THE BREEDING
AND
MANAGEMENT OF PIGS:
A Paper,

READ BEFORE THE MEMBERS OF THE NEWCASTLE-ON-TYNE
FARMERS' CLUB, ON SATURDAY, APRIL 1, 1865.

BY
JOHN FISHER,
OF CARHEAD FARM, NEAR CROSSHILLS, YORKSHIRE.

PRICE ONE SHILLING.
SENT FREE BY POST FOR THIRTEEN STAMPS.

SKIPTON:
JOHN WINTERBOTTOM, BOOKSELLER, SHEEP-STREET.
1865.

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ON THE BREEDING AND MANAGEMENT OF PIGS.

Mr. Chairman and Gentlemen.—The subject for our consideration this evening is, "The Breeding and Management of Pigs," and nothing but a deep sense of its great importance, and a hope that I might be able to contribute something, however small, towards its advancement, could have induced me to respond to your call for a paper on the subject. Not that I was at all desirous of withholding any information which I may, by experience, have gained in that branch of industry, but because I felt myself in many respects quite unequal to the task of placing it before you in a manner at all commensurate with the great interests involved in it.

However, as you have kindly invited me to open the subject, I have endeavoured, to the best of my ability, and in as brief a manner as I was able, to commit to paper what I have hitherto found successful in practice, and which, for want of a better system, we still continue to pursue; and as such only can I recommend it to your notice, for I am sensible that it is a very imperfect system, and I am not without hope that I may be able to pick up a few hints from the discussion that may follow which I may be able to turn to a profitable account. And here allow me to give you a little wholesome caution, not to expect too much, in order that you may be less likely to meet with disappointments, for I have no great and decisive hits to communicate, no short cuts to fortune, nothing but a few plain observations drawn from daily practice to present to you, and which, according to our present state of knowledge, appear the most likely to lead in that direction. And, as I proceed, I feel that I must very frequently trespass on your good nature, and must therefore crave that patience and kind indulgence which is ever accorded to those who have the honour of addressing a gathering of practical and educated British farmers.

In speaking of the importance of the subject as a source of profit, and this is the only way in which I can regard it, I need not remind you of the very high rates which every description of fat stock is commanding at the present time, nor the extremely low prices which even the best samples of corn will fetch, because you know all about these matters much better than I can tell you; but it will be necessary to consider what inducements there are, especially for farmers, to increase their stocks of pigs; and here both the above facts appear favourable

to the proposition. Pigs do not require the farmer's best crops; the inferior, or what is called spoilt corn, with a few roots, is all that will be necessary to rear and fatten them for the market. There will be no condiments to buy, no cake bills to pay, while I need not tell you that the more corn you consume at home the less occasion there will be to increase the manure bill. I know in most seasons many farmers have much inferior corn, which they find unsaleable, except at prices far below what it costs them to grow and get it to market. Then there are but few farms of any magnitude but which can command some kind of motive power, while there are plenty of mills to be had by which it may be ground into meal at home at a cheap rate.

In laying in a stock of pigs, little outlay is required; they multiply very rapidly, are easily reared, and easily fattened, and if there is not a ready market for them near home, it may be always found at any of the large manufacturing towns, whither they may be sent by railway in a short space of time, and at a very trifling cost; and if consigned to a respectable cattle salesman, they are certain to be sold at market value, and the money remitted by the next post.

A few years back nobody thought of curing bacon except during a few of the winter months. Now it is done throughout the summer in all our large towns, where the pork trade is so well managed now, that all the small offal, from the hair on the back down to the hoofs, and which were wasted formerly, are now converted into money, by which a very handsome per centage on the cost price of each pig is realized; and then the returns are so quick that the pigs bought in the market this month are cured and cut out in the shops as bacon during the next. I think few people who are in the habit of frequenting the manufacturing districts will have failed to observe the great increase in the number of the pork shops which have sprung up on every hand, when besides these, almost every grocer, butcher, and provision dealer drives a brisk trade in the ham and bacon line, and the general complaint among the pork butchers is, that they are badly supplied both as regards quantity and quality. These pork shops are a great boon to the labouring classes. Here they can at all times purchase in any quantity, from a fitch to an offal or a penny slice of pork or bacon, according to their want or means of supplying them; and they very much prefer the home-fed and home-cured, if they get less of it for their money. During the spring of 1863, when the provision markets were glutted with American products, clean American sides, of the best Cumberland cut, or the C. C. brand, as it is called, could be bought in Liverpool at 35s. per cwt., and inferior brands at under 30s. per cwt., when at the same time our home-feds found a ready sale at 56s. per cwt. by the carcass.

The market value of a lot of fat pigs may be ascertained by weighing them alive separately, in the same way as sheep are weighed, and is easily done by placing them in a crate, and deducting the tare of the crate from the gross weight, when they will give from 73 to 76 per cent of their live weight, according to fatness; and if very fat, with small bone and offal, they will give 80 to 82 per cent; while some of the small breeds, when excessively fat, or what has been called "superlative specimens of obesity," will give over 90 per cent. of their live weight.

And I may tell you that our cottagers, who have all their pig food to buy in from the miller and shopkeeper, do not consider that their pigs have done well, if with present prices they are not worth £10 each, at ten months old. Many of them far exceed this, of which numerous instances might be given, but I shall confine myself to giving you one of them only, which, having occurred lately, it is the last that has engaged my attention, and for the truth of which I can vouch.

A neighbour of mine, who is a small dairy farmer, killed his pig on the 2nd of February last, it being exactly forty-nine weeks and two days old at the time, and it weighed 49lbs., or 35 stones 8 lbs., and was worth, at market price, over £13, at a little over eleven months old; but it had had a good deal of skim milk during the summer, and had done well. And although I do not hold out hopes that every lot of pigs will average anything like that weight, still it shows that with proper care and attention pigs are capable of making a good deal of money in a short space of time, which is a matter of no small importance at all times, and from which I think we may reasonably conclude that there is a fair prospect of pigs paying their way if kept on a more extended scale than has hitherto been adopted in the large corn-growing districts, which, if true, the next question that suggests itself for our consideration, will be, Which are the best and most profitable breeds to keep? And in answer to this question, I have no hesitation in stating it to be my opinion that, whether breeding for sale as stores of a few weeks old, or for fattening for pork or bacon, the improved large and medium sized breeds will be found the most profitable for the farmer to keep, whatever the name or colour of the breed may be. While the beautiful symmetry and extreme neatness of the small breeds fit them for the styes of the amateurs, where profit is not an essential qualification, and where the general breeder will do well to resort for an occasional cross for the large sorts whenever they do not thrive to his satisfaction, for it is to a judicious combination of the large and small breeds that we must look for a favourable solution of the pounds, shillings, and pence question in pig feeding. And as I have already observed, this is the only way in which I can regard this, or any other branch of production by which the occupiers of the soil are expected to supply the means of supporting the population of a country, and for which purpose, without sacrificing size, we must *advance symmetry, advance quality, and no surrender*. That the general breed of pigs in Great Britain has been greatly improved by importations from different parts of the world, especially by the Chinese and Neapolitans, there can be little or no doubt; these being small in size, with a great aptitude to fatten, when crossed with our large, coarse, slow feeding breeds, have produced *varieties* greatly superior to either of the parent stocks. And as there appears at present little hope of further aid from foreign sources, we may be thankful for what we do possess, and endeavour to work further improvement in them, for which there is still plenty of room left, even in our best breeds; and provided we have good breeders and good nurses, and they possess the capability of giving a large amount of good flesh, with a small amount of offal, in return for the food and care bestowed on them, the

name or colour of the breed will be a matter of little consequence, although in some districts one breed or colour may prevail, almost to the exclusion of all others, and, where such is the case, it may be most profitable to consult the tastes of those who are likely to be the purchasers.

In selecting pigs for breeding purposes, we prefer such as possess good size, combined with activity, and a general robustness of character, and consider the following to be the most desirable points for them to possess.

The forehead should be wide, and the nose moderately short; that the amount of offal may be small, the ears should be thin, and erect, and pointed forward. When the ears hang down over the eyes, they cannot so readily see objects that may approach, and are therefore more liable to accidents of various kinds. The under jaw should show an inclination to roundness, even when in low condition, as indicating a disposition to thrive well. The back should be slightly arched, and not too long, as very long pigs are unwieldy, and have great difficulty in laying down and rising, and as mothers they are very apt to overlay and kill their young before they are strong enough to take care of themselves. The loins should be strong and muscular, and the hind quarters only slightly drooping, with the tail placed well up, for if otherwise, and the legs are drawn too much under the body, there will be great difficulty in getting the sows served by the boars. The hams should be wide, and well rounded, and well let down to the houghs. The flank should be placed low, and only slightly arched, and the belly deep and thick, that the flitches may cut thick in the thin parts, if I may be allowed to use the expression. The legs should be straight, and small in the hock, and not sink so much at the fetlocks, as to throw the weight on the heels and pasterns; the feet should be fine and small, and the gait light and nimble. A good coat of long, bright, vigorous hair, of not too soft a quality, is very desirable, not only as indicating a large amount of lean meat, in proportion to the fat in the carcase, of which it is the truthful index, but also as a protection from the sun in summer, and the cold in winter, as well as for preventing the skin from being so easily acted upon whenever subjected to a little rough usage, or even when sent to market, a practical illustration of which may be seen almost any market day, by those who will take the trouble to look through the pig pens, when they will find that those which have the least hair on them will be covered with abrasions and unseemly scratches, which gives them a shivering and uncomfortable appearance, causing them to show to a disadvantage, and which will as certainly be thrown into the scale against the seller, whenever he disposes of them, which is of itself sufficient reason to make it desirable to breed them with good useful coats on their backs.

The above remarks will apply to both boars and sows, but with the exception of great size, should be more fully insisted on in the choice of the boar, as his influence may extend to a great number of sows, and, consequently, may be of the greatest importance; but, as we seldom meet with all these good and desirable qualities combined in the same animal, we shall frequently have to be satisfied if we can procure such as possess a fair share of them, and should not hesitate to use strong healthy

animals of either sex, if we were certain that they were well descended on both sides for several generations back; and, if properly mated, we should expect to meet with much that is desirable in the produce, that they did not themselves possess, as many of our best and most successful sires are only mean in appearance, when not in high condition; as the test of symmetry consists in the way in which they pack their flesh as they fatten, and the question should be how few *weak* rather than how many *strong points* do they possess?

When the sows are large, with an inclination to coarseness, they will be best mated with a boar of a smaller size, and possessing more of the properties of the small breed; whereas, if they are under-sized, they may be safely put to a boar of the improved large breed, with the certainty of getting more size in the produce, although, if they are getting aged, and are forward in condition, it might be more profitable to feed them off, and supply their places with young ones of a larger sort.

We invariably find that, when the weight of the forehead greatly preponderates over that of the hind quarters, or what is called "good in the crest and crops, but rather light behind," whether it be in the boars or sows, they are never good and fortunate breeders; the boars are too heavy before and weak behind, and have great difficulty in rising to the sows; and the sows are clumsy and careless, and only indifferent nurses; therefore, we prefer such as are wide behind, if rather light in the neck, as they are always more active and better nurses; and the few pounds in which the neck is deficient, and which the standard of excellence requires, is almost certain to be found in the hams, a deficiency which, except on the score of symmetry, few will regard as a loss.

And we will here observe that a weak and indifferent sow, when put to a well bred boar, will frequently throw one or more pigs in her litter which are quite as good looking as many of the best bred ones; but if the boars from such a cross are used on well bred sows, the produce will be inferior; and perhaps such crosses as this may have had something to do in giving rise to that axiom in breeding, "Never to go beyond the first cross," which we are bound to regard as a fallacy, and hold that it is only true when we cross *back* with inferior blood, and believe we may safely cross *forward* as long as ever we can introduce superior and more desirable properties, such as are calculated to further the object we have in view, whatever that may be.

I am aware that it is the fashion to claim purity of race for many of our best breeds of live stock. Thus in pigs we have "pure large breed," "pure small breed," "pure" this, and "pure" that breed. But what are any of our best and so-called pure breeds, but the result of a succession of judicious crosses? and their only claim to purity must rest on the fact that they have not recently been crossed with any other breed. And, in my opinion, many of them might be improved by increasing their size, as size means weight in the scale, or *quantity*. Others would be better if they carried more hair, which, besides being a protection for the skin, means lean flesh. In others, the bone and abdominal viscera might be reduced, which means lightness of offal, and, combined with lean flesh, con-

stitutes *quality* in the carcass. And if we thus far admit their claim to purity, and that they are valuable for improving inferior breeds, they are at least quite as likely to be farther improved by crossing with a better breed (if such there be), as they are to confer improvements on others, which are not inferior to themselves.

Having expressed my opinion as to the principles which should direct us in the selection of pigs for breeding purposes, I will now proceed to make a few remarks on their after-management, and, in doing so, shall confine myself to a simple statement of our every day practice, with some of the reasons which induced us to adopt and continue it.

I am a decided advocate for early breeding and early feeding, and consider October or November the best time for putting sows to the boar for the general crop, as it may be called. They will then bring their litter in March, and get them weaned, and take the boar again early in May, so that their second litter may get strong enough to stand the winter; and if the young sows bred in March have been liberally fed, and allowed plenty of exercise during the summer, they will be quite ready to take the boar in November, and bring their first litter at twelve months old. And we consider this the best way either to commence or increase a stock of breeding pigs, and should not endorse the claim to early maturity in any breed of pigs, if they were not unfit to rear a litter of young at twelve months old. If young sows are allowed to run until they are twelve or fifteen months old before they are put to breeding, they are very apt to miss their way altogether; and we find that the most successful breeders are those which are put to, when young, and are kept regularly breeding, consequently we do not disappoint them, but allow them to bring two litters a-year. After their first litter we keep them sparingly, except when suckling. When they have weaned their spring litter, and have taken the boar again, they are turned into a grass field, in which there is a large shed, with rails across the doorway to prevent cattle entering. In this shed they sleep at night, or retire in rainy weather. If the grass is not very plentiful, we give about a pint each of Indian corn per day, scattering it on the grass, and they can drink water from a stone trough which is fed by a spring, and placed near the ground that they may reach it conveniently. But they mostly gain so much flesh from being well fed while suckling, that they require little more than grass; and some which have had nothing else, have done as well as we could wish them. During last winter our breeding sows have been kept on oat dust, which costs 3s. 6d. per sack, and damaged rice, costing 4s. 6d. per ton, in the proportion of one sack of rice to three of dust. This is mixed together in a large tub, and steeped with cold water. On this food they cost about 1s. 2d. per head per week, feeding them twice a-day, and they sleep in a large well-sheltered open shed, with the free range of the grass-field whenever they choose to go out, which most of them will do every day when the weather is fine. Under this treatment they have done remarkably well, the young falling very strong; and are on their legs and at the teat directly, giving no trouble, and requiring no assistance.

And here I must inform you that we have no arable land at-

tached to Carhead Home Farm, having laid it all down to grass four years ago. We have no corn or root crops, consequently we have to purchase all our pig food, and no doubt but the price we pay for dust is beyond its feeding value. Still, as we can buy nothing so low in price (except, perhaps, brewer's grains, of which we are only able to get a load now and then), and as they do well on it, it is cheaper in the end than a better food, on which they would get too fat, and probably not do so well when they come to farrow. We usually let them remain on that diet until they want about a week of farrowing, when they are taken to the breeding house, which, with your permission, I will endeavour to describe by giving the dimensions and particulars of one we have had in use for several years, and have had every reason to be satisfied with it.

The Breeding House is 10 feet square, the floor is flagged, and falls slightly towards the door, the lowest part being the corner behind the door, where there is a moveable iron grate, with a small well below, to catch the sediment, and a trapped drain leading to the manure tank. Thorough ventilation is secured by elits in the top part of the door, and a large loop-hole in the opposite wall, 5 feet from the floor, both of which can be closed or opened at pleasure. It has a glazed window, 3 feet by 2 feet, to admit the light, and a wooden sleeping bench, 6 feet 6 inches wide, extending across the house, on the side opposite the door, the object being to secure a dry comfortable lodging, with quietude, and plenty of light and fresh air. The benches are composed of wooden bars, 4 inches broad, and 1½ inch thick, nailed to similar bars, placed at right angles, leaving a space of 1 inch between each bar. They are then laid down on loose sleepers 6½ feet long, and 2 inches square, placed cross-wise on the floor. It has a horizontal rail 9 inches from the wall, and the same distance above the bench, to prevent the sow from laying up to the wall and crushing her young. The rails can either be fixed into the wall, or by uprights having one end into the floor, and the other end fixed to the spars of the roof, so that they can be removed when not required. Any joiner who understands what is wanted will be able to devise means by which they can be put up or taken down as required. It also has a 9 inch board placed edgewise on the front of the bench to prevent the young from straying off the bench when the sows are left to farrow by themselves. This board allows the sows to step over it when they want to feed, and is removed after the first two nights. The bench is taken up, and the dirt which accumulates underneath is cleared away every time it receives a fresh lodger, and it is lime washed twice a year.

Having described the breeding house for the sows to farrow in, I must say a few words on the boar house, which may be of equal importance wherever a boar is kept. The boar house need not be large, but should be dry and well sheltered from the wind, and should have a flagged or well paved and drained yard of about 10 or 12 feet square attached to it, with a strong 5 feet wall round it, the door of the yard being the same height as the wall, and lined with sheet iron to prevent it being eaten away, and the sows should be taken to this yard when in season, and removed as soon as served.

Boars, like all male domesticated animals, should receive kind

and gentle treatment, and very careful management. And if they are brought from the sties to the sows, they will frequently refuse to be sent back again, when force has been resorted to, and perhaps, dogs, whips, and broomsticks brought to bear on them, which makes them savage and unsafe to run at large, besides which they work much better when confined by themselves, and the sows always given to them at the same place, and, if fed sparingly, they will take exercise enough in the sty to keep themselves active. Old boars should have their tusks cut back once a year, for which purpose they should be secured with a strong rope, and the tusks carefully cut off with a small iron saw, such as is used for cutting iron.

Having described the breeding house and the boar house, it is not my intention to enter further into the subject of piggeries, for provided they have a dry, well-sheltered lodging, it does not much signify whether it has a south or a northern aspect, although, of course, we should prefer the former for choice; but as that is mostly required for other purposes, for which it is of more importance, we willingly concede it, and proceed to describe.

The treatment of sows at farrowing, and during the time they are suckling their young.—When the sows are brought into the breeding house, they are at once put on the same kind of food as will be continued to them while they are suckling. They are turned out for a few minutes twice a day, before feeding, which keeps the bowels in proper order, and the house dry and sweet, for it is very important that the bowels are open at this time, for, if constipated, the milk will not come freely, and the young seldom do well; besides which, it interferes with the free passage of the urine, causing great uneasiness, and, if not removed, it would lead to serious consequences, for which purpose we give frequent injections of warm water, and walk the patient carefully out, for a few minutes at a time, until we see that the obstruction has passed. Sometimes we mix a little common soap in the warm water, and have never experienced much difficulty when these means have been used.

We give a moderate bed of short straw three or four days before they are expected to farrow, that it may become soft by the time they are due, which, as the time approaches, they will collect on a heap, and place themselves upon it in such a manner that by raising the body it assists them in their efforts during parturition, and this, as well as most other matters at this time, we leave entirely to themselves, believing that they can mostly manage their own business best without our interference. And except with very fat sows, or during very cold weather, we do not remain with them while farrowing, but give an occasional eye to them to see that there is no unusual delay. If the presentations are proper, they will often pass three or four in as many minutes, but when the hind feet are presented foremost, they get on slowly, and sometimes half the litter will come in this way, but assistance in such cases will mostly do more harm than good, for in drawing the birth by the hind legs, the viscera is forced into the chest, and the life is thereby endangered to no purpose, for if ever they get so far on their way as to be within the reach of ordinary aid, they will be passed safer without it.

When sows are very fat and sluggish, they are then indifferent, and not easily disturbed. Their young also generally partake of their sluggishness, and then a skilful hand may be useful in getting them to the teat, and assisting them in inducing the mother to let down her milk, for which she will often have very little inclination. Also, in very cold weather, if the sow will remain quiet and allow it, he may get them to her as they drop, and by covering them with a dry rug, keep them alive; when, if they had been left alone, they might have been lost; but these are exceptional cases which breeders should endeavour to avoid, for although they may have been saved at the birth, it by no means follows that they will be reared, and that anything has been gained by it, for under such circumstances it is much easier to save them than to rear them afterwards. I have already stated that we mostly leave the sows to farrow by themselves; for, besides disturbing them and awakening their suspicions at a time when the greatest quietude is necessary, that they may give full scope to the powers with which nature has endowed them, and which are, with rare exceptions, fully equal to the exigencies under which they are called into action, the attendant often breaks the navel string too soon, or too short, by which the young are weakened from loss of blood, or they will give unnecessary assistance in the delivery, by which they often do a great deal of harm. They will also carefully remove the afterbirth beyond the reach of the sow, as if it was poison to her, thereby depriving her of the means which nature provides, and instinct teaches her to adopt, to allay the fever consequent on her condition, and which now drives both him and the sow to their wit's end for a remedy. Sows are frequently so much unsettled by having their young taken away from them at night, for fear they should be killed, that when they are returned to them in the morning, the screams of the young drives them furious, so that they not only refuse to suckle them, but will often snatch at them, as if they meant to devour them outright. The fact is, she does not recognize them as her own when brought back again, for which reason, whenever it is necessary to remove them from her, two or three should be left with her, and, like the hen with one chick, she will be quite as well satisfied as if she had a dozen by her, and the others may then be quietly introduced without disturbing her.

But we consider this kind of dry-nursing only fit for those who are willing to pay for assistance to coddle their pigs for their amusement, and can afford to lose them in the bargain. All dead pigs should be removed out of the reach of the sow, or she will sometimes eat them, as she would any other dead animal matter, which may have given rise to the supposition that some sows will eat their living young; but as I have never seen or heard of a single instance in which this could be clearly shown to be the case, I am desirous of defending them against this most unnatural and revolting charge, which, I believe, has been most inconsiderately and unjustly brought against them.

I have entered thus fully into this branch of the subject, because I believe that there are thousands of pigs lost every year by this interference and over-attention, by which beginners, who are led to believe that it is necessary to ensure success, having tried it and failed, have given pig breeding up as a losing affair.

To such I will only say, begin with young sows of a strong active sort. Don't pamper and spoil them by making them too fat, for appearance sake. And when they want to farrow, give them a decent sty, something like what I have attempted to describe, and don't let the servant try the nursing experiment on them. Don't expect to rear twelve or fourteen at every farrow; be content if they sometimes only get eight or nine up, and I believe they will very seldom disappoint you. And now I will pass on to the matter of feeding and rearing. As we have to purchase all our pig food, we are to some extent guided by the state of the market as to what we use, but we generally give the suckling sows, as well as the weaned stores, a mixture of ground wheat and barley, with a little bran or pollard added to it, and moistened with cold water, giving any milk that can be spared to such as we want getting forward as fast as possible. In winter we use warm water for the young ones. With this they are fed morning and evening, and at noon they have a little Indian corn or locust beans to masticate, which, by keeping them on their legs for some length of time, is conducive to activity and a healthy growth. When a litter of pigs are about two days old, their tails will often become sore and red by coming in contact with the straw when suckling, while the skin is soft and tender. Indeed, this soreness mostly commences with the first attempt at suckling, only it is seldom observed for the first day or two. If this redness extends quite round the tail so as to destroy the skin, the tail is lost, and will die and drop off. To prevent this, we allow them only a little soft well trodden straw, and, on the first appearance of soreness, we touch the part slightly with a caustic pencil, or apply goulard water, with a small paint brush, two or three times a day while suckling, and we do not lose one tail in a hundred. Such as have the least hair on them are the most liable, as well as the most difficult to save. They usually begin to eat along with the mother when about three weeks old, but may be learnt much younger if a little warm milk be given to them two or three times a day, while the sow is removed from them for a few minutes. About the time they begin to eat, they frequently suffer from diarrhoea, which, if it continue for any length of time, will weaken them very much. This disorder will sometimes be caused by allowing the mother to eat grass or other green food when turned out, or even by a change from one kind of meat to another, for which reason we avoid as far as we can any change of food during the time they are suckling, and continue the same to the young after they are weaned. And as it is very difficult as well as dangerous to administer medicine to them by force, we do not attempt to relieve them by that means, neither can they be induced to take it if mixed with their food, for they will not eat at such times, but depend entirely on the teat, for which reasons we diet the mother carefully, and allow as much small coal as she will eat, throwing a shovelful upon the bed, that the young ones may eat a little if they like; we also strew the floor with sawdust to prevent bad smells, keeping them warm, and giving as much fresh air as possible. If the purging continues, we change them to a fresh sty, taking care that it is dry and warm, and well aired. If young pigs can be allowed a run out with the mother for half-an-hour in the morn-

ing and evening, they will grow all the faster for it; but the middle of the day, when the sun is hot, should be avoided, for if their backs get much scorched it will retard their growth for a while.

All such as are not required for breeding purposes, should be castrated at from four to five weeks old, that they may recover before they are weaned. Pigs which are castrated always thrive and fatten better than those that are not, and give much less trouble; besides, which, there is less danger in the bacon not taking salt properly, and which ought to be taken into consideration by the breeder and feeder, although he may not intend to cure them himself. There are two ways of doing most things, and the best way is generally the easier, and always to be preferred, and in catching young pigs for castration, or any other purpose, great care should be used, as they are easily lamed, and having covered the window and closed the door to exclude the light, the operator should allow them to settle quietly in a corner, and taking the right hind leg with his right hand, then with his left hand he should lay firmly hold of the *same leg*, above the hough joint, and quickly passing his right hand forward, and under the chest, lay firmly hold of the *left fore leg*, and raise the pig with his right hand, using as little force as possible on the hind legs, and never hold them up by the heels, as the intestines are liable to get twisted if held in that position.

We usually wean at from seven to ten weeks old, and separate the boars from the sows soon after. We seldom keep more than five or six together in the same sty, and as they grow larger, we reduce the number, in proportion to the size of the sty.

The feeder commences in the morning about seven o'clock, beginning at one end, and regulating the food according to circumstances, and as he goes on, he rouses every pig up, and sees that all come to take their breakfast; should any refuse he reports the case, and having finished feeding he takes his barrow, fork, shovel, and besom, and proceeds in the same order to clean the sties; for, on being roused up, after laying still all night, they empty themselves while eating, and this becomes habitual and keeps their beds clean and dry, which is a matter of great importance to us, as we have all our straw to buy at a dear rate, and have to economise it accordingly, for which reason most of our sties are provided with wooden sleeping benches similar to that given in the description of the breeding house. So proceeding to No. 1, he turns the occupants out, shakes up the bed, sweeps all clean, and taking up with the shovel what had to be removed, he places it in the barrow, returns them to their sty again, and passing on to No. 2, treating them in the same way, and so on to the end. By this means the sties are kept clean during the greater part of the day; while out, they have free access to a heap of small coal, which is kept in a corner of the yard entirely for their use, of which they seldom fail to avail themselves, whenever they have an opportunity; there is also a trough with water, of which they sometimes drink a little.

To enable pigs to thrive properly, they must be kept in a state of robust health, for which purpose, proper shelter and a cer-

tain amount of exercise, is quite as necessary as good feeding, and all dark, damp, crampy sties should be avoided. There is no place in which young growing stores do better than a good straw-yard during the winter months. With liberal treatment the large improved sorts will make excellent pork at three to four months old, and at six or eight, very superior bacon, which, if well cured and preserved, will be very fine and mild in flavor, as well as tender. All feeding stores should be ready for the market and disposed of by the time they are twelve months old, as they then bring the highest price, and will generally pay the feeder better than carrying them on to greater weights. With the exception of diarrhoea, to which I have already alluded, and from which we sometimes lose a few pigs, when about a month old, we have never had any serious disease in the Carhead sties; consequently, I have very little to say on the diseases of pigs, but will briefly allude to such cases as are of common occurrence in a large herd, and will frequently require attention, although they may often be regarded as the result of accident rather than disease.

Pigs will occasionally catch cold, especially when in low condition; but, if taken in time, and placed in a warm sty by themselves, with a little extra nursing, such as warm milk and water, with a little bran or pollard, not forgetting the warm water injections if the bowels get out of order, they will mostly be right again in a few days. If the case be a bad one, and accompanied by much fever, and the patient will lie still, we cover up with a wet rag, leaving only the nose out, pouring cold water on to saturate it thoroughly, and then cover up with two or three sacks to keep the steam in, and have found this bath give very great relief. Pigs have a very great objection to any kind of restraint, as well as a strong dislike to physic, and if held for the purpose of administering it, they struggle and scream so much, that they do themselves more harm by it, than the medicine is likely to do them good; besides, if not done in a careful manner, there is great danger in forcing any liquid into their mouths, for if introduced while they are screaming, they are almost certain to be choked by it, so that the operator must wait till they have done screaming, which will mostly be when they are out of breath, and cannot go on any longer, for which reason we have not used medicine for several years past. They have also a very decided objection to strangers being admitted into their society, even if one of their fellows leave them for a few days, on their return they are beset and worried in a most unfriendly manner; and if the intruder cannot find means of retreat, they will often get cut and gored a good deal; where the teeth penetrate beyond the skin, swellings will arise, which if they become very large, they may be carefully opened with a lance, or sharp pointed knife, on the lower side, directing the point upwards, that the matter may escape, when they will soon heal without further trouble.

Fat heavy pigs are easily lamed in the hind quarters or hind legs, and should be very carefully driven over slippery or uneven ground. When so lamed, the butcher is the best remedy and the sooner the better, as they lose flesh fast, when they come to lie and cannot rise easily. They are also subject to rheumatic attacks, especially in the hind legs, which may easily

be mistaken for accidental lameness; sometimes they will suddenly become lame in one leg, and then the lameness will as suddenly change to the other, or perhaps leave them altogether. I consulted Professor Simonds, of the Royal Veterinary College, on this disease, and he recommended a strong stimulating liniment, or liquid blister to be applied to the hough joint, and well rubbed in, and I have used it with very beneficial results; also, if confined for any length of time where the wet litter is allowed to accumulate under them, their hoofs grow to a great length, and the feet become unsound and full of clefts, when the hoofs should be shortened, for which purpose we use a pair of strong wire clipping-pinchers, taking care not to injure the sensitive part of the foot, and trim with a shepherd's knife; and for diseased feet we have found nothing so good as a bran poultice, with two or three spoonful of fresh brewer's yeast mixed with it, and put in a strong bag or hoot, into which the foot is introduced, and secured with a string when the animal is laid down. It may be kept wet by pouring water on it two or three times a day, and changed daily.

Pig ringing is anything but a pleasant operation, and most people have a great dislike to it; still unringed pigs are not to be tolerated in grass fields, and nothing can be more barbarous than the usual way of doing it—by thrusting a nail or piece of wire through the nose, and twisting the ends to prevent it from falling out or in, and which enables the animal to hook itself to everything it comes in contact with, keeping it constantly sore, until at last it tears it out altogether, and the operation has to be repeated, perhaps two or three times a year, with precisely the same results. Not long ago I heard of two pigs hooking themselves together by their rings during the night, when their loud cries not only awakened the owner and brought him out in his night shirt, but disturbed the rural policeman and brought him to the spot, who, by the aid of his bull's eye lantern, disclosed how matters stood, and it was only by cutting one of the rings out that they were liberated, and a stop put to the nocturnal concert. I have tried several ways of performing this operation of pig-ringing in a less objectionable and more effective manner, and have lately been favoured by a gentleman in Cumberland with a ring, from which I have taken a hint; and having made some important alterations in it, I think it is now everything that can be desired; it is easily fixed, and possesses the merit of only requiring to be done *once*. It has a comfortable appearance, and looks more like a badge of honour, than an instrument of torture. It has proved very effective, so far as I have tried it; but I intend giving it a more lengthened trial with the sows in the grass fields before I recommend it for general use.

And now, gentlemen, having freely expressed my opinion on the subject before us, and before I ask you to do the same, I will take the liberty of giving you a bit of advice, bearing directly upon it—not that I think there is any necessity for me to do so; but, if in case there should be, it might be worth more than all I have said before—it is this, if ever you have an extra good lot of fat pigs, don't let the Long Firm have them. These gentlemen have strong leanings towards fat pigs, and will be almost sure to find them out. They generally write from the suburbs of London, Manchester, Liverpool, or Bristol, but may

turn up anywhere at a distance, and a stiff price does not make them wince—they always want them forwarded by railway, and will sometimes quietly suggest that you will pay carriage, as a slight reduction on the great price they are *going* to pay. If you ask anything about their hanker, they will most likely refer you to their wine merchant, and cash down is the readiest way of silencing them.

And now, before I sit down, I wish to say a word on behalf of the labouring man's pig, and hope, that where it is necessary to provide better cottage accommodation for the agricultural labourer—a dry, well-sheltered sty for his pig, and a garden for growing vegetables, will not be overlooked; for however much we may admire the pretty rose bushes and honeysuckles in the foreground, we are better pleased to find that the pig and the culinaries are not neglected, for we give a decided preference to that kind of teaching which induces the working man to grow two cabbages rather than one dahlia, for the same reason that we are better pleased to find a well-fed, home-cured fitch of bacon in his cottage than that his taste runs on a fiddle or a birdcage; and we have known many farmers find it to their advantage in securing the services of an industrious, trustworthy labourer, to sell him a well-hired pig in the spring of the year, and a sack or two of meal, at market price, to fatten it on; and for which he has paid with his harvest wages, thereby keeping him out of the market and the miller's hooks. In many cases such acts of kindness, which cost nothing, will go farther than any supervision, in attaching his zeal and devotion to the interests of his employer, and which are as imperfectly represented by any amount of wages that he may receive, as it is impossible to foretell the advantages that may accrue from the improved moral and social condition of his family, for there is a deep current of truth running through that homely expressed maxim which says, "It is a poor house where they never kill a pig."

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