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ROTHAMSTED RESEARCH

## Circular: Patent Chemical Manures: Feeding Stuffs, Etc.

## Feeding Stuffs

## James Rutherford

James Rutherford (1864) Feeding Stuffs ; Circular: Patent Chemical Manures: Feeding Stuffs, Etc., pp 15-17-DOI: https://doi.org/10.23637/ERADOC-1-142

If our Registrar-General, Mr. Donnelly, C.B., would devise some means of combining with his "Agricultural Statistics" a series of tables, embracing, under certain technical headings, the Manures applied to Green Crops, Cereals, and Grass Lands in Ireland, he would be giving fresh proof of the indefatigable zeal and ability which characterize his labours, and would furnish the public with an amount of information which would produce most beneficial results to agricultural interests. Assuming that the collectors of these statistics are supplied with printed forms, containing querics, the answers to which are given verbally by the farmer, and taken down in writing by the public officer, these queries could very simply be extended so as to embrace the particulars above alluded to; holdings could be divided into, say four sections, viz., 10 and under 40 acres; 40 and under 100 acres; 100 and under 200 acres; 200 acres and upwards; and the four provinces could also be distinguished. Manures might be classified into-lst, Farmyard Dung; 2nd, Dung from Towns; 3rd, Ammoniacal Manures, viz., Guanos; and 4th, Phosphatic Manures, viz., Superphospates and Bones; the results year by year as to the state of the crops, could be sufficiently indicated by "Good," " Bad," or " Middling." On some such basis as this there could be no possible motive on the part of farmers, for either erroneous or evasive replies, nor could any one engaged in the manufacture or sale of manure have a grievance to complain of; and a synopsis of the whole returns, which could be further improved by distinguishing between Landlords and Tenants, would furnish valuable data for most important deductions, on a subject of paramount interest to a country, the prosperity of which depends so much on its yearly produce in Beef and Corn.

## FEEDING STUFFS.

Notwithstanding the low price of grain, there has been a large consumption of Linseed Cakes and Rape Cakes as Cattle Food during the past year, and these, partly as the result of corn being so cheap, have been sold at lower rates than for many years previous. I have been at very great pains to secure the best qualities of feeding cakes, having visited, during last autumn, both the home and foreign markets, and procured stocks which have met with the highest approval, and secured a large demand from all parts of the country. In this branch, as in the manure trade, no effort has been made to force a trade by "testimonials" or squibs of that nature; my aim is to supply a genuine article at a fair price, avoiding inferior and low priced cakes, which, if they enhance profits, decrease reputation, and have no tendency to
secure the steady patronage of those who not only wish a cake of uniform good quality, but are willing to give full value for such. Every advantage is given to cash buyers, and favourable arrangements entered into, to meet the convenience of parties prefering a current account, and paying at fixed periods.

Cotton Seed Cakes, though not much in demand in Ireland, are extensively used both in England and Scotland; supplies, however, have been uncertain during the American troubles, nor is there any prospect of matters mending much in this respect for some time. The undecorticated Cotton Seed Cake, which contains the husk of the seed, and is so much cheaper than the other, is very seldom found to produce injurious effects on the animal ; in fact, there seems no risk of this unless the quantity given per day be excessive. Perhaps the most advantageous mode of feeding with Cotton Seed Cakes, is on grass-lands, either with cattle or sheep, and the droppings of the animals produce a more marked and beneficial effect on pasture than from other descriptions of cake.

Many "Cattle Foods" and "Condiments" are prepared and advertised as such, in contradistinction to the Feeding Cakes which are the necessary result of crushing either Linseed or Rape Seed for the production of oil.
"The great value of Oileake as food for Stock, and the high price for which it sells, has led to many inquiries for a substitute. The possibility of manufacturing 'a Cattle Food,' the selling price of which should be sufficiently low to makc it a cheaper food than Oilcake, or our common unmanufactured foods, is worth a little consideration. As every process of manufacture must necessarily add to the cost of the raw material, it is evident that it must be far cheaper to use the raw material as food, without putting it through any process of manufacture, unless this process gives rise to certain things which may be included under one of the two following heads :-
" 1st. -That a certain portion of the ingredients contained in the food, possess a value for commercial purposes beyond that which they are worth merely as food; and consequently enable the manufacturer to sell the residue at a lower price as cattle food.
" 2 nd.-That by a certain process of manufacture, the elements of food can be arranged, so as to produce a feeding value more than equivalent to the cost of manufacture.
" In the manufacture of Oilcakes, we have examples of the cost of manufacture being recovered in the high commercial value of certain ingredients contained in the food. The seed crusher produces oil for commercial purposes. The residue, under the general term 'Cake,' is in much demand amongst agriculturists, either for cattle food, or as manure. If, however, this residue were of
no value, oil would still be produced. The seed crusher, it is true, is enabled to sell his oil at a lower price, on account of the price which the farmer is willing to give for the cake; but it is the commercial demand for oil, and not the agricultural demand for cake, which gives rise to this branch of trade. Linseed oil is generally worth two or three times as much as the seed containing it, while the cake is, weight for weight, cheaper than the seed; the cost of manufacture is therefore recovered in the price for which the oil will sell as an article of commerce, and hence the manufactured cake is a cheaper food than the seed in its natural state."

These remarks clearly tend to show the great value of Oilcakes as compared with the cattle foods referred to ; as regards the latter, it has not been satisfactorily shown that their feeding properties are enhanced by the mode in which they are prepared, nor in connexion with the manufacture is there any ingredient produced (as in the case of the oil), the commercial value of which, as compared with the food, enables the merchant to put the latter into the farmer's hands on the same terms as he can procure the raw material of equal nutritive power.

## ROTHAMSTED FIELD EXPERIMENTS.

Farmers, Seedsmen, and Manure Merchants, or those who desire to receive or impart information as to the proper manures to use in top dressing meadow and pasture, will not fail to be interested and instructed by a careful perusal of the annexed Report on the effect of different manures on the mixed herbage of grass lands. The scientific reader will need no apology for its length and the intricate details of dry facts and figures, while the non-scientific and more general reader, who may be more desirous of a kind of syllabus embodying the principal deductions which he may wish to reduce to practice, will find something equivalent at page 33, commencing with the heading "The unmanured produce," and on to page 51.

Further I have nothing more now to add, unless to express hearty thanks for past favours, to the Landed Proprietors and Tenant Farmers of Ireland; and to repeat the closing sentence of my last year's annual; viz., that "I trust by undivided attention to business, and from the ample resources placed at my disposal, to merit a continuance and extension of the public patronage hitherto so freely accorded."


