

In France and Switzerland, lucerne is often used in laying down permanent pastures. In the latter country, large numbers of plants of lucerne can often be noticed in long-standing pastures; and in dry seasons, when other herbage is burnt up, their luxuriant growth is very striking. The lucerne-strip, on the Seminary-farm in Sherbrooke street, Montreal, has been allowed to go to waste; the small quantity sown not being considered worth cutting we suppose; but, at all events, it was a good test of the value of the plant, as, in spite of this dry spring, it was quite fit for consumption on the 15th May, being then 20½ inches high, under very unfavourable circumstances (1)

PRICES OF ARTIFICIAL MANURES.—In England, the prices of artificial manures have fallen greatly in the last ten years. Sulphate of ammonia has fallen 18 p. c., superphosphate, 25 p. c., and nitrate of soda about 12 p. c. The only article of the kind that has risen in price, as far as we know, is kainite, but, then, there are no wood ashes, to speak of, to be had in England.

This being the case, of course all calculations concerning the value of manurial constituents in feeding stuffs must be altered, and the tables published by Lawes and Gilbert can no longer be quoted as a guide. As we have often contended, only about half the manurial constituents of food consumed by the stock of the farm is available for crops, and the leading agricultural Chemists of England, notably, Alfred Warington are obliged nowadays to admit this to be the true state of the case.

BUTTER AND FOOD.—The county of Dorset is largely a dairy country the "Wessex" of those delightful novels of Hardy.—Large herds of milch-cows have been kept there for ages, and the farmers are all either dairymen themselves, or let their cows to men who take the whole herd at so much a head for the season; so the opinion of one of the most important among them is worth something:

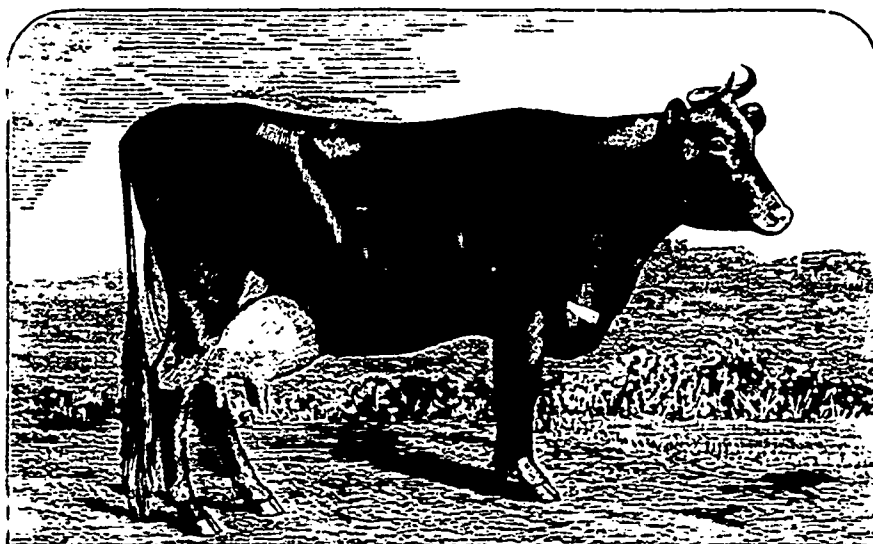
A FALLACY.—The foolishness of the assertion made by theorists that food does not influence the quality of the milk has been often referred to in this column, and it is therefore satisfactory to find a leading dairy authority say that the new school of chemists are at last coming to their senses in this matter. Nothing of late years, he says, has brought theoretical chemistry into greater disrepute with practical farmers than the repeated statements, said to be made after trials, that the quality of milk is not subject to the influence of food eaten by the cows from whom the milk is taken. A well-known Scottish farmer has been frequently cited as a declared ally of the chemists who maintained that the quantity of milk only, and not its quality, was affected by food. But the Scottish farmer in question has just published the result of his more recent experiments, which, he acknowledges, clearly show that food does influence the quality of milk. The wonder is that any farmer who has made cheese or butter could ever lend himself to give countenance to a delusion which is plainly condemned by all our old-world experience in curd or cream. We may hope now that the fallacy will not

(1) It was cut, at last, about July 1st, after having been well trampled down by the horses at plough.—Ed.

be any longer persisted in, and that the views of practical men will prevail.

WEEDS.—A correspondent of the "Farmer's Advocate" offers "A good word for weeds." He has noticed "that seedlings, such as carrots, turnips, etc., flourish in weeds when very small." Very likely; they are drawn up by the weeds, and if a dripping time follows, the singlers of the crop are not to be envied.

A GUERNSEY COW.—The cut taken from the "Country-Gentlemen" accompanying this note is a portrait of the Guernsey that won the sweepstakes at the New-York Show last winter. A more perfect representative of the breed it would be hard to find. We have passed a winter in their own Island; imported and bred them in England; and believe them to be one of the most profitable kinds of milch-cows a farmer can keep.



THE SWEEPSTAKES GUERNSEY COW AT THE NEW-YORK SHOW.

THE LONDON DAIRY SHOW.—At the recent show of the London, Eng., Dairy Association, all the best prizes went to Shorthorn crosses. A 7 year-old Shorthorn-Ayrshire, shown by John Holm, a Scotch breeder now farming in Essex, won first in the cross class for both points and milking, the Lord Mayor's Cup and a £50 Challenge Cup open to any cow irrespective of breed. She made over 65 lbs. of milk a day on a two days' trial. The first prize pure Shorthorn made 71½ lbs. milk but it was poorer in fat than the cross cow. Nine cows were placed before any Jersey got in. The best Shorthorn cow made 2 lb. 7½ oz. butter, the best Jersey 2 lbs. 1½ oz. Taken by points the awards were: 1st, a Shorthorn-Ayrshire, 139.8; 2nd, a cross, 137.82; 3rd, the first prize Ayrshire made 108.22 points and there were two Jerseys above her. In butter-making the user of the Disc Churn was champion, and won the same honors in 1893. One of the most interesting novelties at the show was the Thistle milking machine which drew large crowds of onlookers and was pronounced by the judges to be a real success. Another new implement worthy of special mention is thus described by the London Live Stock Journal:—This remarkable machine which has been awarded a silver medal by the Association, makes butter direct from sterilized milk in about a minute. The milk is heated to 160 degrees to sterilize it, and passes from the sterilizer into the separator, and thence immediately into the little churn immediately over the separator, and encased with it. While in the separator the milk

is cooled down to 60 degrees by means of tiny coolers through which ice water is continually circulating. As soon as the cream is separated, it passes into a tube perforated in the upper part with extremely small holes, through which it is forced at an almost incalculable speed in hair-like streams upon the rest of the revolving cream, converting it into butter by the concussion. The butter thus formed is softer than that which comes out of an ordinary churn, as it contains more buttermilk. It falls into a tub, and, when churning is finished, it is stirred for two or three minutes by moving a wooden dash up and down in it gently. Then the butter granules are skimmed away from the buttermilk, and worked on a butter-worker, which takes out the rest of the buttermilk, or most of it. The butter is then placed on ice for two hours, after which it is finished and made up. The large machine used is capable of dealing with about 180 gallons of milk in an hour, and there is a smaller one to deal with about 40 gallons in the

same time. Both are driven by steam power. The Radiator can be used as a separator only, if desirable.

BREWERS' GRAINS.—Brewers' grains are the material left after the sugar, etc., are extracted. They contain nearly all the albuminoids and fats, and part of the carbohydrates of the barley; and because the starch has been largely converted into sugar, and removed in the "wort," or extract, they are proportionately much more nitrogenous than the original malt, A cheap food, decidedly.

LIVE AND DEAD WEIGHT. English, we might say, British farmers, do not take kindly to selling cattle by live-weight and if they are in general as good judges as the Silurian farmers who guessed the weight of ox and sheep, as mentioned below, we cannot blame them. The animals were slaughtered as usual, and the judgment was pronounced as follows:

THE OX

Mr. Elliott	770 lbs
" Oakley	765 lbs
" Moore	772 lbs
" Reeve (butcher)	760 lbs

the real weight of the four quarters was..... 768 lbs

THE SHEEP

Mr. Kedwaad	99 lbs
" Lewis	101 lbs
" Cate	98½ lbs
" Probyn	98 lbs

the real weight of the four quarters was..... 100 lbs

We used to be a pretty fair judge of the weight of our own bullocks and pigs, but we must confess that the sheep in the wool always puzzled us.

RIPE OR UNRIPE GRAIN.—We take the following from the "Farmer's Advocate". It is full of sound sense if we may be allowed to say so, considering it agrees with the advice we have given hundreds of times in this Journal.

CUTTING GRAIN.—Millers like wheat cut before it is dead ripe, because the skin is thinner than when it has stood longer, and it is said that the proportion of gluten is greater. On the other hand, it stands to reason that seed-grain should be fully ripened, so that the germ will be well developed, and the starch upon which it will feed also. It appears reasonable to suppose that the development of the germ takes something from the flour-yielding quantity of the grain, and that this is one reason why millers like wheat cut before it is dead ripe. There is a great lack of exact knowledge upon this point and a capital opportunity for investigation. Barley, cut when not quite ripe is of a better color and realises more money than when left till it is dead ripe, but for malting, a mature, healthy germ is important. By cutting grain, and especially oats, before it is dead ripe, farmers secure themselves against the risk of heavy loss from shelling. If they do not begin to cut when the grain is a little under ripe they cannot finish before some of it is over ripe, and then the chances are that they will lose a great deal of grain. Except for malting barley, then, the advantages are greatly in favor of cutting a little too soon rather than too late. Any experienced farmers will say that while he has rarely had reason to regret having been too quick in cutting a wheat or oat crop, he has often suffered from being too slow. Especially is this true with oats when the straw is so largely used as fodder.

CANADIAN MUTTON.—A Canadian who recently visited New-York City was impressed with the apparent appreciation of the products of his country, which was shown by prominent signs in many of the best butcher shops—"Canadian Mutton." The same quotation was also noticed on the bill of fare of the best restaurants. Upon indulging in some of the home-grown meat, the question arose mentally, Why do we not get such mutton at home? (1) Probably the smaller Canadian markets are too often supplied with the scrub stuff that is not fit to ship, and, indeed, which the shipping buyer does not care to handle. If our local butchers, as well as our local cheese dealers, would handle only first-class goods, the quality offered would do a great deal toward increasing the consumption and therefore the demand of these two nutritious articles of diet. The stringy, dry, so-called lamb so generally put upon the hotel table causes the consumer to vow that he will not again ask for even "spring lamb."—"Farmer's Advocate" The mutton we get, here in Montreal, is not much to boast of, particularly that sold in the early spring. Six months' old uncastrated male lambs are not likely to yield meat with any good flavour in it, and their "legs of mutton" are absolutely devoid of fat.

(1) Just for the same reason that we cannot get good butter or cheese in Montreal—it all goes to Europe.—Ed.