

done by a half-starved, suffering people. A larger quantity and better quality of food are necessary here than would have supplied men in the old countries, where less action of body and mind are permitted.

Still, there is great danger of excess in all indulgences of the appetite; even when a present benefit may be obtained, this danger should never be forgotten. The tendency in our country has been to excess in animal food. The advocates of the vegetable diet system had good cause for denouncing this excess, and the indiscriminate use of flesh. It was, and now is, frequently given to young children—infants before they have teeth—a sin against nature, which often costs the life of the poor little sufferer; it is eaten too freely by the sedentary and delicate; and to make it worse still, it is eaten, often in a half-cooked state, and swallowed without sufficient chewing. All these things are wrong, and ought to be reformed.

It is generally admitted that the French excel in the economy of their cooking. By studying the appropriate flavours for every dish, they contrive to dress all the broken pieces of meats, and make a variety of dishes from vegetables at a small expense.

Next to the knowledge of the differences in the human constitution, and the nature of the food proper for man, this study of flavors and art of re-cooking to advantage is to be prized by the good housekeeper. Every family who has a garden spot should cultivate those vegetables and herbs which are requisite for seasoning—horseradish, onions, celery, mustard, capsicum, (red-pepper), sage, summer-savory, mint, &c., &c., are easily raised. These, if rightly prepared, will be sufficient for all common culinary purposes, and a little care and study will enable the housekeeper to flavor her meats, gravies, and vegetables in the best manner.

Bear in mind that in preparing food, three things are to be united, the promotion of health, the study of economy, and the gratification of taste.

### BOOK NOTICE.

A CYCLOPEDIA OF AGRICULTURE; PRACTICAL AND SCIENTIFIC. PARTS 16, 17, 18. GLASGOW, BLACKIE & SON; TORONTO; THOS. MACLEAR.

The high estimate we formed of this work at its commencement, is fully sustained by the later numbers. As an exposition of the present condition of British Agriculture, and of the scientific principles on which all sound and profitable practice must be based, it is certainly without a rival in the English, or perhaps any other language. The following remarks are taken from a useful article in the 18th part, on

#### MANURE.

We shall now proceed with the object of the present, namely, the management of farm-yard manure, and also such other manures as call the farmer's art and skill into requisition; Farm yard manure, properly speaking, is the residual produce of all vegetable substances employed in the feeding and littering of the various kinds of live stock kept within the

precincts of a farm steading. Along with this may be included all kinds of manure made by horses, cows, and pigs, in towns and villages. Farm yard manure, therefore, contains all the elements or substances of the food and litter consumed by live stock, except those which are converted into flesh, bones, milk, &c. The quantity and quality of manure so made vary according to the mode pursued in consuming the food and litter. If much fodder and litter be used, and a small amount of green food consumed as in the case of wintering young stock, the manure will be large in quantity, but inferior in quality. If both straw and grain food be abundantly supplied, the manure will be both bulky and of good quality. If, however, we add to plenty of straw and green food, a large amount of corn or cake, the quality of the manure is so greatly improved as to be considered by some more than equivalent for any loss sustained from feeding with so expensive food. Again the circumstances under which the food and litter are consumed very materially affect the quality of the manure. Thus, if consumed in open courts, the manure necessarily contains a large quantity of rainwater, which, if not absorbed by a corresponding supply of dry litter, must pass through and away from it, thus dissolving out much soluble matter. and, as a matter of course, greatly deteriorating the quality of the manure. No doubt this liquid may be collected in tanks and preserved from loss; still it is much oftener allowed to run to waste, while the solid manure is so greatly diminished in quality, that a much greater quantity is required to produce results equal to those obtained from manure made under cover. The most perfect mode of making manure is that practised by Mr. Mechi, of Tiptreeball. The whole of his cattle, sheep, and pigs are kept under cover, on sparred wooden flooring, which permits their droppings to fall through the openings into cellars or chambers beneath. In order to accomplish this the more effectually; the straw is all cut up into short lengths, saturated with liquid oil-cake, and linseed, and ground corn, and in this way used solely as food, no bedding being required. This system has been assailed by a host of writers, in no measured terms, as preposterous in every point of view, as expensive in its working and unsatisfactory in its results, and contrary to the nature of animals so fed. These points, of course, must be decided not by theory, but prolonged experience; and probably, it would be better to delay judgement in such matters until personal experience, or the experience of trustworthy and competent practical men, has furnished sufficient data to argue the matter fairly. With regard to that point, which lies in the way of this article—namely, the value of manure made by Mr. Mechi's plan—it appears to the writer a self-evident proposition, that the manure so obtained must, from the absence of anything like active fermentation, be superior to all other kinds derived from the ordinary modes pursued, just in proportion to the loss sustained by fermentation by one or other of these. The presence of ammonia, in greater or smaller quantities, is now recognised as a tolerably accurate test of its value, so that any mode which is most effectual in preventing its escape is to be considered the best.

Manure made from the board and box-feeding systems, although very different in mechanical condition is yet so far similar in construction in this respect, that the ammonia is prevented from escaping. In the former it is in a latent and non-volatile state, while in the latter, although in a more developed condition, yet the treading to which the manure is subjected the mechanical effect of retaining it in the manure.

'Board' manure is in the form of a thick poultice-like mass, without much smell; while box-manure is