

sey cattle, which, however, from the inferiority of the pasture, soon deteriorated from the original stock.—Colonel Le Couteur, Mr. Parkins, and Mr. French Burke, then cited particular instances of the great amount of butter yielded by dairy cows, during the flush of grass in May and June, or throughout the year, if fed in a particular way, and tended with great care, namely, 16lbs. a week in those months, or 1 lb. a day in other cases during the year. Colonel Challoner then stated the case of a finely-bred handsome Jersey bull of his own, which, though perfectly healthy and fat, had his skin constantly affected with a yellow powder or scurf of a deep orange colour, especially within his ears and on his tail, a result he could only attribute to an abuse made of him by parties to whom he had been good-naturedly lent.—Colonel Le Couteur then expressed the great pleasure it would at all times give to himself, as one of the Governors of the Royal Agricultural Society of England (or to his successor in the office of Secretary to the Royal Agricultural Society of Jersey), to receive applications from any of its members who required advice and aid in obtaining the best dairy animals which that island could produce. He had had last year the satisfaction of freighting a vessel with 33 head of such stock, to a gentleman residing in Scotland, which arrived in perfect safety, and maintained the high character of the Jersey breed.—The Chairman referred to a challenge given by Mr. Villebois, one of the Governors of the Society, to the county of Bucks, in which he resided, in favour of two of his dairy cows of the Channel Islands' breed, which had produced him both milk and butter of almost unexampled quantity and quality.—Mr. Alcock, M. P., remarked that it would be highly desirable, if in the case of other breeds of cattle, a similar scale of points could be established, in order that the doubt and difficulty of the judges, and the frequent dissatisfaction of competitors, might be removed by the adoption of such a defined standard of adjudication as would have the effect of limiting and defining the conditions of merit in the competing animals.—Colonel Le Couteur stated, that when some years ago he had shown to the late Earl Spencer the scale of points for the Jersey cattle, his lordship expressed to him the desire he felt that such a step should be taken in reference to other breeds.—Colonel Challoner said that he could fully corroborate that statement, for he had the pleasure of being present with Lord Spencer and Colonel Le Couteur at the time it was made.—Mr. Burke remarked that he was also fully aware of Lord Spencer's wishes on that point.—The Chairman felt how highly desirable the adoption of so definite a system would prove; but at the same time he feared that our judges would have great difficulty in defining the required points, and unanimously agreeing to them.—On the motion of Mr. Parkins, the

best thanks of the Council were expressed to Colonel Le Couteur for this kind offer on his part, and for the interesting documents and statements with which he had favoured them.

MANURE—ITS GENERAL AND PARTICULAR APPLICATION.

Lime ranks among the soluble manures, a fact which the preparation of lime-water fully establishes; but there are many other chemical salts that are completely soluble in water, and therefore, are qualified to act rapidly upon vegetable roots—such are the sulphates so opportunely noticed in Mr. Cuthbert W. Johnson's article in the last number. To these may be added the potent salt called soda ash, or British alkali, which, according to Dr. Fownes, "contains, when good, from 48 to 52 per cent. of pure soda, partly in the state of mild carbonate, partly as a caustic hydrate, the remainder being chiefly sulphate of soda and common salt." This chemical compound has, of late, been greatly extolled as destructive of the wire-worm; but of this I say nothing, as no positive proof of the fact has been communicated to me. The object which now should be urged, is the great necessity of further and more rigid analyses of the staple earths, and of the plants that grow upon them. Advances have been made, and numerous tables formed, by many able chemists; but the results prove so dissimilar that at present we are constrained to hesitate.

Guanó, if pure and dry, not developing any odour of ammonia, ranks among the most excellent and comprehensive of partially soluble meliorators. Its soluble ingredients consist chiefly of sulphates, muriates, and phosphates of ammonia, soda, potassa, and magnesia, in varying proportions—uric acid and oxalic acid also in combination are often traceable. The insoluble bulk of the substance consists of bone-earth (sub-phosphate of lime), in a state of very minute division. This fertilizer will be again alluded to in its place. The point which now claims the cultivator's attention is the applicability of each individual saline material so as to meet the requirements of any cultivated plant, and herein consists the discovery and establishment of the science of Agriculture.

Liquids and solutions are always of doubtful application, because, if incautiously or erroneously administered, plants may be at once destroyed or seriously injured, of which we possess proofs in the pot-culture of exotics; but the case is different when we apply farm and fold-yard, and it may be also deodorized fecal substances; these contain all the elements which come under the second head of meliorators, and as not a particle of undecomposed solid substance can pass into the absorbents of the roots, there is little danger to be apprehended,