



Agricultural Department.

VARIETY IN FEEDING.

As the result of some observation, experience, and careful thought, I am strongly inclined to the opinion that variety in feeding is one of the essential conditions of success, and has in fact more influence on final results than most farmers suspect. If this is true, the principle will hold good for all feeding; not merely in the case of cattle, but also and equally in regard to the feeding of crops. If, for example, it is found expedient, when cows are fed for milk, or steers for beef, to blend albumenoids and carbo-hydrates in their feed in certain proportions, it is clearly not necessary nor is it wise to take the nitrogenous element entirely from clover, or the carbonaceous matter exclusively from potatoes; but rather to get each of these from several sources, instead of from a single one. In like manner, if we intend to apply to a corn crop a certain amount of nitrogen, of phosphoric acid and of potash, it is better, if we can, to obtain these several elements, each from several sources, provided it does not make too much difference in the expense.

In fact I think we may carry this principle of variety still further and apply it to passive as well as active manurial elements; that is, to those substances chiefly used as absorbents or divisors. Every farmer knows, for instance, that in making a compost of bone flour, hen dung, and ashes, some effective absorbent is indispensable to the value and safety of such a mixture. Perhaps the absorbent most frequently used in this case is dry earth or peat, while some use pulverized charcoal and others plaster. Now I have known cases in which the union of all these has been attended with very striking results, and I am confident that an absorbent composed of all three, blended in right proportions, will, in certain cases, at least, if not generally, prove the most efficient.

Without at present entering into the reasons for this view, I merely remark that it seems to be the teaching of observation and experience. I believe it will be found that, other things being equal, the greater the variety of nutritive elements employed in feeding either crops or animals (within reasonable limits), the greater will be the certainty of the result, and very often the profit also; and further, that the most complete formula for every crop as I have said before, will comprise not artificial manures exclusively, nor the different kinds of animal dung only, but a carefully studied combination of both.

This general principle of variety in feeding, and its two-fold application to animals and plants, though not at all new to our farmers, is entirely too much neglected in practice, and is therefore suggested here as a subject of sufficient importance to be further developed by discussion, and tested by experiments.—*Conrad Wilson, in Christian Union.*

THE CHECK-REIN.

With a logic as defective as their humanity, some persons declare that "the check-rein holds the horse up, if inclined to fall." How far the instrument designed to prevent an animal falling holds it up, which falls with it, has never been satisfactorily explained.

That some horses, rendered vicious and hard-mouthed by bad treatment, require a bit somewhat severe, may be conceded; but who, in all fairness, that has seen the fearful inventions nowadays forced into the mouths of horses, attached to the carriages of the wealthy in particular, will assert that they are aught else than instruments of outrageous torture? If it should be the good fortune of the writer of these lines to convince one lady or gentleman of the folly and inhumanity of their use, he will feel that his labor is compensated.

To insure the full exercise of an animal's power in the safest and most easy way to itself, we should be careful not permanently to disturb its natural posture. The question to be decided is, whether or not it is most judicious and proper to give a horse the free use of his head, or to prevent him from having that use.

The pain occasioned to a horse by a tight check-rein is intense. The action of every muscle is impeded. If a false step is taken, recovery is rendered difficult. Discomfort makes the poor animal restless. The impatient movements occasioned by his distress are not unfrequently visited by a cut from the whip of an ignorant coachman; the horse is called ill-tempered, when he is only miserable. Some new instrument of torture is forced into his mouth in the shape of a bit, until, with temper and mouth both ruined, he passes into the hands of an omnibus-driver or cabman, when his bearing-rein is cast aside, and for the first

time he is treated with common-sense and humanity.

It is a severe penance to any one loving a horse to witness the sufferings from this absurd and cruel practice. Little does the benevolent lady know of the agony of the two noble animals by whom she is so pleasantly drawn along. She probably fancies that the high-prancing step, and toss of head, which scatters flakes of foam at every step, are expressions of pride and satisfaction; when, in fact, they are occasioned by needless pain, and a vain effort to obtain relief.

Could these speechless sufferers answer the enquiries, Why do you continually toss your head while standing in the harness? Why do you stretch open your mouths, shake your heads, and gnash your teeth? Why do you turn your heads back towards your sides, as if you were looking at the carriage?—they would answer: All, all this is done to get relief from the agony we are enduring by having our heads kept erect and our necks bent by tight bridles and galling bits.

While many of the instruments of torture applied to the horse in this country are of foreign invention, some are the product of native talent. Among the latter is one which is a strap passing from the saddle-hook along the neck, and over the head between the ears, secured to each ring of the bit. A more graceless, stupid invention could not well be conceived; and its only recommendation must be that it adds a new pain to the poor horse by pressing violently upon its brain?

Listen to what the author of the "Horse in Health and Disease" says about the check-rein: "I am anxious, in this place, to add my anathema against that inhuman instrument of torture, the check-rein. It is not less detrimental to the utility of the animal than it is replete with agony to him. Look at the elongated mouths of the unfortunate animals thus abused—torn by the bit in their unavailing efforts to overcome this truly barbarous instrument. What produces that dreadful disease poll-evil, but the action of this cruel strap, constraining the head during the violent exertions of the animal, producing inflammation and ulceration of the point upon which it articulates with the spine? Oh! ye daughters of the land, think what agony you might prevent by a little thought for the dumb beasts who serve you so well!"—*Henry Bergh.*

THE PLEASURES OF FARMING.

It is a pleasure to an intelligent man to be the owner of a good farm and to carry on the business of farming, if done properly. No other pursuit is so well adapted to afford health and happiness. To have sweet milk and fresh butter and eggs, and vegetables and fruits from one's own garden and orchard, and poultry, mutton, and bacon of one's own raising, to live upon, is very agreeable. To see the pigs, lambs, calves, and colts increasing, the crops growing, the stock improving in value, the fruit trees bearing their scarlet and golden harvests, and everything prospering, as it generally will under wise management, affords any good man pleasure.

But the farmer, to enjoy farming, must manage his business well. He must plan wisely and execute promptly. He must be a sort of military man in this respect. He must lay the plan of his campaign at this season of the year, and carry it out as thoroughly as possible. To enjoy farming, one wants the best of everything—the best cattle, horses, sheep, and swine, and fruits and crops. He should be ambitious to have the best and should strive for it constantly. His crops should be put in in the best manner. He should have the neatest and best-kept meadows and pastures, the finest orchards and gardens, and neat farm buildings, and everything should show an air of tidiness and order, dictated by an intelligent mind.

It is not necessary to have expensive buildings. Any, however cheap, if put in the proper places, surrounded by neat fences, and the ground adorned by shade and forest trees, will look well. The passer-by will be pleased at the outlook; he will see there the evidence of a happy home. The house sits back a few rods from the road, on a little knoll, so the water drains easily from it. Shrubby and shade trees are planted in the yard. To the right or left of the house and a little back of it the barns and stables are built with some system. The garden and orchard are convenient to the house and everything is arranged in order. The farmer has taken pleasure in forming his plans, and now takes pleasure in seeing how neatly everything looks. His wife and sons and daughters and neighbors feel the influence of these admirable arrangements. It has cost no more, or but little more, than to put up everything in a slipshod, haphazard manner. It would sell for two or three times as much. But homes should never be sold. They are sacred places. They should be made for one's children, and children's children. How dear are all of the associations of our childhood days! Why break them? Why let strangers intrude and desecrate places that are the holiest on earth?

If farmers would exercise this care and foresight and taste in making their farms and homes attractive, there would be a stronger love for country life. There is too much inclination among the young people for the city, and yearly our cities are increasing in population and influence, at the expense of the country.

Could parents see what we are compelled to see almost daily, as we go from our country home to our office in the city, they would spare no labor to endear farm-life to their sons and daughters. Could they see the debauchery, open and notorious, incident to all cities, they would shudder. Could they see the young men, yes, and young women, too, that parade city streets, bearing every evidence of vice and intemperance and degradation, that a few weeks or months or years ago came fresh and pure from country homes, and then consider that such, perhaps, may be the fate of their own kith or kin, if country life is not made more attractive, would they not say it is our highest duty to attach our children to farm-life, to favor innocent amusements, to patronize good books and papers and libraries, to help elevate the tone of society, to carefully consider the tastes and wishes of young people, and to give them proper direction, so that the dangerous period of youth may be passed in safety and the rocks which have shattered the barks of tens of thousands of generous youth may be avoided in the voyage of life which all must travel?—*Colman's Rural World.*

AN ARTIFICIAL MOTHER.—Mr. T. B. Rogers, the famous poultry raiser at Wethersfield, has "sensed the precise thing" and has invented what he calls an "artificial mother" for the rearing of young chickens. He estimates that at least fifty per cent. of chickens hatched are lost by suffering from cold, by being stepped on by their mother, by cats and other animals, and in various other ways. He also finds that chickens to be profitable should be hatched in the winter. He has hatched three broods in nine weeks with one hen—that is, he takes away the chickens as soon as hatched and places fresh eggs under the hen, and in this way keeps her busy propagating chickens. Mr. Rogers's next move was to get up some invention that would take care of the chickens when hatched, and he has constructed what he calls an "artificial mother." This is a box with two compartments, and about three feet long by two feet and a half wide. In the rear is a lid covered with wool which shuts within three inches of the bottom; this is cut off from the front part by a strip that can be raised on hinges. The front is protected by lattice work, giving plenty of air and light, and on the outside are tin troughs, in which gravel, food and water are placed. The chickens can easily get their bills into these, and when they have got their fill they can run under the wool-covered lid, which is so soft and comfortable that they imagine they are under the old hen's wings. Mr. Rogers had in one of these boxes yesterday a brood of twenty-one chickens, sixteen of which were hatched last Thursday, and five on Sunday. They were all as lively as crickets, and seemed perfectly at ease. He took them to the Springfield poultry show on the noon train, where they will undoubtedly attract a good deal of attention. Mr. Rogers deals exclusively in light Brahmas and thinks they are the best layers as well as the most profitable fowls for the table.—*Hartford Courant.*

WORKING DOGS.—In all the German towns the dogs are utilized. They are taught to work, and not raised to play, as in England. Hitched to little carts, either in the shafts or under the wagon, they supplement the man or woman who owns the barrow, and pull by ones or twos with surprising fidelity; and, better than all, they seem to be proud of their service. In Switzerland, dogs are very generally used, similarly; and scores of the larger breeds may be seen early in the morning, at any of the larger towns, harnessed into their little milk-wagons, which they drag from door to door to the patrons of their owners, without mistaking the residences of the customers,—performing this duty cheerfully and as regularly as would a horse or a mule in the same service.

SWINE SUSCEPTIBLE TO KIND TREATMENT.—John C. Dillon, farm superintendent of the Agricultural College, gives, in the *Ploughman* a long account of a Chester pig called "Marmion" which, as Mr. D. says, "under the influence of kind treatment, developed those faculties which swine undoubtedly possess, but which are little prized and rarely cultivated; viz., a remarkable docility, sagacity, and affectionate regard for those whom he looked on as his friends. He would always greet me with a gruff but cordial welcome, seemed pleased to have me open his mouth and exhibit his great tusks; and whenever his services were required, I had only to say, 'Come, Marmion,' and he would leave his mates, and follow me wherever I chose to lead. When killed he weighed 1,020 pounds."—*Dumb Animals.*

DOMESTIC.

—To re-fasten the loose handles of knives and forks, make a cement of common brick dust and rosin melted together.

—To preserve flowers in water, mix a little carbonate of soda in water and it will preserve the flowers a fortnight. Saltpetre is also good.

—If brooms are wet in boiling suds once a week, they will become very tough, and will not put a carpet, last much longer, and always sweep like a new broom.

—The best way to cook codfish is to strip it of skin and cut it in pieces about the size of one's hand; place it in water and allow it to simmer on the stove until it becomes tender. It should never be allowed to boil. Boiling hardens and darkens the fish, and deprives it of its flavor.

—Meat boiled for table use should be plunged at once into boiling water, as the heat contracts the outer surface and coagulates the albumen, thus preventing the escape of the juices. Prepared for stock or broth, it should be placed on the fire in cold water, as then the unconfined juices are free to pass into the liquor surrounding it.

—Boil one pound of best white glue and strain very clear; boil also four ounces of isinglass, and mix the two together; place them on a water bath with half a pound of white sugar, and evaporate till the liquid is quite thick, when it is to be poured into moulds, cut, and dried to carry in the pocket. This mucilage immediately dissolves in water, and fastens paper very firmly.

—For damp closets and cupboards which generate mildew, a trayful of quick-lime will be found to absorb the moisture and render the air pure, but of course it is necessary to renew the lime from time to time as it becomes fully slaked. This remedy will be found useful in safes and storage-rooms, the damp air of which acts frequently most injuriously on the valuable deeds and documents which they contain.

—A very dusty carpet may be cleaned by setting a pail of water out by the door, wet the broom in it, knock it to get off all the drops, sweep a yard or so, then wash the broom as before, and sweep again, being careful to shake all the drops off the broom, and not sweep far at a time. If done with care, it will clean a carpet very nicely, and you will be surprised at the quantity of dirt in the water.

VENTILATION OF CUPBOARDS.—In the sanitary arrangements of houses, even for the richer classes, the ventilation of cupboards is neglected. In places let as tenements, closets are the receptacles for bread, and the fragments of various other kinds of food. Often the dirty clothes are put away in these places, waiting for washing. It is therefore important that air should be plentifully passed through such corners; generally, however, there is but little arrangement made for this purpose. The doors are kept closed without any perforation. There are no ventilators in the walls, and, in consequence, those places become cases of polluted air, which, when the doors are opened, escapes over the apartments. This defect is visible in nearly all houses of old date; and while looking at some dwellings of recent construction it is seen that, although care has been taken to ventilate staircases and rooms, the cupboards are in this respect neglected.

MINCE PIE.—Put into hot water, enough to cover them, a beef's heart and about three pounds of scraggy beef from the neck; add hot water from time to time till the beef, &c., is entirely tender; then remove the lid from the pot and continue boiling until the beef is dry. If the beef is well washed before putting over the fire it will not need skimming, as much of the juice will rise to the top while boiling, and should not be thrown away. When taken from the fire remove any gristly or stringy bits, and put the heart, &c., into a sausage-cutter or chopping-tray. Grind or chop very fine. Also mince three pounds of beef suet; stone and cut, but do not chop, four pounds of raisins; wash, dry, and pick six pounds of Zante currants; cut into thin, small slices one half-pound of citron, four ounces of candied lemon, and two ounces of candied orange-peel. Add the grated rind of three lemons, three grated nutmegs, and one ounce of ground cloves. Chop finely four quarts (after they are pared and cored) of nice apples; add one and a half quarts of good molasses and the juice of six lemons. If one has a quantity of good preserves, they form an excellent substitute for the raisins, currants, and citron. Quince marmalade, West India limes, and Virgalieu pears make a good combination; or crab-apple marmalade, quince preserves, and candied or dried cherries. Mince-meats thus prepared will keep two months if closely packed in jars, the tops covered with a little molasses, and the whole carefully sealed from the air. In this case the apples should be added from time to time as the mince-meat is required for use.