

The month of May is the proper time for sowing carrots and mangles, and do not fail to put in a small piece of one or the other, or both. They are most valuable for feeding in winter and spring, and no dairyman should be without them. Themangle or sugar beet is perhaps the most profitable, as being much easier raised, as they come up much quicker than carrots. One great objection to carrots being that they are so small and delicate after coming up that the weeds get the advantage.

See that your cows are regularly salted twice a week or oftener. Have set days for salting, say Monday and Friday, and see that they get it on those days. Many dairymen are careless on this point, although it is an important one, and should not be neglected. Regularity in this as in everything else will add to the thrift of the dairyman as well as his cows.

The Imported Sow "Grand Duchess."

The illustration on page 92 represents the fine imported sow "Grand Duchess." This animal was imported by John Snell's Sons, of Edmonton, and bred by Mr. Swanwick, of the Royal Agricultural Farm, Cirencester, Eng. Messrs. Snell sold her to Mr. W. L. Mallow, of Concord Farm, New Holland, Ohio. This is one of the prize taking stock of England and Canada. The pedigrees of Berkshires are now duly registered, and the demand for really first class stock is thus enhanced. Although it is opposed by some, it tends to greater care in improving and advancing the interests and prosperity of breeders and farmers in general.

Handling Live Stock.

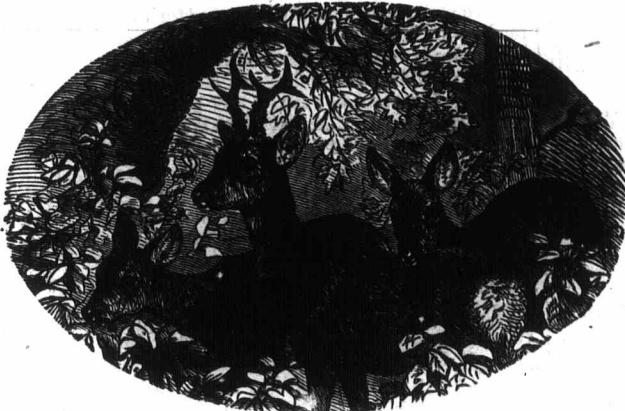
The *National Live Stock Journal* takes the position that, considering the quantity of land devoted to pasturage and forage crops, and the proportion of the produce of the farm fed to live stock, the handling of live stock is the most important business of the farm, arguing that an indifferent class of stock, poorly managed, will not only yield no profit, but will too frequently eat up all the profits of the farm. From this the Journal concludes that the live stock department should receive the farmer's earliest and latest study. He may rise early and retire late, he may labor and toil through sun and rain, and practice the most rigid economy, and yet, after all, the character of his live stock, and the manner in which he handles it, must determine whether the results of his industry and self-denial are to be realized in money or not.

A Difference of Fifty-One Dollars on Two-Year-Olds.

G. T. Sarem, Kellogg, Iowa, writes that he sold at the Union stock yards in February last 64 head of cattle. All of them were two-year-olds and had been stall-fed. A portion were natives, and the remainder half-blood Shorthorns. The natives averaged 1,236 lbs. (they were good ones for two-year-olds, evidently) and sold for \$4.65 per 100 lbs, making an average of \$57.47 per head. The half-blood Shorthorn grades weighed 1,666 lbs., brought \$6.50 per 100 lbs., or an average of \$108.29 per head. This is a difference in favor of the half-bloods of \$50.82 per head. It is a noticeable fact, illustrated every day at the Union stock yards, where cattle are sold on their merits, that grades bring from one to three cents per lb. more than the best natives. This increased price, as has often been observed, is due to the fact that the offal of the improved stock is smaller in proportion to gross weight, and the carcass proportionately heavier in those parts that are less valuable; there is less shank and bone and unsaleable gristle, and more loin, tender steak and juicy roast. The grade sells for more per pound for the same reason that silver brings more per pound than iron—because it is more valuable. But even if the price had been just the same, Mr. Sarem's grades, from their additional weight, would have brought \$20 per head more than his natives. The increased price is, however, a substantial and permanent feature of the market, and the figures illustrate very forcibly the advantage of using thoroughbred bulls. The man who sells his steers for \$57 per head need not look very far for the source of his hard times, when the use of a thoroughbred bull would have enabled him to command \$108 per head.—*Live Stock Journal*.

The Meat Supply of England.

At the meeting of the Farmers' Club, in London, an interesting paper by Mr. James Howard, of Bedford, was read on the above subject. The interest of the question, he said, extended far beyond agricultural circles, for the price of meat came home to every household. Scientific men asserted that meat was not so nutritious, weight for weight, as some kinds of vegetable food—Scotch oatmeal for instance; but it was more tempting to the appetite and more stimulating, and so was esteemed above its mere dietetic value. Meat consumption had increased not only in the United Kingdom, but in Germany, Belgium and Holland, and as a necessary consequence its price had advanced. Within the limits of the present generation the normal price of meat had been 6d. per lb.; but during the last twenty-five years the retail price had increased by gradual steps 4d. and 5d. per pound, an advance of 4d. per pound in beef, and 4d. in mutton, butchers' profits being relative-



GROUP OF DEER.

ly higher, the advantage being on the side of the retailer.

The average quality of meat produced at home had been much improved since the choice breeds of cattle, sheep and pigs had been so widely extended throughout the country. The absence of reliable agricultural statistics made it difficult to state accurately the average consumption of meat by the British beef eater, but it was supposed in 1872 by the secretary of the Agricultural Society, to be ninety-nine pounds per head of the population, which, taken at 8d. per lb. and the consumers at thirty-one and a half millions, gave the value of their annual meat supply at £98,000,000, and that at least twenty per cent. must be added for fish and other animal food. English farms might now be regarded quite as much meat producing as corn producing establishments, and some idea of the home production of meat might be gathered from the fact that nearly 2,600,000 head of home grown cattle, 17,000,000 of sheep,



PLAN OF CHEESE-FACTORY.

and 300,000 pigs were annually slaughtered, the estimated animal value being between £80,000,000 and £90,000,000. Notwithstanding this large production it could be enormously increased were all impediments swept away. Free importation of meat, however, must not be confounded with unchecked importation of disease. In 1874 their importations of foreign cattle, sheep and pigs amounted to 1,068,167 animals, valued at £5,250,000, while in 1875 these figures rose to 1,313,689 animals, valued at £7,330,420. Of dead meat, including bacon, hams etc., the importation amounted to 5,431,542 cwt., which, at 60s. per cwt., amounted to £16,294,626.

A gentleman in Watonsville, Mich., states that he killed an Essex pig, which, after slaughtering, weighed 574 lbs., and after dressing, 540 lbs.

On Starting a Cheese Factory.

Will your correspondent, Mr. J. Seabury, kindly give me some information on the starting of a cheese factory, as there is none in our section, and we are thinking of starting one on the joint stock principle. We would like to know what are all the necessary articles required, and the cost of each, from the boiler and engine down to the smallest article, and what a first class cheese maker will cost per month or season of six months; also where is the best place to get dairy findings. We have a thriving settlement with a village and very good farming community, and we do not care to be behind our brethren in the dairy line any longer. Yours, etc.,

April 15, 1876.

ADAM H. PRUNIAN

If you intend starting a factory on the joint stock principle, it will be necessary to have a thorough organization with President, Board of Directors, &c. Many of the companies have a

charter from the Government. The best thing you can do is to pay a visit to a factory that is worked on that principle, and you will then have some idea of the business and what are the requirements for a factory, such as size of building, site and general arrangements. It would be impossible to give you a complete list of things, with the prices, as I do not know what size you intend building, nor how many vats, &c.; and besides prices of these goods vary in different sections and towns where they are manufactured. With regard to the cost of a cheese-maker, you can hire them all the way from \$20.00 up to \$75.00. A really good one can be had for \$50.00 per month. Many of the factories let the manufacturing by the pound of cheese; the maker finding all the material for making, his own help and boarding himself. As to dairy findings, those advertising in the *FARMER'S ADVOCATE*, of which there are several; you will find all good houses. The accompanying engraving, together with the ground plan given in the March number, will give you a general idea, although the engraver has not given the proper proportions, the appearance being altogether too low and squat. There are a number of factories in the Belleville district which are joint stock companies, any of which will give you any information you may ask for, and a visit to one of them will be your best plan.

J. SEABURY.

Action of Milk and Cereals.

Investigations appear to show that the action of milk, when taken as food, is exceedingly analogous to that of the cereals, both in extent and duration, and the combination of the two appears to be the most perfect kind of food. The casein is to milk what gluten is to bread. The oil in the milk and substances—respiratory excitants—which call it into action, act in a manner quite analogous to the

common combination of bread and butter, or of a mixture of fat and lean flesh. Milk and flesh, it is believed, are the best and most natural modes of administering fat, and altogether preferable to the administering of separated oils. It is well known that in Germany skimmed milk is in frequent use as a medical agent, and in some other nations sour milk is a common article of food. The action of the former is explained by its casein and sugar as respiratory excitants; and that of the latter by the advantage of administering lactic and other acids in that combination in the summer season,

and at other times when the blood, by tending to undue alkalinity, is less capable of carrying on the oxidizing process. It was long since shown that in fevers skimmed milk is preferable to new.

The Deer.

The Deer are natives of every part of North America, and many of them still exist in the woods, though the hunters have greatly reduced their numbers. The common American deer is a very graceful animal; its head is rather long, and its muzzle sharp; the eyes are large and lustrous; the legs long and slender. The color in summer is bright fulvous, in autumn the color becomes a dull leaden, and in winter dark brown. The food consists of buds of the wild rose, hawthorn brambles, berries, tender grasses, leaves, &c.