contract certain peculiar diseases; but when allowed a reasonable share—say 8 or 10 pounds per day of hay—keep in good health. For a family cow, would prefer hay, shorts, meal and roots; but grains are much more profitable to the milk man, whose chief purpose is to get a certain number of gallons per day, which shall not be condemned by the city inspector. The grains are sold at the breweries near Boston for five cents per bushel, and a cow in milk will eat about a bushel per day without injury.

## Short-Horn Sales.

The sales of short-horns during the past year have been unprecedented for the high prices that have been paid for animals with long pedigrees.

The sale of Mr. Campbell's herd at York Mills, New York, reported in a former number of the *Advocate*, was the most wonderful sale of cattle the world ever saw. The sales in Canada, although not approaching that sale in prices, have been as successful as the most sanguine could have anticipated.

Here are a few figures of late sales:—

HON. GEO. BROWN, BRANTFORD.

38 cows and heifers brought \$7,560, being an average per animal of \$198.95. The highest price paid for a single animal was \$410; 12 bulls brought \$1,650, an average per bull of \$137.50.

F. W. STONE, GUELPH.

37 cows and heifers, \$12,930; average per animal, \$349.45. Highest price paid for a single animal, \$1000. 6 bulls, \$1,470; average per bull, \$245.

GEORGE MILLER, MARKHAM.

16 cows and heifers, \$6,255; average per animal, \$390.93. Highest price paid for a single animal, \$810. 5 bulls, \$845; average per bull, \$169.

WILLIAM MILLER, PICKERING.

38 cows and heifers, \$12,891; average per animal, \$339.23. Highest price paid for a single animal, \$1,260. 3 young bulls, \$415; average per bull, \$138.33.

JOHN MILLER, BROUGHAM.

19 cows and heifers, \$5,985; average per animal, \$315.

Highest price paid for a single animal, \$795. 5 bulls, \$1,125; average per bull, \$225.

The above show that even in Canada prices have ruled very high for Durhams. Mr. Brown sold the greatest number, but made the lowest average. We notice that he has since the sale expended more money for new stock than he received from his sale. He is evidently determined to make his herd equal to the best. Mr. Stone drew more American money than the others.

There is great good done by this stimulant in improving stock, but these very animals that command such great prices would be simply ruinous to 99 farmers out of every 100. They must be fed on gold and covered with printer's ink to keep the excitement and demand up to the present pitch.

Forty thousand, thirty-four thousand, and twenty-five thousand dollars were actually paid this season for single cows, one calf bringing twenty-seven thousand dollars. These prices are so much above anything within our judgment or knowledge that they appear almost incredible, and make us ask—what next!

## BUTTER FACTORY.

The butter now made in factories uniformly brings a higher price than the butter made by farmers, and simply because it is better. Why it is better is what everybody making butter should understand. In the first place, persons are employed who are careful, industrious and conscientious. Secondly, everything is arranged for setting the milk properly, for keeping a given temperature, for skimming milk at exactly the right time, for churning under best conditions, and for walking, salting, packing and shipping the butter in such a way that the original elements will retain all their fine qualities. By doing these things there can be no bad, nor even second-class butter, and every pound of it is strictly "gilt-edged." As butter is usually made, fully half is poor, even during the months most favorable for making it; and for want of proper subsequent management, a considerable portion of the best half becomes no better than the poorest half. The loss to farmers generally in making butter is so great that unless they adopt better methods it will be as well to engage in some other business.—*N. Y. Tribune.*

## PERFECTION IN BUTTER.

There have been in the Providence market this winter a few hundred pounds of butter which have a history. They came from a single dairy in Illinois, and are uniform in quality, scarcely distinguishable, indeed, one from another, although made in summer, autumn and winter. They are sweeter, and have a fresher and more delicate aroma than any roll butter we were able to obtain last summer in Rhode Island. They contain little salt and no buttermilk. This perfect butter is churned daily from fresh milk. Here lies the secret. Milk one hour—butter the next. No setting of milk pans and skimming and storing up of cream. No subjection of cream and milk to atmospheric, electric and thermal changes. No expensive cellars with running water to secure fresh air and equal temperature, or, in default a perpetually fluctuating pure, or, in default a perpetually fluctuating product of butter. In place of the inefficient hand working of the butter, jaws worked by power, squeezing out the buttermilk just as the melted slag is squeezed out of the softened iron in puddling.

The dairy farm at which this butter is made has, we believe, a hundred or more cows, in addition to which milk is purchased from the neighboring farms. It is, in other words, a factory, producing butter on a large scale of uniform excellent quality. Our theory of butter-making has always been to carry the milk directly from the cow to the churn, and only to delay churning long enough for the milk to cool to the proper temperature. There would then be two churnings each day, and the quantity should be sufficient to make one or more packages for the market at each churning. Theoretically, also, the caseine should be immediately separated from the residual milk and buttermilk, and the ultimate products, butter and cheese, be the only substances remaining to be cared for, from day to day. In such a factory, power and good machinery would substitute hand labor, and a uniformly good product of butter should result. The cheese would then be of secondary, though considerable importance.

At the present time large quantities of French butter, of uniform quality are sold in the English market, at a good price. Meanwhile, American butter, in England, brings much less than its value, from the fact that no two packages are alike, even from the same

dairy. This holds good of Rhode Island butter in our own market. The butter from the same dairy, in successive weeks in summer, has hardly a recognizable resemblance. A principal cause of this diversity and inferiority of product, is the difficulty or impossibility of keeping milk and cream, in our variable climate, and in any but the best appointed dairy rooms or cellars. The remedy for this is in churning fresh milk instead of stale cream.—*Providence Journal.*

## IMPROVEMENT AND INCREASE OF STOCK IN ENGLAND.

Of the great advantage of this great branch of Agriculture, the general reader may form some idea when he learns the progress made in the improvement during the last century. About the year 1740 the number of cattle sold annually in Smithfield Market amounted to about 80,000, but since 1840 they have averaged about 180,000; and not only have the sales increased in the number of the animals, but in their quality and condition, for it has been shown that the average dead weight of the animals sold in this great market, which is now, of the bullock, about 656 lbs.; of the calf, about 144 lbs.; and of the pig, about 96 lb.; hardly attained to half this average weight in the year 1730; and there is, moreover, no symptoms yet apparent of the march of improvements in our breeds of live stock being stayed, or of the great English breeders feeling convinced that the utmost limits of perfection are now attained.—*Mark Lane Express.*

PROLIFIC EWES.—We learn from *Land and Water* that an instance of the extraordinary fecundity of the Dorset breed of sheep has just been afforded in Cambridgeshire. Last year Mr. Moyes, landlord of the Bull Hotel at Cambridge, selected for breeding nineteen Dorset ewes which he had imported direct from their native county. In the months of September and October these ewes gave birth to no less than thirty-two lambs. In due time they were again put up, and this spring have produced forty-three lambs more, or in all seventy-five lambs since September last. The lambs and their dams may be seen on Mr. Moyes' farm on the Madingley road, near Cambridge, and have had numerous visitors. The sire was bred on Mr. Moyes' farm. (One (the same) ewe on each occasion dropped three lambs.—*Pravie Farmer.*

HOGS POIS-NÉ.—Mr. Daniel Huiatt informs the *Holt county Sentinel*, that he took home some fifty-six head of hogs, and kept them up for a few days, and then turned them into a small pasture, where they remained over one night. The next morning Mr. Huiatt found thirty-five of the number down sick and as blind as bats and frothing at the mouth. They had been eating crow-foot weeds, and it is supposed that was the cause of their sickness. Mr. Huiatt immediately applied soft-soap and grease, and the hogs have since got better.

The *Colonial Farmer* says: Notwithstanding the draft on the Industrial classes which is continually being made in the increasing demands for more railroads, more lines of telegraph, more agencies for new branches of business, more manufacturing, and more education, there never was a time in the history of the maritime provinces, especially New Brunswick when remuneration for farm products was better. Only last autumn the *St. John Telegraph* asked why not ship live cattle to England when beef was so high? And now elsewhere on this page will be found an account of cattle being shipped from Glasgow to New York at a handsome profit to the dealer.

Texas cattle are deteriorating. One of the correspondents states that their cattle do not attain the same size at the same age they once did. This statement would seem to be perfectly reliable when we consider the falling off of the grass upon which they have to rely exclusively, and when Texas men affirm "that it takes on an average, ten of our cows to give a water-bucket of milk—poor at that."—*Moore's Rural New Yorker.*

The *Stock Journal*, after giving a number of experiments in feeding corn to pigs, remarks that these statements show that there is within a fraction of twenty-four pounds of pork in a bushel of corn; and the effort of every farmer should be to endeavor to get out as much as he can of it. And to do this, he must have the right kind of hog, they must be placed in the right condition, and fed in the right manner, with a view to profit.

The Texas cattle disease has appeared in Cairo, Illinois, and vicinity, and large numbers of cattle have died lately.

The foot rot has affected disastrously the raising of sheep in Lake county, Indiana.—Potatoes were badly damaged by drouth.

Mor

The Me  
few of th  
Louis Ex  
fourths of  
the \$50 sw  
\$50 sweep  
sweepstak  
Some of  
their head  
of a farm  
Mr. Jol  
waking up  
He took o  
his straw  
Exhibition  
both insta

Do You  
We wish  
new metho  
wanted, &  
can advert  
use few on  
in such an  
number of  
acres, and  
The read  
at so cheap  
subscribers  
column of  
of the most

Pr  
HED  
Fences o  
necessity b  
—to guar  
ownership  
stock. Th  
be govern  
ber existed  
was a burd  
districts,  
cheapest,  
our countr  
ber, and w  
dition, it  
substitute.  
substantial  
eastern way  
Hedges ar  
and those f  
manently h  
preferred t  
purpose. I  
and observ  
able to the  
none superi  
Although  
American s  
fect and eff  
of the Wes  
East, I see  
mend it to  
The follo  
lities:—1st  
winters of t  
is no hedge  
make a hed  
it once be  
care remain  
when kept  
branches di  
hedge. So  
the common  
mental tree  
of plants  
which the  
and Kentu  
same order  
There is a  
town, New  
is one mile  
tight and st  
to be the b  
hedges of  
Iowa, som  
beautiful, s  
against all  
instances b  
of the Wes  
of the East  
In planti  
previously  
to 15 inch  
up into a r  
will not sta  
as no hedge  
the case.  
in the hedg  
a line. Se  
apart. Cu  
ah fall aft  
Tould be m