

still more distant Colony of Australia, has already acquired a high character in the markets of Europe; but there is one esculent, the potatoe, which forms so large an item in the food of the people, and to the cultivation of which, it would be difficult to attach too high an importance. We trust the varieties, the modes of cultivation and the diseases of the potatoe, will receive all the attention which its importance in the list of *materia alimentaria*, merit for it. The association will not fail to remember, that no esculent hitherto discovered; is so universally used as an article of diet, in all countries to which it has been introduced. Even in France, where the *pomme de terre* has made slow progress, it now supersedes the *haricot* and other vegetables, containing infinitely more nutriment. The causes of the popularity of the potatoe are doubtless to be found in the superior ease with which it can be prepared for the table, in its light, palatable, and digestible properties; and the facility with which it may be cultivated. It is a matter worth noting, in respect to this tuber, and the fact, we recollect, was quoted by Professor Mapes, at a recent meeting of the Farmers' Club at New York, that thousands of bushels of potatoes, not of the first quality, have been sold this Spring in New York at from \$2 to \$2½ per bushel; the newly arrived immigrant cannot do without the potatoe, it has antiseptic qualities, which are invaluable after a sea voyage, and those who have been accustomed to it, can ill forego its use, or adopt a substitute.

General Beatson, who commanded at St. Helena, and who was not unwilling to turn his sword, for the nonce, into a ploughshare, at the suggestion of the Royal Agricultural Society, experimented largely, and under favorable circumstances of soil and climate, in the cultivation of the potatoe. He found that the depth to which the seed should be covered was six inches, that at a greater or less depth of covering, the crop was smaller and of inferior quality. He also found that the largest and most perfect potatoes, when used for seed, would give a much larger and finer produce than a like weight of any other size. He tried the potatoe whole, of every size, cut into segments, the eyes gouged out for planting, and at every depth, but this was the invariable result; each experiment, even in its sub-divisions, being made upon an acre of ground, so that no objection might be raised in regard to insufficient space for the trial: These experiments have been repeated, and the result has confirmed the accuracy of the observation, both in the United States and in Europe. A German method of cultivating the potatoe was suggested about the same time, and went the round of the Agricultural papers. It was suggested that when the potatoe vine was one foot high, its stalks should be pressed outwards, laid flat on the ground, and covered with earth, leaving the tips only exposed; when these again became a foot high, they were pressed inward,

again covered with earth, leaving the end as before, exposed, and thus the bending down and covering was alternately continued, until the vines blossomed, when the process was discontinued. It was found, under this treatment, that the whole length of the stem could be made to bear tubers, and to yield in the proportion of three thousand to one. but it was found also that the size and quality of the tuber rendered them valueless, except as food for cattle, and the process indicated by Gen. Beatson is now admitted, by all accomplished agriculturists, to be the very best for the production of the potatoe, for human food.

Facts such as these have a profound and important bearing upon agriculture, and we have no doubt the Agricultural Association and our agricultural readers will direct their attention to all that is passing in other lands, and which may be made to conduce to the prosperity of our own country. This should be the aim, scope, and object of all such efforts; and we, as public journalists, should ill perform our duty to the society, of which we hope to be useful members, if we ignore, or omit, to bring these subjects under the notice of our readers.—*Montreal Pilot*.

ANOMALIES OF BRITISH GRAIN MEASURES.—The Winchester, or Imperial bushel measure, dates as far back as the reign of King Edgar; and the first attempt to secure a uniformity of weights and measure in the country is almost coeval with the consolidation of the Saxon rule. One of the earliest of our Norman kings (Richard I.) ordained that standards of weights, and measures should be kept in every city and borough in the kingdom. It is provided by Magna Charta that there shall be but one weight and one measure throughout the realm; and also by the Act of Union between England and Scotland, that uniform weights and measures shall be used throughout Great Britain and Ireland. Many Acts of Parliament also have been passed to secure the same object; yet it is still far from being accomplished—"so forcibly," as Sir Edward Coke observes, "is custom with the multitude." At the present time grain is nominally sold by measures of capacity; none others being legal; but still, in the great majority of cases, grain is practically sold by weight. Thus in seventy-seven of the market towns in England and Scotland from which weekly corn reports are made, wheat is sold by the quarter of eight bushels. A bushel of wheat, of good quality weighs about 63 lbs. avoirdupois; a bushel of wheat of inferior quality weighs from 2 lb. to 5 lb. less. In East Lincolnshire 63 lb. to the bushel is expected by the purchaser, who, if a corn-factor or dealer, probably sends the wheat so obtained in that country to either of the great emporia of the West Riding, Leeds and Wakefield, where it is sold at the rate of 60 lbs. to the bushel. It is believed that this difference in weight

was originally intended to cover the freight from Lincolnshire to Yorkshire, but at the present time it only operates to complicate the calculations of corn-dealers, who of course buy according to current rates and debit incidental charges without reference to the difference between the Lincolnshire and the West Riding measures. At nearly all the seventy-seven markets alluded to the bushel is expected to contain a given weight. As it seldom happens that the measure and the weight coincide, the difference it made up artificially. Thus, a low quality of wheat which weighs only 58 lb. to the bushel, must have other 5 lb. added to each bushel to bring it up to the standard of 63 lb. But no account of this operation is taken in the official inspector's returns; that functionary recognises only measures, not weights; so that in the case just adduced, where 5 lb. of wheat over and above the weight the bushel measure will hold has to be given by the seller to bring it up to the standard of 63 lb. per bushel, one bushel in every 12½ bushels thus sold is omitted from the returns, which, of course, makes those documents, *pro tanto*, fallacious. The inferior descriptions of grain, such as beans, barley, and oats, are bought and sold in the same way. They are almost uniformly sold by the quarter of eight bushels. A bushel of beans of the best quality weighs about 66 lb. avoirdupois, a bushel of barley, 46 lb., and a bushel of oats 42 lb. Inferior qualities are made to correspond to these weights by increasing the quantity. The whole system is, in fact absurd and complicated in the last degree, and a great reproach to our commercial system. The question of agricultural statistics has already entered the phase of practice, and will, probably, be soon carried out on a national scale; but unless something be done in the meantime to establish uniform grain measures, half the advantages of the statistical returns will be lost. Judging from the actual tendencies of the trade, grain ought to be sold by weight and not by measure, weight being generally made the test of quality. It is believed by many of those most conversant with the trade, that the hundred-weight, is already used in some of the Irish markets, would be the best substitute for the present imperial quarter. *English paper*.

BREEDS OF CATTLE.

At a recent agricultural meeting held at the Boston State House, some interesting remarks, which we condense from the N. E. Farmer were made in relation to the value of the different prominent breeds of cattle as adapted to different purposes and parts of the country. The remarks of SANFORD HOWARD, who has a very extensive knowledge of the subject, and of B. V. FRENCH, a gentleman of much practical experience, furnish some valuable hints and state interesting facts:

Mr. HOWARD opened with a succinct