

The Stock Food Fraud Again: A Consideration of Actual Feeding Tests.

Virginia, Massachusetts, New Jersey, Minnesota, Rhode Island, Iowa and All Other Experiment Stations Making Investigations Unite in Warning Farmers That the Stock Foods, Poultry Foods, Condition Powders, Etc., Are Either Absolutely Worthless or Produce Results at a Cost Out of All Proportion to Gains Made.

Continuing our consideration of the stock food business, we must see that not only must the farmer expose his stock to the danger coming from the carelessness of the compounder of these foods, but if he is pleased to have faith in the efficacy of the remedies they use, he must brave also the consequences of their ignorance. They do not hesitate to put together medicines that are incompatible. Thus, one condimental food is said to cure both constipation and diarrhea in stock. The enterprising inventor of the mixture accordingly puts in it a drug used for one of these ailments and another drug used for the other. Evidently he expects each of these remedies to have no effect except when it is needed, in which case the one not needed obligingly loses all its qualities. He does not appear to know that they have chemical relations with each other, and that while each of them may have virtues when used alone, they practically annul each other when used together, so that the actual result may be nothing, or possibly a dangerous compound. The latter is a remote danger, but it does not cease to be a real one.

Wretched Mixtures Exposed by Virginia Experiment Station.

One of the best of these bulletins on this subject is that of the Virginia Station of January, 1903, which has been previously quoted. Messrs. D. O. Nourne and Meade Ferguson are its authors. Concerning the mixing of incompatible drugs they report one condition powder containing twenty-four different ingredients, among them laxatives, astringents, tonics and diuretics. When the medicines are mixed so that the action of one counteracts the action of the other they report that the "drugs are not present in sufficient quantities to have any appreciable effect when fed according to directions." The owners of one of these precious concoctions announce them to be "unanimously indorsed by all prominent veterinary surgeons and horsemen, both in Germany and the United States." This and similar modest claims the bulletin pronounces "ridiculous, if not unscrupulous."

Dr. James B. Paige, of the Hatch Experiment Station at the Massachusetts Agricultural College at Amherst, speaks with even greater plainness on page 35 of the Eleventh Report of that institution: "For the promoters of such mixtures to claim that they have any knowledge of compounds and compounding not common to veterinary medicine is charlatanism in its most offensive form." Furthermore, Dr. Paige declares: "In the great majority of cases where tonic foods or condition powders appear to be necessary they can be dispensed with and usually to the advantage of the animal."

Actual Comparative Tests Only Safe Guide.

The supreme test, ultimately, for everything, whether a philosophy or a stock food, is found in its use. No matter how infinitesimal the dose of medicine, no matter whether the remedy used is in the books or not, no matter whether the medicines are said to be incompatible or not, if the food does what is claimed for it within reasonable limits, farmers and other sensible folks are satisfied. A theoretic objection could not stand against demonstrated fact. Here theory and fact coincide so closely as to

leave no room for doubt except, perhaps, in the minds of the proprietors of these compounds, whose self-interest naturally dampens any excessive ardor for impartial scientific conclusions. Mr. R. W. Clothier, of the Kansas Experiment Station, interviewed the users of these foods to see what results were obtained. Few of them could give any positive information, and only one of them had ever weighed his stock at the beginning and end of the feeding period to see what gains were accomplished. They depended wholly on observation. Two of these thought they saw slight gains, but not enough to pay for the food.

117 Pounds Greater Gain For Sheep Without Stock Food.

Mr. Clothier narrates in the Industrialist, published at Manhattan, Kan., Vol. XXVI, 1900, an account of a test made with a certain stock food which is full of suggestiveness. The agent for the food asked Mr. Clothier to be present at the weighing of the sheep that were to be used in the experiment. He could not be present, but the agent was, and the sheep were accurately weighed. The agent then went to the feeder and substituted a different food from the one he contracted to supply. According to the feeder's statement, he said the college had analyzed both feeds and found one as good as the other. Mr. Clothier knew nothing of this and the college had made no complete analysis of either food, but Mr. Clothier was working on the food the agent represented. Two lots of sheep were weighed, one containing 211 sheep and the other 209 sheep. They received the same food—ear corn and alfalfa hay. The 211 sheep received in addition the condimental food. Both lots were given all they could eat. At the end of three weeks the sheep were weighed in the presence of a witness. The sheep that had not received the condimental food gained 117 pounds more than those that had.

This last condimental food, in common with all others, is supposed to increase the appetite and stimulate digestion. A summary of experiments cited by Mr. Street in Bulletin 184 of the New Jersey Station gives the same results. Out of sixteen experiments the addition of a condimental food to the feed of stock either showed no effect at all or was injurious. In three experiments there was a slightly favorable effect, but the cost was so greatly increased as to render the use of such foods impracticable.

Losing \$1.40 Per Steer By Feeding Stock Foods.

In one of these experiments, that at the Iowa Station, steers fed with one condimental food showed a loss of \$1.40 per steer. Another condimental food yielded \$8.16 per steer less, and still another \$8.92 less. In all these cases the cattle received the same rations, excepting the addition of the condimental food to some of them.

At the Massachusetts Agricultural College at Amherst, Mass., Professor Brooks fed a condition powder to some hens that were receiving the same rations as other hens. Those not fed the powder produced 195 eggs at a cost of 1.8 cents per egg. The others, equal as to numbers, in the same time, produced 163 eggs at a cost of 2.7 cents per egg. Those receiving no condition powder had laid twenty-four eggs before the oth-

ers began laying. A similar experiment was tried with another condition powder, Sheridan's, costing, at \$1 a pound, \$2,250 per ton. The hens that did not get it laid more eggs of the same average weight as the eggs of those that did get it; they required less food, and the cost of production was much less. Professor Brooks naturally remarks that poultry keepers throw away money expended for condition powders.

A Kansas Analysis of the "Foods."

Mr. R. W. Clothier, of the Kansas station, who has been previously quoted, writes in the Industrialist of May 22, 1900, that he analyzed a stock food and found it had less protein and fat than five ordinary feeds used by farmers and only a little more than bran. He further says that all the condimental foods he examined contained salt which he regards as the chief stimulant to digestion in them all. He quotes Dr. Dammann, of the Royal Veterinary College of Hanover, as ranking common salt above all other condiments, but as condemning the continued use of any condiment, organic or inorganic. On this subject Dr. Dammann is one of the best authorities in Europe, and indeed in the whole world. He declares that the long continued use of all compounds that abnormally stimulate the digestive process weakens the constitution and permanently impairs the digestive organs—a remark applying equally well to human beings. It may be noted here that in a most interesting account of a model farm at Flourtown, Pa., in the Year Book of the United States Department of Agriculture for 1903, the writer, W. J. Spillman, states that stall-fed Jersey cows are there given a small daily ration of salt mixed in their feed with the most satisfactory results. The cows never leave their stalls from one end of the year to another, yet they are in perfect health and produce large quantities of the highest grade milk. This, however, is by no means in conflict with Dr. Dammann's view, since there is no attempt at abnormal stimulation of the cows. To resume, Mr. Clothier states that there is no food or compound known to chemists or veterinarians that will permanently increase the digestive powers of a healthy animal.

This is entirely in accord with the results of experiments conducted in 1893 by the Vermont Experiment Station, and in 1896 by the Maine Experiment Station. In the first of these tests, conducted by Mr. J. G. A. Kullender, Nutritone, a largely advertised condimental food for cows, was shown to have but slightly more feeding value than wheat bran. Mr. J. M. Bartlett, who conducted the experiment with the same food for the Maine Station, got the same results. On page 55 of the report of the Maine Station for 1906 he says: "It is significant that no experiments conducted by disinterested parties have shown a return equal to the cost."

A Slight Gain in Butter—But It Cost 50 Cents a Pound.

And finally a little more condensed testimony from disinterested sources will aid the farmer in forming a true judgment of their worth. Thus Mr. C. S. Plumb Director of the Indiana Experiment Station at Purdue University, reports in Bulletin 93 two tests. The first of these, conducted by H. E. Van Norman, found that

pigs fed under identical conditions, except that one lot received a condimental food showed a greater gain in weight and profit for those that did not receive the condimental food. The second test by Mr. C. W. Ely gave similar results. Mr. D. H. Otis, in Bulletin 119 of the Kansas Experiment Station page 26, says, of the two tests of the Acme and the Globe stock foods with cows: "The tests of these two stock foods indicate that they are worthless for dairy cows accustomed to a good balanced ration." He obtained a little more butter fat from the cows in these tests, but on computing the cost of the condimental foods he found that this additional fat was costing 48 and 57 cents per pound.

Messrs. Harry Snyder and J. A. Hummel report, in Bulletin 80 of the Minnesota Experiment Station, that a ration of alfalfa hay fed with corn was much more thoroughly digested by steers not receiving a condimental food than those getting the same feed with an addition of the prescribed quantum of condimental food.

Will Farmers Still be Humbugged.

In spite of Sir John Laws, in spite of the numerous experimenters and bulletins in this country, this robbery of the farmers goes on. The Virginia bulletin previously quoted says that in a village of 875 inhabitants and a city of 16,000 population no less than twenty-three different kinds of condimental foods and condition powders were found to be sold. In reply to questions the storekeepers, including druggists, reported that "considerable quantities" of these worthless preparations found a regular sale.

It is a lamentable fact that the great majority of those for whom these excellent bulletins are prepared will never see or heard of them. The merry trade of buncoing the honest farmer will, therefore, go on till he educates himself to the use of the publications of our national Department of Agriculture and the various State Experiment Stations, which may be had without charge, for the simple asking.—Tilden Sempers, in Watson's Magazine. Reprinted in The Progressive Farmer by special permission.

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