MY HOME FARM

BY

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LONDON
LONGMANS, GREEN, AND CO.
1883

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CHAPTER I.

SERVANTS.

YES, my dear M., I quite approve. I see no reason you should not succeed, despite your want of experience. You are reasonable—do not expect too much—and active, accustomed to exert yourself.

You think of taking a little farm. You can have one, you say, for half the rent you pay for a mere dwelling in a town, and you think the occupation will suit the tastes of yourself and your children.

Certainly at first sight I thought your plan rash, and I still feel that it involves some risk, but not more than you are entitled to run. If I could but lend you my experience! That is proverbially impossible. I will try to do what is most nearly like it—to tell you, as familiarly and in as much detail as possible, how I myself managed matters of the same sort as those you are now about to undertake. My operations were on a larger scale than those you contemplate and had a different origin—so much the better

perhaps. In this sort of work it is at least as necessary to be adaptable as to be systematic.

One should be as systematic as one can, as soon as one can, short of any root and branch work. Pull down nothing till you see your way to erecting something better. I am not addressing a lady of large fortune, looking to the building of an artistic dairy and hennery as an amusement and a means of disposing of some of her superfluous cash. Neither do I wish to recommend farming in any of its branches to persons entirely without pecuniary resources.

Some people, I believe, imagine they see the way to the success of Hen Farms, Bee Farms, &c., apart from any other branch of agriculture, and their suggestions are very attractive, because a farm limited to one such branch as I have named might be begun with so very little money that it might be said to require no capital at all. The whole hope of profit from it rests on the farmer's belief in her own capacity for an incessant and minute attention, combined with extraordinary powers of economy—of saving both money and material.

The sort of thing which you think of undertaking, and in which I hope to help you with my experience, is entirely different. I must first premise that it involves the employment of some capital in some shape or other. The requisite capital may exist either as a lump sum or as a very moderate yearly income.

The expenses of a small farm managed as I would propose do not amount to thousands or even hundreds of pounds annually, but most payments are made in ready money, and I would advise no one to attempt the thing who is either so poor or so improvident as not to be able to lay

out fifty pounds each spring, or at any time. Many of the expenses connected with farming come to some extent unexpectedly, and no person of the hand-to-mouth character or habit will make a successful farmer. Thrift is the very marrow and mainspring of the business—thrift personally practised and steadily enforced on children and servants, *not* a narrow or selfish economy.

In the latter I have no sort of belief. Even if I had I do not think I would practise it, but I believe that a worrying, too minute, too suspicious system defeats itself. At this point one arrives at the ever-difficult question of servants. The Hen or Bee Farm I believe proposes to dispense with them, or at least with their service as anything more than machines. The farmeress is to be always present herself during every operation. This in my mode of life would have been utterly impossible.

I should be sorry if I were to be supposed an enemy to what is termed 'Minor Food Production.' I am not. I shall be very glad to learn that some peculiarly constituted woman has made anything by it, and I think it not unkind to point out how very heavily handicapped she is in her attempts by those who carry on her industry along with several others. One thing fits into another in country matters, and I merely say here that it is clear to me that much more considerable profits may be expected by persons able to put some capital into their business, and to engage in several branches of agriculture at once, than by those who can devote little more than their own personal exertion to it, and devote that to one branch alone.

I am not advocating large farms either. Their day seems gone by. They no longer pay. They cannot com-

pete with the large supplies of portable food material reaching us from America now, and likely to reach us soon from even more distant regions. Farming, it appears, will never again be a business for a man possessing above 25,000*l.* of capital. The days of farmers keeping their carriages and pair, and priding themselves on the entire idleness of their wives and daughters, seem to be past. Yet we cannot suppose that all our food supply will henceforth come from over sea. There are many articles of food which will always be best when fresh. There are considerable numbers of people who would willingly pay a somewhat higher price to have these articles of the very best quality. The juncture seems to me one which women should not neglect. I believe that henceforward farming will be carried on with its best chances of success by farmers investing sums less than 10,000*l.* in the business, and prepared along with their money to bestow a more careful personal attention than was always their practice when their operations were on a very large scale. The sort of attention is one which I would much more confidently hope for from a woman than from a man, and a married woman in many cases is well situated for bestowing it. A woman has from her earliest years probably been trained to some of the sort of thing—had the qualities cultivated which she will most need to exercise, and if she has been accustomed to housekeeping, and been a successful economist, she has already acquired those which are most difficult of attainment.

The *personnel* is the first consideration; and of the *personnel* the mistress first. Yet I have nothing new to say to either mistress or servant, no better rule to propose to them for their individual or mutual demeanour than the

old one—to do to others as you would they should do to you. The peculiar modifications and applications of the rule as between mistresses and servants are allowed to be excessively difficult, and on their proper application depends the whole success of at least small farming. In large farming I suppose some one above what can be called a servant may be employed, and in housekeeping alone the too common failure is less marked. Hundreds of mistresses fail of establishing good relations with their servants for one who succeeds in doing so, and the failures cause much discomfort. More than that they can hardly be said to do. The question is different where a greater value has to pass through the servant's hands. Then ruin or success is at stake. The ideal farm should *perhaps* be cultivated by other agency than that of servants—by apprentices, young relations, or *protégées*. When one ponders over all these different sorts of persons and thinks of the objections applicable to each, one reverts again to the ordinary 'hands' as on the whole more workable than any others.

If others were employed, it could at any rate be only in combination with these, so the difficulty remains—that great servant difficulty.

I do not know that I can boast of having mastered it with extraordinary success, but I will give you in that as in other points the benefit of my experience, referring here to almost the only book which I found of much use to me on that as on the other points of which it treats. It is called 'The Manse Garden' (by Nathaniel Paterson, D.D.), and is a perfect and complete treatise on such a garden as you, dear M., should have, but its concluding chapter epitomises all I, or I think

any one, could say on the all-important point of the management of 'The Boy.' The author lays down no more detailed scheme for his discipline than 'the law of kindness,' but he describes how he himself exercised it in a manner which I think would be useful to any one who had to do the like.

From my mentioning 'servants' and 'kindness' in the same sentence, pray do not run away, dear M., with the idea that I am a sentimentalist as regards servants. I am far too old a mistress for that. Servants are but human beings, and often very faulty ones, and their wellbeing and happiness are of no more consequence than those of any other set of people, except—that some one or two of them stand nearer to us than any other persons in the world, know more about us and our concerns, have it more in their power to mend or mar them. It is from this point of view that in this work I enlarge on the importance of servants, not on the wider ground of their common humanity. I hope that I would never recommend you or any one to injure another to benefit himself, but my recommendations here in regard to servants are given for the mistress's, not the servant's, advantage. I believe the two fully compatible, and that it is a vulgar error existing chiefly in the minds of servants that they are not.

Servants are not on the whole a disinterested set of people, and mine never served me on any other than the ordinary principle of personal advantage, yet when I look back over the past twenty years—the period of my farming—I find that almost all I have learned and know about it I learned from servants. At first I had to rely on their experience, having none of my own. Afterwards I learned from their mistakes as well as from their achievements,

and from nothing more than that most deplorable of all incidents in farming, the loss of an invaluable servant. When such a loss is impending, the earnest efforts to notice and remember such a one's 'ways,' and when they have gone one's perhaps awkward attempts to teach them to a successor, are an invaluable bit of training for the mistress.

I once heard of a peculiarly incompetent young housewife who appealed to a very notable old lady, piteously inquiring of her how she should set about learning housekeeping. The old lady, one of the very common sort of friends addicted to cutting one's knots instead of untying them, replied, after due deliberation, 'My advice to you is to get a *perfect* servant, and notice her ways.' The younger lady burst into tears. Well she might. The perfect servant has still to be found, and when did a peculiarly incompetent mistress secure the services even of the best in the market?

Let no one call her incompetent who does so. The gift of picking out the best assistant is much more valuable than the power of doing many things with one's own hands. But although I have never yet secured the services of the perfect servant, I have had many servants good in different degrees and in different provinces, and have learned much by noticing their ways. I have also had to thank Mr. Paterson (author of 'The Manse Garden') for the consolatory reflection that time has not been wholly lost in the training of a servant, even although the servant as soon as trained leaves one for a more lucrative situation. If the training has been good of its kind, a mistress has trained herself as well as the servant.

But the mistress! Though it often seems a hard saying that good mistresses make good servants, yet a good

mistress is at least an important component in the manufacture. It is hard to define what a good mistress is, impossible to lay down hard and fast rules for her guidance in the management of the variety of different characters who pass through her hands as her servants. The law of kindness, supervision without suspicion, confidence without laxity, deeds rather than words, an agreeable mode of address to one's servants—these are all points and maxims to be remembered.

Many more might be added, but they would hardly be very useful. I would only again reiterate, remember kindness—remember to be always kind, but also to sometimes show your kindness in the way in which it is most likely to be understood. If this last point is omitted you may find that steady and well-directed efforts for the improvement of some rough young colt or filly, the most real kindness to them, is exciting in them, instead of gratitude, the bitterest resentment against you.

A well-timed piece of cake or dish of strawberries would sweeten your lessons, would possibly open a young heart to you, dead to more important kindnesses because untrained and unaccustomed to them. Persons unaccustomed to kindness do not know what it is, and are suspicious of it. It has been my fate to meet with much of this sort of ignorance in the lower section of the servile class, in that from whence 'the boy' or 'the girl' is drawn. It is to refine too much for our present subject to say that your kindness is not pure kindness because it has an ulterior object, that of forming your boy or girl into a good servant. It is his or her interest to become a good servant just as fully as it is his mistress's to make him one.

CHAPTER II.

PERSONAL EXPERIENCE. JOSEPH AND HIS SUCCESSES.

To make the sort of farm I hope you, dear M., are to have complete, you should grow your own turnips, potatoes, hay, and oats. My hope of profit would be entirely from the stock, and the growing of the animals' food would of course necessitate the employment of more labour, and I never myself did it entirely, therefore am less in a position to advise you as to such crops than about other matters. Still, I have no doubt it would be cheaper to raise these crops for yourself than to buy them from the corn merchant—the usual alternative. Farmers, in my experience of them, have the strongest objection to selling animals' food to neighbours. They require for their own animals any which they have not already arranged to dispose of to a corn merchant; and if one must have it, one buys at the greatest disadvantage, the farmer protecting himself as well as he can from future demands by charging the full retail price (the same as the corn merchants) with a slight addition for the little trouble of diverting part of his produce out of its natural channel. I fear I may not be able to support my opinion by figures, never having done any grain and but little hay farming myself, but I am quite persuaded from my own experience as well as that of others that it would be best for you to grow these things. The question of

course depends on several points—the rent of land, wages of labour, and climate; but having some land in hand, say from ten to twenty acres, and having therefore to employ regularly perhaps a man and a boy, you should either make room for hay, oats, potatoes, and turnips within your own ring fence, or rent additional fields for some or all of them.

When I first began farming my domain was a lovely field, rather rocky, shaded by some splendid trees, and facing northwards; a small and unproductive garden; and a large rough back court, surrounded by roomy but ruinous and rat-eaten outhouses—in all, rather more than two acres of ground; and my inducement to begin was the exhortation of a wonderful man then in our service as gardener, groom, and 'generally useful.' I should perhaps state that our establishment, besides the invaluable Joseph, consisted of three maids—cook, house-maid, and sewing-maid or nurse-maid—and that our home was near a large town, though in a situation then entirely rural. We kept a pony and a cow for pleasure and convenience, and a few hens which rarely gave us as many eggs as we would have liked to eat, and never succeeded in hatching chickens.

Joseph was not exactly a good servant—he was something both less and more. His strongest characteristic was an extraordinary sympathy with and power over animals, but being an Orcadian he had also a general practical knowledge of all kinds of country work.

He was my first and my principal instructor. He was some years in our service, and probably would have been many more had I then better understood the duty of a mistress. He so constantly assured me that I had within my reach

the power of earning considerable sums of money, if only I would allow him to act for me, that at last I did. Joseph could milk, make butter and cheese, cure hams, could also (though that is not to the point at present) sew and knit, and cut out clothes tolerably, mow, ride and drive, but the strongest of all his many talents was for hatching and rearing chickens.

He examined every egg by looking through it at a candle before he set it. He could in this way tell whether each egg was prolific, and whether it contained a cock or hen chicken. The rats never molested Joseph's clocking hens, never ate the chickens they hatched. Thirteen chickens issued from each 'devil's dozen' of eggs set, and we had soon fowls on our table like turkeys more than like common hens, ducks which people mistook for geese. Joseph, without feeling the smallest objection to his pets being applied to their natural purpose, really loved his animals. It was the secret of his success; his hens shared his bedroom, his chickens (once in the case of an orphan brood) his bed. Besides supplying the family liberally with eggs, he sold some for us, and occasionally a pair of fowls, if a friend wanted a particularly fine pair for some occasion.

We did not at that time sell any fowls or eggs systematically. Joseph relied for the promised profit of our farming more on milk than eggs, and I have always found milk much the most profitable branch of my farming, though at a later period the profits of the fowls and eggs were not despicable, as I hope to show in the sequel. How much better still would they not have been could I have retained a care-taker for them such as Joseph! I never after his time saw as a regular thing thirteen eggs produce thirteen

chickens in my own establishment. I saw among cottage neighbours the thing occur.

Among them, as in Joseph's little home, the clocking hen was a member of the family, waited on, tended, and cherished, one hen only, or at most two, allowed to clock at once, and if there were two, never allowed to meet. If I ever take to poultry again with a view to profit, I will devote myself either to the production of eggs or of chickens, not of both. The two are inconsistent. Which might be most profitable would depend on local and individual circumstances, but I am advocating a mixed farm, and fowls, beyond any of the rest of the stock, I believe will be gainers by the mixture of different industries. I do not believe fowls will ever thrive if kept together in very large numbers. A few hundreds are enough even with the most ample resources for air, exercise, and cleanliness, and the most distinct profits I know of have been realised from much smaller numbers.

Joseph insisted on my selling a handsome cow which had calved several times with us, and letting him purchase one just about to calve instead. Our cow was fat, so brought in the market twenty pounds, while the new one cost twenty.

Joseph took entire charge of the new cow and of her milk, and this may be as good a place as another to tell you exactly how he did it.

I need hardly tell any one, however little acquainted with such matters, that the calving of a cow is a matter of much anxiety, requiring vigilant care, and involving much of the success of her after-production of milk.

The risks are many and great, so many that at a future

period I often preferred buying cows ready calved, though that plan also is attended with risk, especially if cows are purchased at a public market.

They are often so roughly handled at such places as to injure them considerably directly after they are calved. The mere driving them to and from market just at that time is bad for them, to say nothing of the cruel and dangerous practice of what is called *hefting* them—that is, leaving them unmilked till their udder is much distended. This is done to increase the apparent promise of milk in the cow; it is highly dangerous even to the life of the animal, and cannot but injure her health and the probability of a large future yield of milk.

Cows, undoubtedly, thrive best when obtained a few days before calving, and calved in the place in which they are to be milked. Joseph's opinion was that to make cow-keeping as profitable as possible, no cow should be retained more than four months. She should be re-sold as soon as her milk began to decrease. This decrease, however, takes place at very different times in different cows, and I found reason to modify my practice in this respect, on account of various circumstances to be mentioned hereafter.

To return to Joseph's methods with his cow. Before she calved she was allowed to walk about and graze in the daytime, Joseph seldom entirely losing sight of her, or ever for a moment forgetting her. At night she was always put into the stable, comfortably bedded with straw, and visited late at night and early in the morning.

Experienced persons have some way of knowing that a cow is going to calve within a few hours, though no symptom

is apparent to the uninitiated. One evening Joseph established himself in the stable reading the newspaper, matches and lantern at hand, saying quietly, 'The cow is going to calve to-night; I shall not go to bed.'

I and the cook chose to stay up also, and the cow was reasonable, and got through her affair in time to let us have a little sleep. All danger in the delivery is not supposed to be over till the cow has what is called cleansed, but even then much care is necessary for at least three weeks after calving to guard against that terror of all cow-keepers, a so-called 'weed,' in other words a cold or chill falling on the udder. Even if the cow does not die of the malady, which she often does, her yield of milk is permanently diminished by it. In a future chapter I shall have more to say on this subject.

The calf being born, a process which generally requires a little manual assistance—bestowed of course by a person of experience only—Joseph immediately rubbed it all over with salt. This has the effect of making the cow lick it very thoroughly. The calf was placed before her that she might do so. The salt acts as a useful purgative to the cow, and the very complete licking with its mother's tongue cleans and helps to dry the little animal. While she is so engaged the cow should be very gently milked quite dry and her milk then given her to drink. The cow will drink her own milk at that time most eagerly, and it is the safest draught she can have. The calf should not be allowed to suck. As soon as it has been licked quite clean it should be removed to another outhouse, if possible out of its mother's hearing, where a corner has been prepared for it. Joseph tied a rope round

the little creature's neck, assuring me that the rope *supported* it. He of course took care that the rope was not the least too tight, that it was not tied in a slip-knot, and that the opposite end was secured to a convenient point neither too near nor too far off, but so as to allow of the calf's lying down if inclined. I have since then seen calves reared without being first salted and tied up, and cows calved without having any milk given them to drink, but I think the cow is the better of both the salt and the milk, and, strange as it may seem, the calf seems decidedly more comfortable for the rope; it prevents some of the stumbling and tumbling about of the senseless little animal in its first hours of existence without parental care.

Whether tied or not a calf must be frequently visited during the first forty-eight hours of its life lest it should entangle itself either in rope or enclosing bars and kill itself or break its limbs. It is not necessary to feed it till its mother's next milking. After two or three days the poor little orphan will have learned the mystery of drinking milk instead of sucking it, and will have become quite contented in its very narrow quarters. It is far the best plan to keep it entirely within them if it is intended to be killed for veal; if it is to be reared it may begin to get out with much caution when a few months old. The danger is from the excitement which the little creature feels at first finding itself free in the open air. Hard to say whether its feeling is fear or delight; I think it is the latter, but it usually rushes so violently about its pasture as to endanger its life. If too young when first let out it is almost sure to suffer an internal injury which proves fatal.

While kept closely tied up, if regularly fed and kept strictly

clean, the little thing will enjoy perfect health—even show its good spirits by capering within its very limited space.

A cow should be milked at least four times within the first day after calving, oftener if her flow of milk is very large. The calf will not require more than a third or a fourth part of her milk if she is a good milker. Milk is not wholesome or agreeable to human beings as milk till a cow has been at least three days calved, and it is dangerous to young children or delicate people, causing them diarrhœa, but the 'beastie' milk, as it is called, makes the most delicious of all puddings, and if the cow is a good milker there should be enough of it for family, servants, and neighbours besides what the calf requires. It is a usual and acceptable present in the country. It should of course not be offered for sale, as it sometimes is, mixed with other milk; alone its strong yellow colour would betray it. The calf should have nothing but its mother's milk for at least six weeks, or at all if meant for veal. After six weeks old, if meant to be reared, it may begin to have a little other food with extreme care. Its stomach is a most delicate organ, and any derangement of it extremely apt to prove fatal. The only food which I consider perfectly safe for calves is eggs. These they will eat eagerly—raw, of course—either broken into their milk or alone. Meal foods must be very gradually introduced. I believe none are better than very well-boiled porridge or gruel. After that has been some time in use along with the warm milk, skimmed milk slightly warmed may be substituted for sweet along with the porridge.

The first feeding of a calf is a very barbarous-looking process, and one of some difficulty. It requires two per-

sons who know how to do it. One must hold the cog containing warm milk very firmly, having at the same time one hand in the milk, the fingers of which the calf will suck as its first effort at self-nourishment. The other assistant must hold the calf between his knees, while grasping its ears in his hands and steadily holding its head down into the cog. It is almost impossible any one should do this who had not first seen it done and tried it several times. The struggles of a calf and its determination to upset the cog defeat all calculation, yet the operation is essential to its existence. One success ends the difficulty.

It is perhaps proper to add that although the application of strength to this performance is necessary, yet that in handling any animal, especially a young one, force should be always temperately applied; the resisting struggles of the senseless creature must not be met by opposing struggles or pushes, still less by blows. Resistance will probably cease if opposed by strength as nearly as possible silent and motionless. If ten minutes' persistency is insufficient for the object it should be abandoned for the time, the attempt repeated an hour or so later, when the little creature is again composed by rest.

Joseph's first calf was sold at five or six weeks old for 3*l.*—by no means a high price. Earlier in the season, while veal is still dear, a good calf fetches 5*l.* or 6*l.*—a good return for the milk it has consumed—but to bring this higher price it has to be fed during the time that on most farms milk is scarce, before the grass is fit for pasture. The calf in question arrived just as the grass was reaching its first perfection; the cow required no other food than the grass in her pasture, the house was abundantly supplied

with the best milk—a totally different article from the milk of commerce—and in less than two months Joseph handed me 5*l.*, which he had received for milk sold. He himself milked the cow three times daily, and immediately after two of these times he walked into the adjacent suburb and sold the milk still warm. Most of it was sold to private families. The skimmed milk left by the cream used in the house was sold to a shop which retailed it again. Joseph never at any time allowed any one but himself to milk, and some one person being always milker of the same cow undoubtedly tends to increase the yield of milk. At a later time the Sunday supply was always smaller than that of any other day, owing to the church-going of the milker. I can suggest no remedy. I merely mention the fact, and it will be found invariable. Although the occasional milker may be quite as good as the regular one, and cow and milk in every respect as well attended to, the yield will always be diminished by a change, and it must be remembered that the actual diminution caused at the time of the change is not the whole loss. All such checks to the flow of milk tend to diminish it for all its future duration. Joseph did go to church, but never at milking-time.

There could be no doubt at all about the profit of the milk transactions. No expense had been incurred which would not in any case have been incurred, and there was the money—money earned apparently merely by the gathering up of fragments which would otherwise have been lost.

CHAPTER III.

PERSONAL EXPERIENCE CONTINUED. JOSEPH'S FAILURES.

AT this point began the mistake which gave a temporary check to my business. I in a hasty moment resolved on making Joseph a partner in the concern. It seemed to me unfair that he should exert so much more strength and attention than as a mere servant he owed me without having any of the profits of his successes.

I told him that he should from that time forward have one penny on each shilling he earned for me. It did not seem an immoderate sum, and if it had been a percentage on nett profit might have been a good plan, though even so I rather think not. The calculation of nett profit in such operations as I have been attempting to describe is obviously very difficult.

Up to a certain point they might be said to cost nothing, to be all profit and no outlay, because the capital employed was not actually paid out and sunk in them at any one time—it was instead only diverted from other objects; and I advise ladies situated as I then was to observe how very easily if they possess a cow, a lawn, a few hens, they may turn part of these things into pocket-money without, in some cases, inconvenience of any kind. Still, it would be a misunderstanding to say that we had our milk, eggs, &c., for nothing, or to consider even the money

handed to me as nett profit. In a future chapter I shall be able more clearly to state the expenses necessary to realise the advantages. Here it may be sufficient to remind you that Joseph received board, lodging, and wages, and that the lawn could easily have been let at about 7*l.* of annual rent. Still, I believe that my farming was remunerative—yielded a fair, not enormous, profit, and would in time have yielded more but for my mistake in choosing to share profits with Joseph. Co-operative systems have great recommendations for illogical minds, for persons who can look only at one side of a question. It is a delightful thing to think of sharing *profits* without sharing losses. The profits to make the plan in any degree fair should be nett profits only, and the servant-partner would require to be in a position to deposit a considerable sum, say 100*l.*, from which a due proportion of any loss incurred could be deducted. The proportion due would again be excessively difficult to fix.

As I freely acknowledge that *all* my first profits were morally due to Joseph, it is but fair to record that at a later period I hold him to have been entirely responsible for certain heavy losses caused by a most deplorable little failing of his. The spring following the one which I have described, we had two fine little calves, and both died in one night, undoubtedly from insufficient care in the preparation of their food. There is obviously no pecuniary remedy against a servant in such a case. Joseph did not receive any percentage on the sale of these calves, and that was all. To have really borne his fair share of their loss he should have bought me others.

To return, however, to my more agreeable reminiscences.

I purchased six sheep and a pig that and many successive springs, and I think the profit of these animals (granted the existence of the other circumstances described) was quite unquestionable. Where there are a cow or cows and a garden, a pig or pigs are essential to prevent the waste of much which would be absolutely lost without them. A very economical cook may leave marvellously few kitchen scraps, but still if nothing whatever of an edible character is burned or thrown among the ashes, if a pigs' pail is established and kept constantly within reach, most kitchens will furnish enough to go a long way towards the nourishment of a pig. Outside leaves of cabbages and other garden rubbish augment the supply. All sorts of vegetables, potato peelings, turnips, even nettles, are acceptable to pigs *if boiled.*

It is necessary for even a very small farm to organise a boiler or boiling-house outside the dwelling-house, as the boiling of coarse or partially decayed vegetables is offensive to the smell, yet makes perfectly wholesome food for pigs. Raw it is of hardly any use to them.

Joseph built up with a few loose bricks and stones a fireplace for himself in the open air, and made his fire of sticks picked up about the fields. If animals are few, and especially in summer, it is not necessary that the boiler should be heated every day. Sometimes once a week is sufficient, as the contents may, at least in warm weather, be very well eaten cold. It is essential that they should be thoroughly boiled. Pigs and fowls should have the principal part of their food out of the boiler.

Fowls are supposed to require the addition of some grain, and pigs are the proper recipient of any dairy refuse which may exist. The more careful the dairymaid or man,

the less will exist; but if butter is made, the washings of it may be added to the pigs' food. If butter is made of milk, not cream—the more economical method—there will be more buttermilk than any family will use, and it may be no great extravagance to give part of it to a pig which is soon to be killed, though I have seldom done so, having always found particularly ready sale for buttermilk, besides using a good deal of it for baking, for which use it is the better for being sour. Cheese-making furnishes a large quantity of whey, which can hardly be turned to any other purpose than the feeding of pigs and hens. Fowls are the better of every variety of food which can be provided for them. In future chapters I shall relate my methods with them more systematically.

A pig just weaned is purchased at a sum varying from 6*s.* to 1*l.* When fed for four months, it may be resold for 3*l.*; if fed for six months, from 4*l.* to 6*l.* It is in vain to say it has been fed at *no* expense, but the expense of its food is perfectly inseparable from other expenses not incurred for it. The number of pigs should be carefully proportioned to the supply of scraps, and their presence regarded as a means of utilising these.

No waste is first and last maxim. No cinders, no ashes, no mud, chaff, litter, dirt, or refuse of any kind should be regarded as useless. On a well-managed farm there is a place, and a use, for every such thing. Pigs should be supplied in their sty with straw which has been already used in the stable if the saving of straw is an object.

In some places farmers are so anxious for manure that they will give fresh straw for that which has been used, and even in some situations will pay a higher price for

manure than that for which they will sell straw. When that is the case, it becomes of course an object to use as much straw as possible, and pigs are excellent consumers. I have always had to pay little less for straw than for hay, and the economy of it with due regard to cleanliness was well worth consideration.

Where the saving of straw is an object, none should be put in the dunghill but what is dirty. The bedding of horse and cow should be removed from them in the morning, well forked over, and put into an airy place to dry and sweeten. The pigs' bedding may be made of that which is slightly soiled, but not bad enough for the dunghill. If the pigs are allowed to go out to graze in the daytime less straw will be used, and their health greatly improved. It is, indeed, necessary to let pigs occasionally out of an ordinary small sty. If constantly confined there, their legs swell and they become unable to walk. The difficulty in granting them liberty arises from their perverse habit of turning up the soil with their snouts so as completely to destroy pasture either for use or appearance.

The remedy against this is in what is called ringing them—placing a ring, a nail, or a piece of wire in their noses.

This operation causes the animal much less pain than could be imagined. Joseph ringed our first pigs himself. They squealed for a few minutes, during which he was piercing a small membrane in the nose, not thicker than the part of a lady's ear pierced that she may wear an earring. The instant the ring was introduced he placed before them a basin of oatmeal porridge—a long-forgotten dainty—and they ate cheerfully, and were afterwards allowed the liberty which they enjoy quite as much as any other animal. Ringing is

not, however, always a lasting cure for routing in the earth. Sometimes when the little wound of the operation is quite healed, the pig takes to routing, ring and all, using his ring as a small spade; oftener he manages to tear the ring out, and is then as mischievous as he was before. Pigs vary very much in the persistency of this propensity. I have had some so bad that I could only let them out with an attendant enjoined to keep them running during the whole time of their exercise. When this is necessary, half an hour a day may do as the period of liberty, but some exercise pigs must have, else they will neither be healthy themselves, nor furnish wholesome food to their owners.

The question which is most profitable, to consume or to sell produce, depends on too many different circumstances to be entirely settled by any one person for any other. I have done some of both with most commodities. In the near neighbourhood of a town high prices tempt one to sell as much as possible. In more remote situations the difficulty and expense of transport lead one to do more pickling and preserving for home use, to be more independent of the sending of butcher and grocer. To the uninitiated it will appear that one of *course* produces all that is required for home consumption, and sells all the remainder, but there are a few practical difficulties in the way of this simple plan. In the first place, if it were expounded to ordinary servants as I have now stated it there would probably be nothing at all to sell! It is amazing how much milk, butter, meat, &c., *can* be used if the household make it their business to dispose of as much as possible. If only as a measure of what is reasonable it is best at first to sell everything, and buy the household provisions from

the ordinary dealers. This will enable you to judge of the value of your contributions 'to the house,' which must by no means be discounted from among the profits of your farm. After by this process you have everything properly represented in money, you can withdraw a suitable portion from your sales if you prefer using your own commodities to those bought. They will probably be better, and using them may be an economy if you learn the proper way of it. But from first to last you will always have to combat in servants, and in some others who should know better, the belief that what is not bought at the time for money is worth nothing! My experience therefore leans more towards as much selling as possible, than towards storing or preserving.

Of course one does some of the latter, but I found it best to make selling the primary consideration.

Pigs I always latterly sold alive for various reasons, but in Joseph's time we killed them at home, ate roast pork and cured hams and bacon with much success, and ate also many wonderful dishes of the pig's head, pig's feet and pudding order, which Joseph cooked or directed the cooking of. If a family are fond of ham and bacon they are economical food. There is a prejudice (whether well or ill founded I know not) against the flesh of the pig, and all housewives discover to their cost that anything which exists in large quantity and *must* be eaten becomes hateful to every member of their family. In vain to say 'Eat it or starve;' one cannot persist in that position, and the tacit combat ends in the article being perhaps utterly wasted, perhaps given away.

The killing of mutton at home I found much more decidedly economical than that of pork (though latterly I did not do that either). The question of its economy

depends greatly on having a servant who can manage it.

The figures stand thus. Ewes are purchasable (of small Highland breed, which are considered the best) at from 1*l.* to 2*l.* each—say 1*l.* 10*s.* (the exact price I paid for them for several successive years). Each ewe has a lamb, sometimes two, and with Joseph's care at lambing-time no lamb ever died. With no care at all, which is the usual plan, one loses of one's flock generally down to the same number of lambs as ewes. The lamb is sold when it has had all its mother's milk and nothing else for just the same price as the mother cost, 1*l.* 10*s.*

Joseph, with the assistance of myself, the children, and the maids, clipped and washed our ewes. Where the opportunity offers, sheep should be well washed in a pond or stream some days before shorn.

When to be shorn, they are driven into a fold or outhouse, caught successively, and tied by tying together one fore and one hind leg on the same side, not too tight. So secured, they will lie perfectly still. Two blocks being then placed about six feet asunder in a convenient place in the open air, a ladder is placed across them, and the sheep laid on the ladder. The shearers sit on the blocks and clip off the wool in regular lines, beginning where there is least wool on the belly of the sheep, and so that at last the whole fleece comes off in one piece. When shorn, we thoroughly washed the sheep in a large tub with warm water and some sheep-wash, which kills the vermin by which sheep are infested. We use common shaping scissors. After they are shorn, which should not be earlier than the month of June, the sheep should be shut up together for a short time

in a rather small outhouse till they become warm. The objections of the lambs to their evenly-shorn mothers when first they are restored to the pasture are very amusing.

The fleeces yielded from 2*s.* to 5*s.* each in different years; the skins when the ewes were killed in winter as much. Ewe mutton is not the best mutton, but it is quite eatable, especially if the ewes can be allowed a few turnips before they are killed. A sheep is not at all too much meat for a family numbering ten or twelve persons to lay in at once *in winter*. Our plan was to eat heads and haggises—very cheap dishes indeed—while the joints hung up to ripen, and then eat them successively. In this way with my six ewes I had no butcher's bill all winter—may count that we used 1*l.* 10*s.* of meat monthly for which we did not pay at all. Thirty shillings being the original price of the ewe was all the meat cost in money, but a tolerable sheep weighs about 100 lb., an amount of mutton not purchasable at a butcher's for thirty shillings. The sale of the lambs had paid the original purchase-money of the ewes, and the prices of skins and fleeces may be counted a liberal allowance for the ewes' share of the rent of pasture. With a smaller family and a larger breed of sheep the question became different. Even then it might have been economical to eat our own mutton had Joseph still been with us. There was no difficulty in disposing of half a ewe to the butcher if we found a whole one too much, as there was in summer no difficulty at any time we wished it in killing a lamb for ourselves and disposing of half or three-quarters of it to the butcher.

I do not wish to mislead any one by drawing too bright a picture, and I think my description reads rather like making

bricks without straw, something out of nothing. I must again remind you that Joseph received wages. He was paid 10*s.* weekly besides board and lodging, and any intelligent reader must perceive that it was impossible he could do much *more* than what I have described him as doing. He was engaged as gardener and groom, but both gardening and grooming as understood in a gentleman's establishment appeared to Joseph utter waste of time. He did not indeed entirely neglect either department, but he managed both garden and horse much as if they had been his own. The style of the garden and equipage were (unless indeed on special occasions, when Joseph was capable of an astonishing exertion to get up a good appearance) that of a small farmer's rather than a gentleman's.

I had engaged Joseph on a written character from a person unknown to me—a dirty bit of paper bearing an ill-spelt statement that he was an excellent cleaner of silver and remarkably fond of children. He possessed these qualifications besides a good many more, and he was as honest as other people, and was, I believe, a perfectly faithful servant while only a servant. The partnership plan gradually led to a sort of temptation which I might have foreseen. It was his interest that I should extend my business as far as possible. He was a gainer by all sales, without paying any share of purchases. My stock gradually got to exceed the proportions of the pasture, and the purchase of food for them became a heavy expense. Joseph's percentages were regularly paid to him, and he began to feel himself, besides really being, something different from a servant.

He assisted me in every imaginable way. He was a kind and trustworthy guardian to children on occasion. He

engaged my maids for me, amongst others his own sister, who was the best cook I ever had. Having engaged them, he naturally assumed the right of also drilling them somewhat more sharply than I ever did myself. This of course led to some little unpleasantnesses downstairs, especially between Joseph and his sister—a very perfect servant some years Joseph's senior—and she left our service shortly before Joseph did so himself, on account, as I believe, of disputes with her brother.

We had no quarrel, but one morning Joseph informed me he meant 'to make a change.' I never remonstrate against such an intention in a servant, and I supposed that the money he had accumulated led him to imagine he had best engage in some business on his own account. Very probably this was his idea, but though skilful in earning money for himself or another, Joseph had not the power of preserving it. He quickly got rid of all he had acquired in our service in some attempt at a lodging-house speculation (for which his savings were quite too small a capital), and took service again in our near neighbourhood.

He continued a friend and adviser till his early death a few years after he left us.

CHAPTER IV.

MY SECOND TEACHER, JOAN.

It is in vain to try to describe the discomfiture caused by the loss of such a servant as Joseph. It was a loss some time expected and prepared for. In the present day no one should regard any servant as a permanent possession. Modern servants believe that they find it for their advantage to change their places periodically. Modern masters and mistresses should make it their affair to discover in the plan the 'good which is in everything,' and meet the deserters half way. The experience to the stock farmer on a small scale is perfectly dreadful. The new official knows nothing, knows not where to look for anything, the mistress must be on the alert herself all day and almost all night, the fatigue is overpowering, and after one's very utmost is done more or less loss is sure to ensue.

Conventionality must be thrown to the winds, and one's whole mind and strength directed to the care of the animals, to preventing them as far as possible from suffering from the change of caretakers, and to training the new man to the performance of his duties in exactly the approved manner. The fewer things he is left to find out how to do for himself the better. Your best chance of good service, especially from a young servant, is to have just one way in which things are to be done, and impress him with the feeling

that there is no other way in which they possibly could be done.

Just one month after Joseph's departure fate bestowed on me another of the servants whose memories are a tradition in a family; a woman this time, a person quite as remarkable and much more interesting than Joseph. In both instances I engaged on but slight recommendation. Something in the appearance led me to dispense with more than a very ordinary certificate.

Joan was a woman between fifty and sixty. In early life she had been in humble country service, but most of what she had learned had been in her paternal home. Her father had been an unsuccessful cow-feeder, and Joan had been accustomed to drive a milk van, to harness it, to stable her horse, and fodder horses, cows, and all sorts of animals. Like Joseph she loved animals. They furnished outlet for a too warm heart. Joan had had a story which I shall not tell here, neither shall I tell the exact circumstances which led to our parting after some years of service had caused strong attachment between her and our whole family. It is enough to say that it was brought about by the same infirmity which was also Joseph's greatest fault—intemperance. It may seem an odd coincidence that I should have had two so excellent servants both faulty in the same way, but I suspect many others could produce parallel instances.

The vice is so completely the curse of our country that any one of exceptional powers found in a humble position may be suspected to be a victim to it.

Both Joseph and Joan would have been fit for much higher things than minding my pigs, cows, &c., if they could have kept sober. In Joan's time, as in Joseph's, I

was liable to the sudden deprivation of the assistance of a person as useful to me as my right hand. Such accidents of course always occur at just the most inconvenient time. They have been the means of my learning *how* to do all my own work. I could do with my own hands everything that was necessary except—the most necessary duty of all —milking. I strove often and long to learn to milk, but without success, and my belief is that no one who does not learn it as a child is ever a good milker. I soon adopted the practice of engaging no maid for any department who was unable to milk. I gave those who were able to drive a preference, and I engaged all my maids with the proviso that they were to be willing to assist me about my animals when and if I asked them.

Many were never asked to do anything for them except on a Sunday, I could myself groom and harness a horse, and do all that was required by all the other animals with the one exception of milking. I could make butter and cheese, and understood the garden work, but my own unassisted strength was insufficient for some of these tasks, and I never found any of the disadvantages which I had anticipated to arise from engaging all my maids to assist me when required. I feared that the plan might lead to my obtaining a low class of servants, and to the house-work being more or less neglected, but such was not the case. Country girls, who are, on the whole, the most desirable servants, have often been accustomed to milk in their parents' house, and also to handle a horse, and these are the accomplishments in this line which cannot be acquired in a moment. Other attentions to animals are a matter of will, and many servants have really no dislike to them, though they generally profess

to have, because they consider them beneath them—part of a lower sort of service than that to which they have climbed. If their mistress accompanies them, uses a pleasant manner with them, and shows a little consideration for their convenience as to times and seasons, there will probably be no difficulty about the occasional service required.

Joan was engaged as cook and laundress. She was excellent in both departments, a good and marvellously economical cook. She put her kind-heartedness into all her work, she remembered people's tastes, drew cold wet children in to the fireside, and set dishes of soup before them; recollected a friend's love for her peculiarly excellent scones, and had a neat little parcel of them ready to present to her on her departure, carefully presenting them in her mistress's presence. Joan's honesty was something beyond what is common. She would not have used or given away unauthorised the value of a pin. She was a woman of uncommon muscular strength, and could do all kinds of men's work as easily and quickly as a man.

She could thoroughly groom a horse and clean a carriage, and she used to take the harness to the kitchen fireside to brush and polish it. She could kill, skin, and dress mutton, and was fond of garden-work. Work was the poor soul's refuge from the sufferings of a strong uncultivated mind. She seemed to look around her constantly for more and more to do, and we observed that when she was reduced, by having finished every other imaginable task, to some particular sorts of hard and unnecessary work an attack of intemperance was impending.

She had exhausted all her resources then, and only the whisky-bottle remained. During her stay with us, Joseph's

place was either vacant or filled by a succession of incapables, but out of even the worst of them Joan managed to draw some use. For one year we had an industrial schoolboy whom Joan formed into a valuable servant for some one. At the year's end he chose to depart.

Joan was either perfectly sober or utterly drunk—the latter condition sometimes lasting for a week at a time. She had all the excuse that can be furnished for such a propensity by an excessively nervous temperament. With her great strength and faultless health she never knew what a whole night's sleep was, and none of her work was mechanically done. It was all matter of anxiety, and a certain perfectly silent strain on her nerves. In her time I began to make the poultry more serviceable than they were before, and she also made much use and some pecuniary profit of the small and deeply shaded garden. She left no space vacant at any time. Whenever a cabbage was taken out another was put into its place, and she sold all the vegetables we could part with easily along with the milk and eggs. She was in the habit of asking our customers if they wanted, for instance, a cabbage or any vegetable which happened to be ready. The reply was often in the affirmative, though but for Joan's inquiry the cabbage would probably not have been purchased from us. Joan and I went to market together and purchased and sold our own cows and pigs; she drove home the former, and carried home the latter.

Joan's only fault *when sober* may seem too small to notice, but leads to the mention of a small economy which I wish to particularise as an instance of the save-all principle. Joan, in her love for her animals, used to give them any little scraps only fit for their use *on the plates* on

which they happened to be left. Such scraps are invaluable for fowls. It is, however, the best plan not to give them to them at odd times. They should go into a proper receptacle and be used for the regular meals of the fowls. Not only did Joan sometimes give them morsels of meat or potatoes between meals, but she also laid the plate containing them down in the open air, on gravel or pavement, as might happen. This habit led to the breakage of a good deal of crockery, and to remedy it I devised the plan of keeping all the preserved meat tins, which formerly were a mere nuisance, not saleable nor even removable by the class of persons who apply for old bones and such like. It is tolerably easy to turn out many meat shapes without making the approved air-hole in the tin. If no such hole is made an Australian meat tin forms a perfectly suitable drinking dish for fowls or chickens. Where chickens are reared, many such dishes are required, the purchase of crockery ones is a constant running expense, and the house crockery is apt to be applied to the purpose to conceal the breakage of the proper vessel. Even if a hole has been made in the tin, it can easily be filled up, and without it is still fit to hold scraps or to mix up meal and water, the chickens' food, in. From Joan's time onwards I always kept meat tins for this purpose—sometimes had an Australian meat dinner on purpose to obtain a new hens' dish. All servants are more or less careless in breaking and losing the vessels used about the animals, and it is a considerable point to have an unbreakable sort of dish which costs nothing. The insides of Australian meat tins are very easily kept clean—can be well washed even with cold water.

I have mentioned the making of butter and cheese, and

shall have more to say about them in future. No year passed in which I did not make both, yet I made neither as a regular part of my plan. There is no so good profit to be made of milk as by selling it fresh where a ready sale is to be had, but one is liable to changes, sometimes sudden in that matter. If dependence for custom is on a town or suburb, one finds on the 1st of August that perhaps *all* the customers have gone away for the vacation. If, again, one has been selling wholesale to a merchant who transported the milk into a town, one receives some morning the full pails back again, consequent perhaps on a check in the dairyman's business, perhaps on some piece of spite or a quarrel between his servants and one's own. If one has been retailing milk to humble country neighbours, some other person's cow has now calved, and the customers desert *en masse* for fear of offending a powerful neighbour. Something has to be done with the milk; both butter and cheese have to be made perhaps for some weeks or months till a market can again be found for the sweet milk.

Except in Joseph's hands, I have never found the retailing of milk pay quite so well as selling it wholesale.

It is difficult to say exactly why this is the case. The price of the article when retailed is of course slightly higher than when sold wholesale, and I think I managed to prevent the actual loss of one drop of it. I attribute the fact of my profit being always rather smaller when selling retail than wholesale partly, but only partly, to a too liberal interpretation of my injunction to give *good* measure.

At first sight it would appear as if selling wholesale must be very much less trouble than retail, but I doubt if my servants thought it so, owing to the very early hour at

which a dairyman insists on the milk being sent to him which he is to convey into town. That children going to school may have milk for their breakfasts and their parents cream for their tea, dairymen have to nearly turn night into day. According to the number of their cows and their milkers, they must rise and begin milking at four, three, or even two in the morning.

Dairy shops in the town must open at six, or half-past six at latest, else they will be outdone by a more active neighbour. The milk must be on the way into town by five o'clock. A servant who has to supply a dairyman with milk must therefore be up by four, or at latest half-past. The penalty of a minute's lateness is the return to one of that day's milk, with probably a message that no more milk is wanted as it cannot be sent in time.

In the retail business one may either undertake the delivery of the milk or not, according to circumstances. In Joseph's time my milk was all delivered.

At other times it has all been sent for by people living in the immediate neighbourhood. For their own sakes they prefer having the milk while perfectly fresh. All that is for sale is generally sold by the same person who milks the cows at the time she does so. All the customers or their emissaries are frequently standing around while the cows are being milked, and when milking is over all the milk that can be spared is carried off by them.

In selling wholesale one's accounts are naturally paid not oftener than once a week, though it is wiser in dealing with an unknown dairyman to insist on daily payment. By not doing so I have twice lost considerable sums. In retail dealing, though I have dealt with very poor people, I

have never lost any money except once a small sum by a person so unfortunate that I would not have accepted payment from her even had she offered it, which, however, she did not do. Ready money is no doubt a good rule, but I have never enforced it, and, as I have said, have never had reason to regret giving credit to poor people.

CHAPTER V.

PERSONAL EXPERIENCE CONTINUED.

My farming did not end in the same place in which it began. In both places we were tenants, and our departure from the first scene of my exertions was sorely against our will. The second, however, afforded much more scope for my industry, and before the end of our stay the profits of it became, from change of circumstances, much more important to me.

I may here remark how very much more advantageously such a business could be carried on by a proprietor than by a tenant. If I ever try the thing again I am resolved it shall be in premises of my own. It is universally acknowledged—except by proprietors—that our land laws need reformation.

No one knows it better or so well as the small stock farmer. At every turn, at every corner, one is hampered or tripped up by the circumstance of being a tenant.

Outhouses need repair, fields need draining, a hundred small matters want doing, but the landlord declines doing them and the tenant does not see why he should do them for the landlord. A lease is but a clumsy expedient, often as unfavourable for the tenant as for the landlord. The calculation is difficult of what can be used up within the duration of a lease—of how to restore the property to the

landlord in just the worst condition which shall not leave the tenant legally liable for damages.

My second farm was of about fourteen acres. It was all in pasture, natural hay and garden. Some of the pasture was swampy, and yearly produced increasing crops of nettles and thistles. It should have been ploughed and drained, but the slightest assistance or even permission for this was withheld or delayed till, on but a short lease, it seemed contrary to the tenant's interest that it should be done.

The hay crop consisted largely of horse daisies. It also should have been ploughed up, or at least heavily top-dressed, and the material for the purpose was at hand in the outer covering of the house (a large one), which was removed on our entrance to be replaced by a fresh one.

But the exhausted lime and sand which would have made the best possible top-dressing was taken away by our landlord's workmen.

The larger premises required the employment of an additional male servant, who had to be a professed gardener, because we were bound, by the custom of tenancy in such cases, to cultivate the extensive gardens of the place. I engaged the man not as gardener alone but general overseer, and he had the assistance of a lad who, besides assisting him, acted as our coachman when we did not drive ourselves. Within doors we had three, sometimes four maids till the last year, when only two were kept. As formerly, the maids were engaged to assist out of doors when required. I had sometimes two, sometimes three cows, from fifteen to twenty-five ewes, two pigs, some hundreds of hens, ducks, turkeys, and pigeons, and a pony. We grew a small part of the hay required by the pony, and all the turnips and

potatoes required by ourselves and the animals, the garden being very large.

The cows were, however, fed during winter chiefly on draff—far the cheapest food for them. It necessitated the sending into town for it by the pony once a week. It was salted on its arrival, and kept good for a week. The turnips were carefully economised so as to use in small quantities along with the draff all through the winter.

The figures connected with cow-keeping are excessively simple, and show profits which would be enormous but for the manifold accidents to which the business is liable, and which it must be the constant endeavour of the cow-keeper to avert.

The price of a cow may be counted at 20*l.* It was my rule not to pay more, and I have often had good milkers for less. The pasturage of a cow during the summer half-year near a town costs, if paid for separately, 5*l.* or 6*l.* A like sum for her winter keep is a liberal allowance where draff can be obtained. Three shillings' worth of draff per week is the winter allowance for one cow. Other two shillings' worth of turnips and other green food would be sufficient even if purchased separately. A good cow in full milk yields four gallons of milk per day. During the period of my cow-keeping the wholesale price of milk fell from at first 11*d.* per gallon to 10*d.*, and then to 9*d.*, the retail price being 2*d.* per gallon higher. I have already said that my profits were best when selling wholesale. Four gallons at 9*d.* each show 3*s.* per day as the yield of the cow, while her food costs on a *very* liberal allowance 1*s.* Even adding to these figures the price of the cow the account stands thus—

	£	s.	d.		£	s.	d.
Price of cow .	20	0	0	Price of 1,095 gallons of milk at 9*d.* per gallon .	54	15	0
Summer keep .	6	0	0		32	0	0
Winter keep .	6	0	0		22	15	0
	32	0	0				

Thus showing 22*l.* 15*s.* of clear profit *even in the first year.* Every other year will show a better account, because the purchase-money of the cow has to be paid in full once only. A fat cow should sell for as high a price as a cow at calving. I must say, however, that never after Joseph's time did my cows so sell. It is almost, if not quite, impossible to make a cow which is a good milker fat. I have found the purchase of expensive food for this object complete waste of money. The cow sold no better than if sent to market while receiving no other than her usual food. I always lost from 2*l.* to 4*l.* by such sales—the value of from two to four weeks of the cow's milk. This may fairly make a deduction of from 5*l.* to 10*l.* on my 22*l.* 15*s.* of profit, but my profits were practically much larger than an account can show, as no winter food except draff was bought, and as the pasture, valued at 15*l.* per annum, maintained the ewes and partly the pony besides the cows. The pecuniary loss on each sale, besides the trouble and uncertainty connected with selling one cow and buying another, led me to alter Joseph's rule of changing each cow every four months. For a person similarly situated to myself three cows is a good number to keep, and the object being to keep the supply of milk as nearly equal as possible, the cows should be changed at three different times of the year, say in May, December, and March. The reason of the first period being longer than the other two is that the cow's milk will keep up better

while she is on grass than on draff, and that the beginning of winter is the most unfavourable time for the sale of fat or should-be-fat cows, except indeed the beginning of summer.

At the last-mentioned time one must make up one's mind to a loss on the sale of one cow for the sake of having another in full milk, the months of May and June being in all situations the time during which the demand for milk is greatest.

I here revert to my former statement of its being the best plan, pecuniarily, to sell as much of one's produce as possible, even though doing so may sometimes force one to buy part of what is required for one's own household. I wish also to connect with this statement the fact that my profits were actually largest in money when selling milk wholesale than when selling it retail, and I think the two results arise from the same set of causes. Where the supply of the household is made the first object there inevitably occurs a laxity in management of the material, if nothing worse, which will *leave* a very different amount for after-disposal from what the amount would be if it were *deducted* as a fixed quantity in the first place, and the household had to subsist on the remainder or show cause for buying more. In just the same way, if a certain number of gallons of milk daily are promised to a dairyman, they are supplied until some obvious and inevitable change takes place. In selling retail an honest dealer has in the first place to compete with the dishonest. The adulteration of milk is indeed pretty effectively prevented by the police in large towns now, but outside the city boundaries it cannot be so, and the small customers are sure to be its chief victims. A dealer

who adds the washings of his dishes and pails and a certain proportion of skimmed milk to the halfpenny and penny portions of his small customers can afford to give them a larger bulk for their money than one who retails the pure article only. The little addition to each small purchase constituting what is called 'good measure' makes also a considerable deduction from profits where the customers are numerous, but more than either of these causes I am convinced should be ascribed to the same one alluded to under my last head—a less degree of exactitude which in spite of her best efforts a mistress cannot entirely control. The small ready-money customers are not bound to take any particular quantity daily, and although the variation in their demand is but slight from one day to another, yet that, with its consequences, I believe to be the cause of the loss of more than *2d.* per gallon on the milk sold.

Of course if one expects to make money by milk, the use of milk in the household must be strictly regulated.

It might be much more so than it ever was in my family, but I will here record what my own rules were. I may first premise—what every person of experience well knows—that it always proves a mistake in the end to give servants less than their rights. I have had servants who were very obliging, who volunteered to do without milk, for instance, altogether till, perhaps, 'the cow was calved.' In the latter part of my farming life (when profits were much more important than in the former part of it) I never allowed anything of the kind. Had I done so it would have rested with the servant to recompense herself for the inconvenience she had suffered to oblige me in any way she pleased so far as milk was concerned. I allowed each servant one pennyworth of milk

daily. The portions of the two, three, or four servants were put while warm into a basin of their own, and my advice to them was to skim off the cream for their tea, and use the remaining skimmed milk for their porridge. The allowance is liberal but not excessive. When a milk dinner was ordered for the kitchen other milk was given for it. The frequency of milk dinners, or partly milk dinners, both for parlour and kitchen, depended entirely on the quantity of milk which happened to be on hand. When the milk was sold wholesale, it was often with difficulty that I could arrange to retain enough for the servants' allowances, and to furnish milk as 'cream' for tea in the parlour; milk puddings or milk dishes of any sort were a rare exception, occurring when a new cow had calved, or some other accident suddenly increased the supply.

Looking to comfort and economy together one might wish for a modification of this state of things, but it is in both respects better than its opposite. As I have already said, a superfluity of any article whatever leads marvellously soon to its being actually loathed by all one's family. The beautiful milk, which would be valuable to so many, leaves the table both in kitchen and parlour untouched, and one has sour looks about 'queer' ways and too little butcher meat.

It will be observed that in my account of cow-keeping I have made no allowance at all for service. I could not make any, as practically it cost me nothing. The same number of servants would have been kept whether the cows had been kept or not; and as I always engaged my servants to milk and attend to the cows and the milk as part of their regular work, they had no reason to complain or

object. Three cows I calculated as being the proper number for this sort of establishment, one cow for each maid, and my preconceived plan was that each maid should milk one cow. The matter never was arranged in that way.

Although authority is an absolutely necessary element in government, my opinion is that the less it is appealed to the better. I was always willing to listen to the opinions and advice of my servants, and am glad to acknowledge that I was often very much the better for them. I have referred to two servants as my principal teachers, but even after I had lost their services, and was more in the position of teacher than learner towards others, I still allowed them freely to state their views, and only after theirs and mine were fairly discussed and compared did I issue a distinct order about any matter of consequence. A servant does his work much more readily and intelligently when convinced he is doing it in the best way for all concerned than when acting from a mechanical obedience alone, daily irritated perhaps by having to do some small thing in a way particularly inconvenient or disagreeable to himself when another way would do just as well. In other words, it is worth while to have one's servants in good humour when possible.

The quicker milking is done the better both for cow and milk. A very good milker milks a cow in ten minutes. Allowing twice that time, three cows will be milked in an hour. An ordinary performer will have milked the three cows, strained the milk, sent away what is to be sold, and placed the rest in the so-called plates within that time. That done she returns to the house from the perhaps somewhat distant outhouses, fills her milking-cog and pail (if one has been used) with boiling water, leaves the strainer in the boiling

water, and is ready to attend to her other work till next milking, which is at midday. The boy should put out the cows and clean the cow-house. It is but small trouble for the milker to loose the cows and drive them out should the boy not have put in an appearance before she leaves them.

Early hours are essential to success in every sort of farming, but on that as on all other points it is wise to show reasonable consideration for servants, to let them see that you demand of them only what is necessary for your object. A steady persistence in such a spirit and occasional expositions of it to one's servants does at last, to some extent, lead to the better sort among them acting in a like spirit to their subordinates.

Thus, when I was sending milk to a dairyman at five in the morning, had I carried out my preconceived scheme of each maid milking her own cow, all the maids must have risen soon after four. They in their turn would have been entitled to insist on the services of the boy to drive in the cows for them (when out all night), and in any case to loose them and drive them out after milking. Four is too early an hour for persons to be astir in the morning in a house where the family dine late. The inconvenience is reduced to its minimum by only one person suffering it. Arrangements must be made for that person being at liberty to go to bed as early as she pleases, a complete midday rest (the resource in a cow-feeder's establishment) being apparently unattainable in a gentleman's house. Six o'clock is the proper hour for the gardener and his assistant to commence work, and the cleaning of outhouses, which should be the boy's first work, can very well wait till then. It is common for a gardener and his helper to rise very

early indeed in the height of summer to mow, but for that only. The grass is so much more easily cut with the dew on it that they readily rise for the purpose. Their employer should not lose the opportunity of marking consideration for them by begging them to rest during the midday hours on such occasions, or, if that is declined, recommending that work should stop earlier than usual in the evening, being always open to a representation on their part that there is so very much to do they wish to work as hard as they possibly can to overtake it, counting on not being refused a holiday at a more convenient season. I have had a gardener willingly work on through the whole long summer evenings, that being the time at which it suited me and my family to work at little things which we liked to attend to personally, and for which we needed his assistance. I of course enjoined on him *not* to rise at six on the mornings following, and my injunction was attended to reasonably and moderately. It is impossible for a person to continue to work more than the proper time without injury to health, which in the end injures both him and his employer.

For reasons already fully stated in Chapter II. one person should as far as possible be always the milker of the same cow. For those which I have now explained the same person will naturally be the milker of all until at least the number exceeds three. There are certain inconveniences attending either cook, housemaid, or sewing-maid being also dairy-maid. I have had the duties performed by each at different times, and cannot say that I found one way do much better or worse than the other.

By good will on the part of all concerned (and the fullest possible explanations of one's expectations to every

servant *before she is engaged*) all may be done quite comfortably.

I have at different times tried to divide the work, to have one maid milk, another take charge of the milk (*i.e.* sell some of it, send up the proper portions for the family meals, and make butter or cheese if these were made), and the gardener take charge of the cows, supply and regulate their food. This arrangement is possible but not advantageous. More time on the whole is sacrificed by the three persons than by one, and duties are not so well performed.

I have found it the best plan to have one person with as few exceptions as possible do the whole of the milk business, including the cleaning of the dairy and dairy dishes, pails and milking utensils, the same person having also the responsibility of the feeding of the cows, though in this the boy may assist her, and he naturally cleans the cow-house. It has happened to me to see during times of sickness or absence of the boy how easily a willing young woman could perform his duties to the cows besides her own, with how very little additional expenditure of her time, and it has occurred to me what a valuable investment in many cases one cow might be to some one keeping but one maid as her whole establishment if only she herself understood the business and was vigilant.

So much is usually said in treatises of this sort about the advantages of the master's, or, as it may be, the mistress's eye, that the unfortunate beginner is led to suppose she must have or pretend to have eyes in the back of her head, eyes which never sleep, and the qualities of an Irish bird besides.

I think I have already shown that I relied far more on a

moral influence over my servants than on close supervision or anything like a spy system. I consider it a thing particularly to be avoided to take any servant by surprise. It is irritating, shows suspicion, and is likely to be ineffectual in making the desired discovery—a person cunning enough to devise a deliberate fraud having usually his excuses or means of concealment very ready at hand. A much better plan is to lead a servant to expect inspection and to welcome it. You come to see how well he does, how he does it, and to inquire as to any inconveniences or difficulties he may suffer that you may remedy them. There can be no possible harm in telling your dairymaid you mean to be present at early milking the first day you feel active enough, although a good many days may pass before you really appear on the scene.

A mistress should always manifest the strongest interest in her own affairs. If these are the charge of animals, she must be prepared for, and even encourage, interruptions in *any* of her occupations in certain circumstances, such as the real or supposed sickness of any animal, but especially a cow, and be prepared to give her personal presence indoors or out at any season or any time of the day or night. A small detail connected with this point is that she should be provided with a suitable dress in which she can go into the open air and amongst her male as well as female servants and neighbours on a moment's notice. After various attempts I found the most suitable costume a black serge dressing-gown made exactly in the form of an ulster, with a black hood or cap of a thinner material. These garments, along with a pair of thick-soled and goloshed warmly-lined boots, should be always close to the bedside of a farmeress to allow of her turning out at call if necessary in the night, and

also to be assumed daily on first rising in the morning and worn for the first hours of the day, till every animal has been visited and all the orders for the day given. A similar suit of cooler material will be required for the summer months. Though even summer mornings are sometimes chilly, her occupation will furnish her with exertion and interest enough to keep her warm. The morning hours over, there is nothing to prevent a farmeress wearing the ordinary dress of a lady and occupying her time as a lady. She will find it convenient, as many country ladies do, to wear all day shoes in which she can go into the open air, and my plan was to arrange my dress so as at all seasons to be able to step out without making any change in it.

I was not habitually present at the milking of the cows. I was so occasionally, and endeavoured to be present at every milking when I had a new cow or cows or a new servant.

It is essential to the due economy of milk that the purpose of all should be determined, and that it should be set aside for each purpose as soon as milked and strained.

It must be an absolutely fixed rule that the milk 'plates' are never 'broken'—that is, that the milk placed in any vessel is never meddled with till the whole of it is to be used. The yellow cream is its natural seal, and a person with some little experience can easily know if a vessel of milk has been touched. It can be neatly done so as to be concealed from a casual observer, and the action *may* have had a sufficient reason to justify it, but an accustomed mistress readily casts her eye over each milk-dish in her dairy, and if she observes a slight inequality in the cream-edge in one she should immediately inquire its cause. If she hears murmured something about rats her suspicions

should be aroused. The presence of rats in a dairy would be indeed fatal, so completely so that it is generally guarded against in the structure of such an apartment, but it is reasonably easy for a human rat to gently push or blow tolerably fresh cream back from the edge of a 'plate,' and from the space from which it has retired to abstract a small quantity of milk. The action *may* possibly be justified; an unexpected visitor, either for kitchen or parlour, may have arrived, but it is a serious matter and requires justification. If the family is liable to chance visitors who receive drinks of milk it is best to have a jug specially set apart for their use, so as to avoid *breaking*, as it is called, on the larger portions of milk. If any day wholly or partly unused the milk so set apart can be made into pudding or custard, or if saved up for a week into butter.

The basin for servants' milk has been already mentioned. There should be separate vessels of exactly proper size for each of the family meals at which milk is required, and they should be filled at milking-time and placed in the dairy, except at such times as frost is very severe, when some place for them must be found within the house. The dining-room sideboard may perhaps be tolerated for the short time during which a frost so intense as possibly to cleave the dishes lasts.

Having now narrated the part of my story necessarily personal, along with all my experience relating to mistresses and servants which I can suppose likely to be useful to others, and which I could give only in a more or less detached and unsystematic way, I shall now describe more in order my exact methods in each department, with their results during the last year of my farming, so far as a record of them has been kept.

Before leaving the subject of servants I wish to say that I am opposed to the plan of rewarding them in money for any particular exertions or success. In my account of Joseph's service I have shown the evils of the plan in one form, but I now believe that every form has some evil.

Servants should as far as money goes 'be content with their wages.' To give one the best chance of the best servants, the wages offered should be liberal, but not excessive, proportioned to what the individual servant has previously earned, and rising gradually on duration of service up to a suitable point. On payment of the first term of the highest limit it was my plan to say that I had now raised the wages as high as I could, and that no further rise must be looked for. If the servant serves *only* for his wages, his obvious course on such an intimation is to give notice, and seek more lucrative employment. I have not generally encountered this result, and not encountering it one has the satisfaction of knowing that the servant is in some sense and to some extent an attached servant. The bestowal of shillings and sixpences as rewards for success engenders greed and causes envy, and substitutes a low motive for a possible higher one, to say nothing of the diminution of profits by a practice which to be at all effectual must go on at an increasing ratio. There are many other ways in which a mistress can reward exertion better than by money.

Praise should not be withheld where it is quite deserved, and its effect is sometimes excellent, especially on a young servant. Some care must be taken in its bestowal at first. The too common principle with employers of a low class is to blame freely, and sometimes in unmeasured terms, but *never* to praise. They believe, with some reason, that their

servants would immediately leave them if they said they were pleased with them, especially in the hearing of others. It would then be impossible for the master to withhold the 'character' the bestowal or withholding of which is a master's strongest hold over a servant. I have made this experience. I have found a good servant select the moment at which I was expressing my approbation to give notice, no doubt for the reason above explained; and even supposing the boy, for instance, does not forthwith run away on commendation, he is apt to be so elated that one has almost immediately to find fault on account of insolence to some fellow-servant. This result, however, should not discourage his mistress. It only shows that she has used a strong stimulant incautiously. She must learn to dilute it to the strength and appetite of the recipient, not discard its use. A proper moderate manner of praising is an art to be learned, as well as a similar manner of blaming, and altogether one's mode of talking with one's servants is worth a little attention and consideration. It forms so large a part of their higher education that the too common practice of indolently sparing one's words on them except in reproof is quite unjustifiable. The opportunities for conversation with servants are few; they should be made the most of, and made as agreeable as possible, but the whole value of your words will be lost if your deeds are out of harmony with them. If a servant has worked for you early and late, his or her request for a holiday should be complied with readily and ungrudgingly, even though it may cause some little inconvenience; his friends, especially if also relations, should be not merely admitted to the kitchen table, but should be welcomed, and on suitable occasions invited. If he is ill,

no less than a parent's attention should be shown him by his mistress, and this is the most difficult of all kindnesses to servants. Illnesses of course come unexpectedly, and all unprepared a mistress has both the charge of an invalid and the invalid's duties to fulfil or get fulfilled. These are but a few of many ways in which a mistress and her family should show kindness to a deserving servant. Junior members of the family may make servants small presents without injury, and I have never interfered with the usual 'vails' from visitors ; but have, I think, now sufficiently justified my objections to money rewards, and shown that there are good substitutes for them.

CHAPTER VI.

HORSES.

Their Food, Shoeing, Clipping, Pasture.

AMONG my many animals, each of which had a share of my personal care and attention, I have as yet hardly alluded to the one of them all the most valued and valuable—the most valued at least, if one except the indoor pets, dogs, cats, and birds, which hardly come within the scope of this work. One dog might be mentioned, as he was a well-trained collie, and once performed a feat worth recording, but this chapter has for its subject the pony.

To have made my milk business at all complete I should myself have sent the milk into the town, and I have no doubt, had I continued it, I should have taken to doing so, though it would have been adding quite a new branch to my business, and would have necessitated a general extension of all its parts to make it pay.

Though my stud consisted generally of but one pony, and never of more than two, yet twenty years' care of those with no professed groom gives one some acquaintance with their treatment, and in earlier years my acquaintance with horses was more extensive if less particular. The possession of at least one such animal is essential to anything which could be called farming.

Besides the sending of produce there is more or less carting to be done. In some situations I suppose an animal might be borrowed or hired only when needed, but this would be attended with much difficulty, and would rob the farmer's life of great part of its amenity—a very important part of its *raison d'être.* No one will succeed who does not love their work. Success, again, increases the fondness for a pursuit naturally congenial, and so the farm and the 'beasts' get pretty near one's heart, and none of them nearer than the pony.

Ladies have generally much exaggerated ideas of the strength of horses. One and another of them expressed their surprise that, having *a* pony, I did not send my milk daily into the town myself instead of being at the capricious mercy of the neighbouring dairymen. To have sent in my milk myself, a distance of five miles with a steep hill one way, I must have kept three ponies to allow each reasonable intervals of rest and not wear them rapidly out. My one pony had quite enough to do with other branches of my business without drawing any of the milk.

Though keeping but one pony, we had three vehicles—a four-wheeled chaise of old-fashioned structure which we had had built for ourselves, a light 'van' or Whitechapel cart, and a small farm cart. The four-wheeled vehicle, which (although he drew it) was too heavy for the pony, went into the town on business three times each week heavily loaded with matters to be mentioned hereafter. The van went in once a week during winter to carry in some things and to bring out draff and horseflesh (of which more in a future chapter). The cart was used chiefly on our own premises for drawing dung, &c.

I have so strong a conviction of the rascality of horse-

dealers and the mystery of horse-dealing that I never trusted myself to select a pony. One male friend or another always did me the good office after Joseph's time, and I was on the whole fortunate. I have nothing to say about the ailments of horses, as during all my more than twenty years of horse keeping *I never had a sick horse!* It seems a remarkable fact. I know not whether to attribute it to the hardihood of the animal or to my own good management. As I can by no means make the same statement with regard to cows, I suppose the first mentioned cause had something to do with it. I may say for myself, however, that my animals were generally healthy, and I attribute the fact chiefly to my own strong sympathy with them, and vigilance about them, as well as to refusing to be guided in regard to them *entirely* by local custom. Local custom, no doubt, has its reasons, and is therefore worth attention, but a person of some sense, experience, and information on sanitary subjects should refuse a blind compliance with it where it appears to run counter to these.

In the beginning of my period of horse keeping, which preceded the farming by some years, I had various accidents. I was twice run away with and once upset. At that time we lived in a town and kept no male servant at all. I engaged my maids to help me with the pony when required. I could myself do everything about it and the vehicle, and easily taught any of the maids to bring the vehicle to the door when required. At first my ponies were of the smallest size. If female hands only are employed about them, the pony being small and the carriage very light makes the business easier. In Joseph's time we had a much larger animal, and latterly our steed was a pony of thirteen or fourteen hands.

The price we paid for several successive ponies (this refers to a period twenty-five years ago) was 8*l.* Our last and most entirely perfect pony cost 16*l.* All my misfortunes in horse keeping proceeded from in one instance purchasing a quite young pony. I was myself aware of some of the risks, but was persuaded to run them, hoping to escape the dangers, as indeed many people do. Many young horses work quietly at once without any more training than a lady can easily give them. Many others, however, do not, and I would strongly advise any one contemplating horse keeping in an irregular sort of way, without any experienced assistant, not to purchase a young, untried animal. An actually old one is a decidedly better investment. A horse which has worked for some years in good hands and without accident or ill-usage is best of all.

My young horse, whilst appearing to be gentle and quietly learning its duties, bolted one day while conveying a party of young people, with myself as coachman, home from church. On that occasion we happily avoided all accident by a policy which I recommend to all drivers in like circumstances. In the case of a distinct bolt, not from fear (the difference is discernible by various small circumstances), do not attempt at once to pull in. The result of doing so if your reins did not break would probably be to lead the horse to kick and plunge. Allow his onward course, directing your whole attention to keeping it straight, the wheels clear of obstacles, till the continued gallop and a rising ground give you the power of pulling in gradually. Once this succeeded. Next time the pony repeated the trick, the carriage wheels on one side ran up on a little grass bank and the carriage upset, the party within being all

thrown out into the road. Oddly enough the runaway animal then instantly stopped and stood perfectly still while his owners picked themselves up (none were much hurt) and disengaged him from the broken vehicle. This fault can, I am told, be corrected by an experienced horse-breaker and *not* by punishment, but the risk was obviously too great to run, and our young swift horse was exchanged for a very slow old one. Result the same! The old animal bolted one day at the top of a steep hill. My steering plan was again in that instance successful, and the runaway was pulled up without any injury being done. He was, however, sold, and for some time I dispensed with a pony; my nerves had been so much shaken by accidents that it was disagreeable, almost impossible, to me to drive. My mistake in my second ill-behaved pony was purchasing an old pony with whose previous history I was unacquainted. An old horse may be invaluable and may serve you as long as a young one (though the statement sounds paradoxical) if he has been always well treated and is sound in wind and limb. Ill-usage generally teaches horses vicious tricks. An old horse is incorrigible. The only remedy for his faults is to part with him.

Those just recorded were my only misfortunes with horses. They confirmed my previous conviction that one should *never* feel entire confidence in a horse, never drive carelessly, nor readily allow an inexperienced person to drive. A horse once acquiring a trick is hard to cure of it.

The food of a pony costs, on a liberal computation, from 10*l.* to 20*l.* per annum. Thus a cartload of hay at corn merchants' price costs from 4*l.* to 6*l.*, say 5*l.* It should

last for one pony from the end of one summer's grass, about the end of October, till the beginning of another summer's grass, about the beginning of May. The grazing of a pony costs less than that for a cow, and should be obtained for about 4*l.*, say 5*l.* It should cost much less still if the pony has at all regular work, the usual plan when that is the case being to keep the pony within the stable the whole day on which he is to work or has worked. Oats cost about 10*s.* per month if and when the pony is regularly worked. When he is not working he does not require any, and all his food may be much economised by his eating scraps from house and garden if there are not pigs or fowls to consume these. Turnips, where they are grown, are economical and wholesome food for a pony, but all will not eat them, and animals in general are much more determined than human beings as to the sort of food they will eat. There is no starving them into the use of food repugnant to them. Carrots are excellent and acceptable food for horses. Many other vegetables are so also, but a horse is a most fastidious creature as to the cleanliness of its food. If fed with kitchen scraps, the vegetables, bread or other meal, and flour scraps must be kept scrupulously free of the least grease, else a horse will reject the whole. A cow is not nearly so particular, and the one cow to which I have previously alluded as likely to be a good investment, either to a family or a single lady keeping one maid, might have great part of her maintenance from the kitchen, especially if there were also a garden and if no fowls or pigs were kept.

The expenses connected with keeping a pony, besides his food, are his shoeing, which, according to the amount of

work he does, may cost 1*l.* to 2*l.* per annum, some straw for bedding, which will in most situations slightly exceed the price received for it again as litter, and some indispensable stable utensils—a pail, comb and brush, corn chest with lock, besom and shovel; in all perhaps worth from 10*s.* to 1*l.* when new, and remaining long serviceable while the mistress is head groom, a constant vexatious expense after the advent of 'the boy'—one of those apparently small but really large drains upon funds which most require the vigilant attention of any one having an eye to profit from keeping animals.

As my ponies never were from first to last, or at any time, in any one instance ill, I may consider my management as in that particular successful, and will here detail it. The pony was regarded as living perpetually on grass, summer and winter, and whether he was working or idle. While I had a pony which *would catch* (allow itself to be brought in for work from the pasture) it was turned out each morning without having been previously fed in summer, taken in if wanted for work about an hour before the time it was required, and given a half-feed (two or three pounds of oats). After its work it was turned out to pasture again, taken into the stable at night and given a supper of hay or of any food available except corn. Grooming was done at the time it was preparing for work or before it was turned out in the morning. In winter a feed either of corn or some other acceptable food should be given before the pony is turned out, which need not of course be till there is good daylight, and another when he is taken in before dark at night, besides a midday meal if he is required for work. It must be remembered that the grass is not supposed to contain any

nourishment at all in winter, though horses or cows if put out on it will apparently graze and obtain I have no doubt something—be it air, or something else—which tends eminently to preserve their health. I never intermitted the putting out of horse or cows for snow or frost, or for any ordinary degree of bad weather, but I here beg to draw attention to what I consider the strength of my system. I gave my animals sympathy, and as far as possible taught their other attendants to do likewise. If pony or cows returned to the field gate lowing or hinnying for readmittance it was granted to them. The morning run out, always joyfully taken, had given them necessary exercise; if they deemed it too cold to remain out, why they were the best judges—let them stay in.

I never could bear to hear animals asking and re-asking something. I am sure that—to say nothing of humanity or one's care for the creature's suffering—the value of an animal, its available productive energy, must be appreciably lowered by straining its voice for several hours in fruitless prayer. I never heard an unusual or incomprehensible sound among my animals without either myself hastening to inquire its cause or sending some one else to do so, with orders to report to me, and the accustomed sounds, the understood language of the dumb creatures, were always attended to.

Neither cows nor horses like to be out in heavy rain, and if there is no shelter-shed in their pasture they should be fetched in (they will run gladly to meet their guardian) on any unusually heavy or continued rain.

Their demand for water should be instantly and fully complied with. My animals had water within their pasture, yet they sometimes required to be supplied besides. Neglect

in this particular causes the death of many horses, and I never listened to assurances that a horse might injure himself by drinking too much water when heated or when at work, &c. Mine were allowed as much as they pleased at all times, and I never saw any bad effect result from the practice.

As already said, I have reason to fully recommend my own methods of horse management, both for convenience and economy, but as I know they will meet with the strongest opposition from all grooms, I will here as fairly as possible state both objections and advantages. All plans about everything have both. There is no such thing as absolute perfection, and the sort of business I am recommending is pre-eminently the making the best of existing circumstances, not some fanciful remodelling by which all difficulties are to be abolished. The objections to the pony's going freely out in winter as in summer are, firstly, that he rolls himself in the wet grass and mud—excellent for his health, but costing his groom some time and trouble in brushing him clean against next time he is wanted. Secondly, the wet soil tends greatly to loosening the pony's shoes—they must be looked to daily, and often a nail replaced before general re-shoeing is necessary. If this is neglected the pony will frequently be found minus a shoe when wanted for work, which in the case of a horse habitually wearing shoes disqualifies him entirely for work till he can have it replaced by the blacksmith. Thirdly, and worst, many horses are fond of a little hunting on their own account, and will chase cows or sheep so as to injure them; they are at the same time so sociable that if put in a field in which there is no other animal they will leap any fence possible to leap, and one much higher than they can leap with safety to their own limbs. Against this very trou-

blesome propensity I have no one remedy to offer. A skilful manager must seek remedies in the characters of the individual animals under his care. If a cow is very tame not to be startled by the first inviting gambols of the pony that cow will not be his victim, and may suit as the companion of his particular paddock. Pasture is much more convenient when divided into several fields.

When the chase has begun, when one's attention is attracted by the trembling of the ground, and on looking out one sees one's whole stock madly flying before the delighted little hunter, he may possibly be brought to a sudden stop by a loud and angry shout from a voice he is accustomed to obey. An address in a similar tone *before* he has got into full career is sure to be attended to. He must, in short, be watched and prevented from beginning this favourite amusement. If this course is persisted in, he will ultimately understand that this private hunting is forbidden and not attempt it. It is peculiarly to be deprecated while there are young lambs in the pasture. If the pony cannot otherwise be kept at a safe distance from them he must remain within the stable during the short lambing season.

Now to set against these objections or difficulties. Additional labour or trouble to the groom is by no means unimportant even from an economic point of view, but if he will listen to me I think he will be convinced that my plan saves him trouble and time on the whole.

The pony's being allowed to roll himself and loosen his shoes in the mud obviates the necessity of washing feet or otherwise grooming him when he comes in from work. He will make himself more comfortable at that time than any one can make him if allowed liberty, and the mud he

acquires will be quite dry and easily brushed off in the morning. (That antiquated instrument a curry-comb will be found useful for scraping off mud.) He has been fed before his work—if it has lasted long also during his work—does not therefore need food or attention of any kind during the latter part of the day beyond turning him loose—so easy a matter that whoever drives may easily do it, and so avoid calling a servant from any other work at that time. The pony's being allowed the run of the pasture when not at work obviates the necessity of at any time 'exercising' him—an absolutely necessary practice if he is kept standing in a stable, and the cause inevitably of a considerable waste of the groom's time, to say nothing of its frequently leading to visits to the public-house, and to much loitering and gossiping on his part while he might be doing his master's work.

In the latter period of my farming the pony's being ridden at any time was strictly forbidden. The boy was enjoined to lead him to and from his pasture—never to mount him. Short rides of that sort which boys like to turn into longer ones, and always perform at a rapid pace, are a fruitful source of accidents to horses. The risks are greater than they might be in a longer journey. The stable-yard is rough, the boy in a hurry, the pony fresh. More pairs of knees get broken in such stolen rides than in long journeys.

Referring to the catching of the pony for work, it is extremely convenient that he should come willingly to his guardian when wanted. Joseph's ponies always did so, and the maids and I generally succeeded in having them come to us when called. I never had a boy who could manage it. I believe that the boy had with perfectly natural boyishness taken pleasure in seeing the pony fly from him at the

clapping of his hands on some one occasion perhaps, and that after that *that* pony was never again catchable to any one. Horses are wonderfully tenacious of any trick once acquired. The catching of a pony in an extensive pasture is so very troublesome and uncertain a process that if he has the habit of running from his would-be captors, the remedy must be found in keeping him (and of course also feeding him) in the stable till it is quite determined whether he is wanted for work on that day or not, and only releasing him after it is known that he will not be required.

Thus he loses at least half the liberty he so much enjoys, and his owner loses half the benefit of the pasture where he is concerned. Boys cannot be too frequently or impressively enjoined not to make playthings of animals, not to play any tricks on them, however harmless in themselves.

I need hardly add that their owners should not do so either. To play with a lapdog may be suitable; if with a donkey unsuitable, how much more so with a horse or a cow. To teach or encourage playfulness in large animals with human beings is to make them highly dangerous companions for children or timid people. A very quiet, slow, grave manner is the best in which to converse with such creatures. In fastening or unfastening them, feeding, or performing any other services about them, the utmost care should be taken to avoid startling and frightening them. Their size is sufficient to make them dangerous in a sudden panic though free from the slightest ill intention, and the too common habit of speaking loudly, shouting to them, or striking them always gives horses or cows accustomed to it a roughness of movement which might readily be dangerous to an unaccustomed person.

It never was my custom at any season to leave the pony out all night; both for his comfort and his owner's convenience he is best in, but sometimes during the long summer days the pony was so delighted with his pasture and liberty that the united efforts of myself and my whole establishment were ineffectual to get him in from it. In such cases he seemed not at all the worse of the night out, and gladly came in at an early hour next morning.

After some experience of the practice I gave up having my ponies clipped or singed, and I allowed no horse clothing in the stable. All my successive assistants, as well as the blacksmith who shod the pony, urged on me the advantages of having a pony clipped at or before the beginning of winter! The practice is usual both for gentlemen's horses and for tradesmen's van ponies, and I several times had it done; then determinedly refused from my observation of the discomfort it caused the pony in spite of the futile efforts of the groom to counteract its effects by the use of clothing. The arguments in favour of the practice are that a horse can go better, faster, if not embarrassed with a heavy fleece, that the fleece is liable to get wet with sweat and then is as bad as a wet blanket around the animal, and that as a matter of fact the horse's skin is warmer without than with his long coat. This 'fact' must be somewhat difficult to establish. A thermometer can hardly be effectually applied to the skin of the same horse at the same time both when his fleece is off and on. It may not be absolutely impossible to make such an experiment, but I myself much doubt its ever having been made, and regard the statement on the subject as one of those by which servants too often govern their masters for their own purposes. Under some exceptionally complete

and systematic management one can see the advantage of clipping perhaps. If a horse were always kept going at a rapid pace except when covered with complete clothing it might be advantageous, but my belief of its real advantages for those who most use it is that it makes the horse *more sensitive to the whip*, more easily groomed, or less noticeably ungroomed. My pony, like a good many other horses in fashionable and unfashionable life, had often to wait for a considerable time at our own and other people's doors while loading and unloading, and the shivering and gathering of his legs under him from cold in spite of the horse-cloth or fur blanket thrown over him determined me against the practice of clipping. The practice is used only in winter, a horse casts his long hair naturally in summer, and will do so more completely and show a far more glossy summer coat if he has not been clipped for winter. The possession of his natural great-coat is his natural comfort in winter weather. If it is regularly brushed and combed from the summer onwards it will not become a tangled mass such as might be an impediment to motion, and its ever getting into the state of a *wet* blanket should be avoided by not over-driving and by attending to the pony's condition. If he sweats excessively while driven at a moderate pace he is not receiving enough of hard food for the work demanded of him.

The cost of clipping a pony is from five to fifteen shillings —an expense best avoided, though a pretty pony certainly looks very nice after it.

It is a purely English absurdity to urge that grazing or eating fresh grass cut disqualifies a horse for work. Some oats should be added to it if he has more than very little and very slow work. With that addition the grass only keeps

him in comfortable health, obviating the need for the use of mashes, medicines, nitre, or any kindred article. Grooms will lower the health of their master's horses with these things to raise their own importance and show their skill if they are allowed. Nothing of the sort ever entered my stable.

I had constantly to watch to prevent my young groom from clapping on a horse-cloth even above an unclipped coat. The pony was hot, he would urge, and would be the better of the cloth while cooling, or he was cold and would like the warmth of it. If a horse-cloth is never used a horse will never feel the want of it. When he comes in he may be rubbed dry and clean with a wisp of straw; he will shake himself, and if he has the opportunity roll himself, if unhampered by a cloth. It of course prevents his doing either effectually. The only reason for my little groom's love of the horse-cloth was that he saw 'other horses' wear them. Servants are the strongest and most unreasoning conservatives. The 'other horses' probably did not pasture out all winter, and the pony's being kept covered in the stable, and uncovered while out, would undoubtedly have tended to his catching cold.

Other points of stable economy which require constant attention are the supply of air and light. Grooms if allowed will often stop up all entrances for either! The stable being a horse's sleeping apartment only, of course greatly modifies the evil, but even a bedroom should be aired.

The shoeing of horses with iron shoes is, I believe, a needless barbarity. I wish I could say I had tried the experiment of doing without it, but as I did not I have no

advice to offer as to any better method. I can only suggest that the owner of a horse should sometimes, and his servant always, stay the whole time of the shoeing with the horse in the smithy. This will act as a check on much rough usage which often takes place in smithies. I would emphatically recommend the same practice if clipping is to be done. The cruelty sometimes practised on a horse during that process is great.

It never was my practice to sell a horse which had served me well. While he could work he did, when he could not he was put to an easy death. The usual fate of an old horse is too dreadful to think of. The case is entirely different with any other sort of animal. A cow, a sheep, or a pig has much the same life and death anywhere.

CHAPTER VII.

COWS.

Their Complaints, Food, and Management.

A GOOD deal of what might properly come under this head has found a place in earlier chapters. The cows were the most important branch of my farming, and it was impossible to describe its beginning or course without alluding to them. In this chapter I shall endeavour to collect any further information likely to be useful with as little repetition as possible of what has gone before.

Avoid public markets for the purchase of cows when possible. Purchase them in preference from neighbours, or through advertisement. Cow-dealing is not, however, by any means such a mystery or such a field for fraud as horse-dealing. Before the end of my cow-keeping I had confidence in my own judgment on a cow, and have selected them successfully both in the public market and elsewhere. If you have no experienced servant to accompany you when you go to make such a purchase it is well to have a friend or neighbour. Not being entirely alone protects one from being overborne by the vociferous recommendation of the dealers, and so gives a little time to examine and consider the merits of the animals. The first point to be observed about a cow is her age, if your plan is, as mine was, to

frequently change your cows. The age gives or takes a specific market value, and should therefore be observed. Some aged cows are excellent milkers, and if meant to be retained through several calvings it may be a good plan to purchase them, as they are cheap. The age of a cow is to be read by the rings on her horns, and also by her general appearance; a very moderate acquaintance with cows enables one to take in at a glance the points of a cow. If the horns are rough and deeply indented at the roots the cow is old; if smooth she is young. Her back should be straight, her head small, her body deep, her legs short, her udder well developed. The udder being unusually large indicates old age merely; the cow may or may not be a good milker notwithstanding. I might easily multiply points to be observed, but I fear no amount of reading or writing will arm you with the requisite knowledge. No one should quite unadvised choose their first cow for themselves. A little advice and demonstration from an experienced person will soon teach them how they should do it. It is quite possible in buying cows to deal with a respectable merchant, and it is best to do so. An important point which cannot be learned from the appearance of the cow is whether she is gentle. A purchaser should inquire of the dealer himself whether the cow is perfectly gentle, both in milking and in the pasture. A vast majority of cows are so, but some are not. A respectable dealer with whom you are acquainted will not deceive you on the subject. He would dread the responsibility falling on him in case of an accident, and he has a ready market for an ungentle cow among the cow-feeders. As they generally keep their cows entirely tied up, never let them out of their stall from the time they buy them

till they sell them again, they are indifferent as to gentleness.

A troublesome habit in a cow is fidgeting or kicking during milking. As a cow only kicks forward her kick is very different from that of a horse—hardly likely to hurt any one, but very likely to upset the milk-pail. A cow's udder is often slightly painful immediately after calving. She should at that time be milked with the greatest gentleness. A confirmed habit of fidgeting during milking may be engendered by her being hurt at that time, consequently losing confidence in her milker. A cow should stand absolutely still during milking, her whole aspect showing that the operation is grateful to her. If one has unfortunately purchased a cow which has acquired this bad habit, the remedy is to be sought in what are called *fetters*, but are indeed a light rope loosely twisted around the hind legs of the cow just above the hoof. The feeling of this slight restraint—quite insufficient to really hold her by force—will often induce quietness, showing (for all animals are wonderfully slaves of habit) that the cow has been accustomed to be fettered. Fetters should not be applied till all other means of producing quiet, such as talking to or stroking the cow, stopping occasionally in milking to let her change her position, &c., have been exhausted. It is a pity to begin a coercive habit which, once begun, cannot again be left off.

Cow-pox is very common among cows soon after calving, and often makes their milking a most serious difficulty. It does not seem to affect their health or the quality of their milk, but their teats become covered with angry-looking pimples, which eventually suppurate, and milking causes so

much pain that even a gentle cow will resist having it done. During the existence of the complaint the cow's udder must be carefully washed with warm water and soap and gently dried with a soft towel before each milking. Fresh butter should then be applied to the inflamed teats, and these gently rubbed with the hand until softened before the attempt is made to draw off the milk. But the milk *must* be taken, and even after the preliminaries mentioned the teats sometimes remain so irritable that it is a work of much difficulty. The best milker within reach must be asked to make the attempt, and to persist in it till successful.

The occurrence of this complaint has often given me the opportunity of remarking how deplorably dead the observant faculties of ordinary servants are.

I have been told, 'The cow has gone mad. Tom, Dick, and Harry, or Kitty, Betty, and Nanny, have all tried to milk her, but she will not give her milk, but kicks,' &c. A glance showed me the cause. I may here remark on the great advantage of being on good terms with neighbours of all classes. Country folks are so well aware of the advantage that there is a sort of country code of law on the subject. One *must* grant one's assistance on certain occasions—be willing to lend and give some things.

Though to a very systematic person the demand may sometimes be disagreeable, beware of disregarding or refusing it. In hundreds of instances, far too many and various to be specified, one gains by the friendly feeling of neighbours, would lose by an unfriendly one.

If cow-pox is very severe, the cow should be kept in the cow-house, as the flies will annoy her outside. During exceptionally hot weather cows are best in the house during

the hottest hours of the day. They are peculiarly the victims of flies, and the heat is itself bad for them. Cows and their produce are chiefly luxuries of cold climates. Our races of cows at least endure cold much better than heat.

A habit of following in the pasture is disagreeable to timid people and might be dangerous to children. It is a common consequence of weak sight in a cow, and the eyes should be examined, especially those of very light-coloured cows, before one is purchased. If seeing indistinctly, a cow will be disagreeably anxious to closely inspect any light or bright-coloured object, even to pushing it with her head.

My favourite breed of cows is the Ayrshire. It best combines quantity with quality in the milk.

Dutch cows usually give a very large quantity of rather inferior quality. One might, however, say much about different breeds of cows without saying much that was useful. In all breeds there is great difference in individuals ; good and bad cows can be found in most breeds, and the favour or disfavour of particular breeds is very much a matter of fashion. I would advise a person looking to profit to avoid the most fashionable breed. They may have an equally good cow of another breed at a smaller price. For richness of milk, Alderney and Guernsey cows are unsurpassed. They are charming also on account of their beauty and their gentle manners.

A cow of a rich dark brown colour, or one having much of that colour about her, will give richer milk than a pale-coloured, a black, or a white cow.

I left my cows in the open air all night, from the first fine days in May till the first chilly ones in August or September. They would often graze almost all night during that time, and their yield of milk was consequently increased. I had to

change my practice in this respect, however, when sending milk away to a dairyman at a very early hour in the morning. As the cows would have had to be driven in before milking, this would have necessitated the dairy-maid's rising even earlier than she already did, or insisting on the boys doing so. I therefore allowed the cows to be driven in about nine at night during the longest days, and to remain in after evening milking when the days became rather shorter, they being supplied during the time they were in with grass cut in the garden, and I making it my business to observe that the door of their house was wide open for air. The pony having, from his uncatchableness, to spend about half his days in the stable, was also a consumer of the grass cut daily during summer in the extensive gardens.

During the height of summer cows require no other food than grass. As the season advances and draws towards winter, more garden produce is available.

Belts and edgings of grass should all be cut for their use, and a point requiring the mistress's attention is the cleanliness of their feeding-troughs or mangers. If the pony is the most particular about one sort of cleanliness, the cows are the most so about others. A horse abhors grease of any sort, but will often eat grass which has been a day or two cut and more or less soiled. Cows will only eat grass which is fresh, and if withered grass is left in their mangers or their grass or vegetables are wheeled in a dirty wheelbarrow they are very likely to refuse the whole.

In November draff-feeding begins. A sufficiency of draff for three cows can be drawn by a pony once a week. The quantity required for each cow varies in price between *2s. 6d.* and *3s. 6d.*, but this quantity is only about half of the

whole nourishment of the cow. I believe cow-feeders in some parts of the world feed entirely with draff. It must be prejudicial to the health of the cows and destructive to the quality of the milk ; draff makes a thin watery milk yielding little cream, but without unpleasant taste. Turnips, which, next to grass, are the favourite and most wholesome food for cows, give the milk, and still more the cream, a taste which, if extreme, makes it altogether unfit for use. I have already said that I had so few turnips that I had to economise them carefully, fortunately for my customers. Nitre is said to be a corrective of the taste. It must be used with care, of course, as in large quantity it is highly poisonous. As my milk never tasted of turnips, I never used it.

Potatoes are excellent food for cows, but good ones are too expensive.

Cows gladly eat diseased potatoes, and these and the very small roots should be gathered out for their use before the potatoes are stored for winter.

The use of diseased potatoes for cows is not without danger, but I have fed them with them to the amount of three pailfuls daily, one at each meal, without any bad effect. The potatoes should not be boiled, but well washed, brushed, or scraped, and the very worst rejected—put into the boiler to be boiled for the pigs and poultry, who will gladly eat up the very worst potatoes, and are never injured by them. As diseased potatoes will not keep, they should be used up before the turnips are begun on, but by no means be used in too large quantity.

The proper preservation of draff requires attention. Care should be taken to obtain it from the distillery when quite fresh, and a general order given to fetch a stone of

common salt along with it. The draff will reach home warm, but will keep the better the cooler it can be kept short of freezing, in which condition it is not fit for use. It should be placed in a large barrel standing in the open air if provided with a cover. The cover is necessary because, if left open, the fowls would so defile the draff as to render it uneatable to the cows. If the barrel is in a shed it should be one as open as possible to the fresh air, by no means either one of the houses inhabited by the animals nor that in which their food is boiled. The draff should be put into the barrel in layers, a layer of salt following each of draff, and firmly trodden down. Cows are very fond of salt, and, so treated, the draff and salt are an excellent basis for their food. Turnips should be well washed, and given to the cows either whole or sliced. In neither case will the cows probably eat them entirely up. The left fragments should be carefully collected and put into the boiler (described in Chapter III.) The remnants of turnips and other vegetables, with the water in which they have been boiled, are excellent for mixing with the draff in about equal quantity with it, so as to make a kind of broth, with which the cows are delighted, and which is excellent both for their health and their milk. Ill-preserved draff is highly dangerous to cows. They are peculiarly liable to indigestion, and it is frequently fatal to them. In the course of my cow-keeping I have lost three cows by death. Two of them died soon after calving, but all the three deaths were, I believe, caused by injudicious feeding, by the use of meal food at too early a stage after calving. Meal is, indeed, so dangerous to cows that, although convenient as a resource and tending much to enrich the milk, I would advise its

not being used at all. If used, a breakfast-cupful of pea or bean meal well stirred into a tubful of such a broth as I have described three times a day is sufficient.

Each cow requires a tub for her winter food. Tubs fit for the purpose can be made by sawing down American flour or other barrels, which can be got from a grocer for a few pence each, or perhaps for nothing. Handles can be formed with the saw, finished off, if wished, with a borer and knife.

The boiler should be heated at different times for the cows and for the pigs and poultry. Pigs and poultry may fare alike so far as the contents of the boiler are concerned, but although much of what is fit for them would also be suitable for cows, all would not; and no liberties must be used in the feeding of cows. Proper food properly prepared is essential to their health and production of milk. At the same time some variety is essential to the well-being of all animals, and not quite easily provided. A *sympathetic* mistress will find it where a servant would almost certainly pass it by unnoticed.

Hay and oats are excessively acceptable to cows, but are far too expensive to be given them except as the rarest exception. If the mistress bears them in mind as she walks round her kitchen or even flower-garden, she will often see things prepared to be burnt or flung on the dung-hill which would delight the hearts of the cows. If not very nourishing, such articles—prunings, for instance, of some shrubs, the clearings out of flower-beds, turnip, carrot, beet-root, and artichoke tops, &c.—will prove valuable as tonics, improving the appetite for the ordinary food.

Many cows will eat straw readily, especially wheaten

straw. It should, therefore, be obtained instead of oat straw for bedding if possible. I have seen a well-meaning man carefully tuck back the cow's bed of straw to prevent her eating it! Her doing so spoiled the symmetry of the cows' beds. My impulse was to pull the straw forward again within the cow's reach, for I had that day failed to find any titbit for her. But I recollected that it was well too that the man should like to have the beds tidy, and a pity to mortify him by undoing his work, so I contented myself with remarking how fortunate it was that the cows liked the straw, desiring that they should have a truss placed before them to eat, and waiting till I saw it done.

Very milky cows are very delicate animals, and their lives often depend on illness being promptly observed. Every servant should be frequently enjoined to report to the mistress personally any appearance of illness in any animal without one moment's delay, and nothing should for a moment delay the mistress's visit to the invalid, especially if that is a cow.

If a cow calves in very fine weather, she may be let out on the following day. If it is cold she should not go out for three, but for at least three weeks it should be carefully noticed whether she appears to feel cold. If she does she should be promptly taken in and not again sent out without a horse-cloth firmly tied about her. If a cow shivers and has a diminution of milk, she is threatened with what is called a weed, fever may supervene, and the cow die in twelve hours. The minor evil to be dreaded and observed is a hard swelling of the udder. If to any extent, it is never entirely recovered from.

The approaches of the complaint are to be treated by warmth in every applicable shape. A double blanket

should be put on, the cow's legs swathed in straw ropes, a drink of warm ale administered—two pints is enough. A drink of warm treacle may be useful—one pound of treacle in two parts of hot water. Every cow-keeper should have treacle always at hand, and one pound of Epsom salts. The latter is a sometimes necessary remedy against constipation in cows. As many of these medicaments as can be administered without force should be, but if the cow will not voluntarily take her medicine she must be made, and the performance of this duty requires the assistance of more than one man. Neighbours are always willing to be serviceable on such occasions, and on most large farms there is a shepherd or cattle-man who has some experience of the ailments of animals. His assistance should be sought and he taken into counsel as to whether it is necessary or not to call in the veterinary surgeon. If the chill passes off and the cow is to recover, there probably remains a hard lump in her udder, which is to be treated by mild laxatives (treacle is the best) and gentle friction by the hand, rubbing only *towards* the nearest teat. It is not so difficult to administer medicine to a cow as to a horse, and I have done both myself with success, assisted only by my own servant. The plan is as follows. The medicine must be put in an ordinary quart bottle, refilled as often as necessary. The administrator must get up into the manger in front of the sick animal, and it is wise to secure oneself there by a belt or rope tied to the rack. The assistant, who must be a tolerably strong man, must then draw the cow's head back by the horns, and hold it back while the administrator introduces the mouth of the bottle at the corner of the cow's mouth and empties its contents down her throat.

CHAPTER VIII.

MILK, BUTTER, AND CHEESE.

Milk.

THIS subject, like the last, has perhaps been nearly exhausted in the previous chapters. I have said that the sale of sweet milk under favourable circumstances is the most profitable use of a cow, but from the inevitable vicissitudes and changes to which that business is liable one is forced sometimes to make both butter and cheese, and it is economical to be always ready to make a little. A little cheese goes a long way, and may sometimes be made of milk which would otherwise be lost.

A usual way of arranging by people who send away milk for wholesale disposal is to send away the produce of either one or two milkings, reserving the remainder for themselves or for retail sale. The morning milking is the most abundant, generally larger than the other two together. The midday's is the smallest. The evening milking is the richest in quality.

Under all circumstances the sending is always a consideration ; the demand for milk is greatest in the morning, and unless during the months of May and June, when, perhaps, the dairyman is so anxious for milk that he will send for the afternoon milk as well, it may be enough to let him

have the morning milk. Neighbours will, perhaps, buy the midday milk and the evening's remains for the house. By this arrangement the quantity sold will vary from 1*l.* to 2*l.* per week, and there will remain about half as much for the use of the house.

Where the daily transport cannot possibly be managed, butter-making is the resource, and pays within about 20 per cent. as well, may even pay better if managed in a particular way. That way is to have all one's cows calve at the same time—in the beginning of summer—make all their milk into butter during the grass and stubble season, after that to dispense with milk entirely the whole winter, either selling the cows before winter or starving them judiciously till their next calving. Good fresh butter sells even in the country at 1*s.* 6*d.* per pound, and is so much more portable than milk that one might even get the town price on it.

It is too well known to need much reiteration that a dairy must be clean—it and all its belongings. Every dish or article of any sort used about milk should be filled with not merely hot but *boiling* water the moment it is emptied of milk. When the boiling water is cool enough to allow of the dish being washed, it should be so, every scrap of cream being scraped off, and it should then be filled with cold water till wanted, or better still, where the opportunity offers, placed in a running stream. If milk is left very long in the plates, as in raising cream for butter, it is excessively difficult to scrape the plate clean just where the rim of the cream was. Joan used to regularly *boil* all her milk plates for several hours together every few weeks in the wash-house boiler. Milk plates should never be dried with a cloth, but *dripped.* Before the milker goes to a milking the whole of which is

not to be sold, she places one clean milk plate, or more than one if necessary, close to that last filled, always on the same side, so that the milk of different ages is arranged in a regular row. The milk is strained into this plate, and immediately thereafter the jugs for the various family meals should be filled. My family greatly preferred milk of the previous day to perfectly fresh milk. If kept cool it will not be sour, but a thick cream—the natural reward of the earliest claimant at breakfast—will have formed on the top.

I would strongly recommend a mistress to skim her milk herself, to authorise her dairy-maid only to make such arrangements and distribution of the milk as is every day the same. If extra milk is wanted for any purpose the mistress should herself go to the diary at any inconvenience.

An easy and proper time to look to the milk is after breakfast, when the mistress probably goes to the kitchen to order the dinner. Generally she can at that time so arrange the milk as not to be disturbed about it afterwards.

Where butter is the chief object, milk should not be skimmed till at least three days old. A week in ordinary weather is not too old.

As butter never was my chief object I skimmed my milk usually, because skimmed milk was required. The cream never 'gathers' as well a second time on the milk as the first. Still the second gathering should not be despised if any accidental circumstance should have led to the too early skimming of a plate of milk.

A dozen common brown earthenware basins (white inside) called milk *plates*, costing about a shilling each, are sufficient for a dairy of three cows. There should be at least half a

dozen white bowls with spouts—a pouring lip merely—which will cost about a shilling and sixpence each. In these the cream should be put when skimmed, the different dates being kept apart as far as the bowls will allow. When they are all filled, if it is still not convenient to make butter, the oldest cream can be all put together into a spare *plate*; it is then too old to figure as fresh cream. If a little cream is wanted at any time, it can be poured out of these lipped bowls not only without injury to what remains but with advantage to it, for the thinnest part of the cream—the under part—will pour away and the thickest will remain. Skimmed milk, when not bought by surrounding cottagers, to whom it was sold at one fourth of the price of sweet milk, made rice and milk, or barley milk, or milk porridge for parlour or kitchen dinner, or still oftener curds. When some remained after all those uses, it was made into cheese.

I may here remark that my family did not use cream daily with tea or coffee. Sweet milk only was set apart for these purposes. If there were visitors, cream was to be had, and a constant company dish was one with which most of our guests seemed unacquainted, and which I first saw in Ireland—*i.e.* half-made butter or thoroughly whipt cream, which are the same. Where cream is churned into butter, it will, as its first step towards becoming butter, *swell*, as it is called—change, that is, from the ordinary appearance of cream into something more resembling snow, though, of course, not quite so white.

This is occasioned merely by its receiving and retaining a certain quantity of air in very small bubbles into its substance. This material can be most easily made in a cream churn (*i.e.* a churn meant for making butter out of cream

alone, not out of the whole milk). It as well as butter can be made of cream a week old, or of different dates within a week, or at most ten days. The churning does away with any sour taste, but the dish is usually seasoned besides with vanilla or lemon and a little sugar. It can be prepared in five minutes and is universally popular. None but the richest cream will make it, the thin always falling to the bottom, but a smaller quantity than could be supposed will do if quite thick. An English pint of cream will make a dish for a large party. Many such dishes were made and enjoyed, and the expense of them was slight compared to what would have been incurred by the daily use of cream at two or three of the family meals. I always enjoined that drops of milk remaining in any of the milk-jugs should be put together to go ultimately to make butter or cheese. By a little care and observation a family may have enough without almost any such drops being left. A jug of skimmed milk, clean and not sour, should be sent into the house daily for the use of cats and dogs if these are kept, and should be at hand at meal times to prevent their being fed with sweet.

Butter.

Butter is most economically made of the whole milk, but the process of making it in that way is so much more troublesome than that of making it with the cream only, that after Joseph's time we never made it except of cream. Cream butter for some chemical reason is richer than so-called milk butter. The making of it is excessively simple, though even it is attended with a degree of mysterious uncertainty which makes it a decided relief to the mind not to have to do it.

For cream butter, at least, the old-fashioned plunging churn is now entirely discarded. Our cream churn was a neat tin cylinder made to screw to a table, with a revolving arrangement inside turned by a handle. It was capable of making four pounds of butter at once. A churn must not be filled *with cream* to more than one third, or, better still, one fourth, part of its whole capacity. Swelling distends the cream to fully three times its original bulk. In summer there is usually no difficulty about making butter, in winter a great deal. It appears that the proper temperature at which to churn is about 60°, and if the milk has never been much below 50° it will churn into butter readily. But artificial warming of milk once thoroughly chilled seems ineffectual. I can by no means assert that this is a full exposition of the mystery of butter 'coming' and 'not coming.' Probably the poorer quality of the winter milk has something to do with it, but I do not think any one can pretend to fully understand it. Once Joseph, who was usually a successful butter-maker, churned himself and got others to churn for him for three days and no butter came! A long delay is a bad sign. Butter which comes unwillingly is never good for much. Butter will sometimes come faster than it is wanted. I once flew to the churn on the arrival of some unexpected guests to prepare a dish of whipt cream for them such as I have described, but the hurry of my spirits so drove on the churn that in not more than five minutes my cream was butter—butter sweetened and seasoned so as to be neither eatable as butter or cream! Butter in *very* inexperienced hands is capable of going away again after it has come. If the churner does not stop at the proper point—*i.e.* when the butter '*has come*'—he may

churn the butter all back again into the milk and nothing is recoverable but butter-milk!

The churn being absolutely clean (freshly washed first with hot water and then with cold, though it had been put by clean), fill it to one fourth of its capacity with your oldest cream. In warm summer weather the dairy is the proper place to do your churning, in winter the kitchen, in spring or autumn a pantry or side room, neither so cold as the dairy nor so warm as the kitchen. Turn the handle of the churn at a steady pace, not so fast as to put yourself out of breath, but actively, at the rate, I imagine, of about sixty turns a minutes for perhaps twenty minutes without stopping if possible (if you stop, for as short as may be), or until you feel a sudden increase of resistance. Twenty minutes is about the time churning should take in summer, but even then, and for no discoverable cause, it will sometimes take less, sometimes more. If you wish to know if the cream has 'swelled,' or anything else about the inside of the churn, request an assistant to take a peep through the little lid in the top, do not desist churning for the purpose. To stop during the operation has an unfavourable effect on the desired arrival. The 'coming' of the butter is instantaneous. A sudden increase in the difficulty of turning the handle is the symptom of it. The resistance must be overcome. It will be so in perhaps six more turns of the handle, necessarily slow because it is so stiff. It must be turned till the resistance ceases as suddenly as it occurred. Then the butter is made. The top of the churn may be removed so as to allow the churner the satisfaction of seeing the yellow lumps which his labours have evolved. There is then no hurry about the next processes. The

churn and its contents may remain in the dairy till the proper person is at leisure to 'make up' the butter. I strongly advise a mistress to do this herself whether she is or is not herself the churner. She will both get more butter if she puts it together, and it will be more nicely done. Being done entirely with the hands, it requires even more than the usual cleanliness demanded by all dairy arrangements.

In summer either morning or evening is usually chosen for butter-making, and in hot weather even if churning is done earlier it may be as well to leave the making up till evening, as the butter may be too soft to handle during the warmest hours of the day. A cotton gown should be worn, both for the sake of gown and butter, the sleeves pushed up to the shoulders and secured there, a perfectly clean white apron should cover the front of it, or a towel pinned cornerwise up to the neck. The hands and arms should be washed in the ordinary manner first with nailbrush, soap, and warm water, then in warm water with oatmeal instead of soap, and then as thoroughly cooled as possible under a cock or pump. The fragments of butter adhering to the revolvers of the churn must be stripped down with the fingers, all collected together among the butter-milk, then all pressed together with the hands, and the lump lifted out of the churn and plunged—as a lump—into a basin of the coldest water attainable. A little time and patience may be bestowed on fishing out any wandering fragments of butter remaining among the buttermilk, or a sieve may be employed, but the soft new butter will stick about it so as to make it a little worse than useless.

The first basinful of water will probably be so milky

that the pigs will drink it. Several changes of water will be necessary before the milk is properly washed out of the butter. Till it is so, till the water in the basin remains quite clear, the butter should continue to be washed. If any milk is left in the butter it will not keep. The washing consists in gently kneading the butter together till it is all united into one lump of equal consistency.

If intended for the market, the lump must then be divided into half-pound rolls, which also in summer should remain in an abundance of cold water. If for home consumption either the same plan may be pursued, or the butter sliced off or made into small pats when wanted, or it may be made up in *prints* of about the size of half a pound, which can be put on the table without further preparation. Some persons like a little salt added to even so-called fresh butter. This is very easily done. It is merely kneaded into the butter before it is finally finished off in whatever quantity is desired. Well-made fresh butter should keep a week. If it is not thoroughly washed, or if the cream of which it is made was too old, it will not keep so long, though it may be equally good at first. If the cream has had any flavour of turnips in it the butter will probably become uneatable after two or three days' keeping. If powdered, butter will keep longer, and if thoroughly salted should keep half a year without injury.

The so-called butter-*milk* left by cream butter is in but small quantity. It is in fact sour cream with a little butter in it, and is considered particularly wholesome and palatable by some people. We generally used it for baking, for which it suits admirably.

Joseph's plan of making milk butter was as follows. He

collected all the spare milk into what he called a churn, but what was in fact a large, very deep tub, rather narrower at bottom than at top. In winter he placed this vessel in the kitchen over night, and he poured into it on the top of the sour milk which it already contained the whole of one milking while warm. He usually began churning in the kitchen early in the morning. This he did with a common large plunger, while he either stood or sat beside the tub, which had no cover of any kind. He worked his plunger with a peculiar rotatory motion, alternating with a double plunge, sometimes for several hours before the butter came. Except on the memorable occasion before mentioned, however, there was always good fresh butter for breakfast after the strange sound of Joseph's Orkney churn had been heard. The yield of butter from an equal amount of milk when the whole milk is churned is considerably larger than when the cream alone is churned, and we always found butter-milk quite as saleable as skimmed at the same price. Neither butter nor butter-milk are so rich as when only cream is churned, and the labour of churning is much greater. It must also be done more frequently, as the bulk of the whole milk is too great to allow of its being stored up for so long a time as cream can be.

Cheese.

Cheese-making is the most troublesome and least remunerative use of milk. As a trade it is pursued in out-of-the-way parts of the country, where markets are too distant even to be convenient outlets for butter, and where there could be no sale for fresh milk. To be properly done it requires considerable and somewhat expensive apparatus.

Thus, while home-made butter is almost always better than that which is bought, home-made cheese is of very varying quality. With the imperfect makeshift instruments furnished by a private house, so much has to be done by testing, trying, guessing, in fact, that it is difficult to put in writing anything which could be useful on the subject.

A cheese-tub, chessel, and press are the principal instruments required. The cheese-tub is a tub with an escape-pipe in the bottom for the outlet of the whey, but a clean washing-tub made all the cheese we ever manufactured, and we borrowed from a neighbour the chessel and press on the few occasions on which we required them. Rennet—besides milk and salt, the only ingredients—we had always at hand for making curds to eat fresh. It may be proper to say a few words about the rennet. It is to be had in small quantity from any dairyman. Dairymen keep it not only for the occasional making of cheese, but also to satisfy their almost daily demand in summer for curds. For persons living in the country, however, and using a good deal, it is best to buy a *rennet-bag*. A rennet-bag is a calf's stomach salted and dried. It costs *1s. 6d.* to *2s. 6d.* according to size. The butcher obtains it when required, though apparently not quite easily—I had always to give some days notice when I wanted one. If not quite dry when obtained, it should be dried at the kitchen fire before it is cut up. When dry it is cut into irregular bits of half an inch or so square and placed in warm water, in which it remains for two or three days. This water is then bottled up and is rennet; the steeped remains of the bag are of no further use.

A pretty large rennet-bag should make about six quarts of rennet, a tolerable summer provision—sometimes insufficient

for us, however. We were sometimes obliged to obtain a second rennet-bag within a year. About a tablespoonful of rennet prepared as I have described is enough to curdle milk for a large dish of curds, perhaps a soup-tureenful, and the very best way of making curds for table use is to milk a cow's *afterings* (the last yielded milk at a milking, and far the richest portion) into the tureen in which the rennet has been placed. The natural heat of the milk is sufficient to curdle it, and the dish comes to table with the yellow froth of the milking on the top. Curds for common occasions can be well made either of sweet or skimmed milk raised for the purpose to the temperature of fresh milk, *not above it.* If the rennet first put in is insufficient to cause coagulation (which should take place within about three minutes), it is easy to stir in more; beware of too much, as it makes the dish taste salt. I have tried in vain to obtain any exact prescription for the preparation of rennet or its use. I can do no better than describe how I myself prepared and used it.

For cheese a proportionate quantity must be used to the quantity of milk, and the milk in the washing-tub must be raised to the temperature of new milk without boiling any of it. The plan we pursued was to place a pailful of the milk in the washing-house boiler till quite hot, then to mix it with the rest. If the quantity of milk is very large, this must be done twice. When the whole contents of the tub are as warm as new milk the rennet must be added till it coagulates the milk. Let the tub stand as near the fire as possible for three quarters of an hour; the whole mass should then be first cut in squares with a knife, then gently stirred round and round for three

quarters of an hour without stopping. It then stands covered with a cloth for about half an hour. Then again about half the whey must be run off to be heated by placing in a vessel surrounded by boiling water and again restored to the tub. The whole must then be stirred *quickly* for three quarters of an hour, then again let stand for a quarter of an hour. After this the whey must be run off as completely as it can be with the imperfect apparatus, leaving the curd in the middle of the tub. It is then again cut in squares, which in ten minutes more should be turned. When as much whey has run from it as will run it is put in the chessel, which is merely a very strong wooden vessel of the shape and size of a cheese. It is in this vessel further freed of whey, then again taken out, broken up and salted to taste, well mixed together, left a little to cool, and again put into the chessel surrounded by a cloth well pressed in with the hands, and then put in the press. The cloth must be changed daily to effect its purpose of extracting all the whey. When the cloth comes off dry the cheese may be taken out of the press, but it should still be kept bound with a cloth and not cut for perhaps a week or two, till its touch to an experienced finger declares it ripe. A cheese once cut ripens no further. We used only skimmed milk for making cheese. Skimmed-milk cheese is sometimes excellent. Its appearance, and some people think its taste, is improved by the addition of a little annatto along with the rennet. A little of the whey was sometimes drunk by the family or neighbours, or used by them with porridge ; it was freely given away to any one who would accept it. Being sour it was not palatable to most people, was fit for little but the pigs, and our own pigs would not always drink it all.

CHAPTER IX.

PIGS AND SHEEP.

Pigs.

PIGS are the most distinctly profitable and the least troublesome of all animals. To breed them is easy, and pays well. A sow will breed at a year old, will produce from six to twelve pigs, which will sell at six to eight weeks old, having had no food but their mother's milk, at from 15*s.* to 30*s.* each now. (Twenty years ago I have purchased little pigs which throve well for 7*s.* each.) Our pigsties were not large enough for systematic breeding. It would have been very easy to build larger. My sons and their companions could have done it without expense to me beyond the price of the material, but—we were tenants. Our right to build against existing buildings was questionable, our *no* right to remove them if built unquestionable; to obtain any answer from a landlord generally at a distance—address unknown—difficult, a discourteous refusal probable. The application was not made, and I contented myself with the purchase about thrice a year of two pigs just weaned, which at a similar interval were resold to make way for other two. My purchasing price was within a pound each. My selling price generally just within five.

In an earlier chapter I have discussed the pros and cons of killing pigs and making ham and bacon at home. These are not difficult arts, and in both Joseph's and Joan's time

we performed them with success. Receipts for the preparations are various. In my own case the reselling of the pigs alive was distinctly the best plan.

Avoid public markets for the purchase of pigs as of cows. I once lost two apparently fine healthy little pigs the day after they were bought, undoubtedly from the rough usage they had received in the market or on the way to and from it. They had sustained internal injuries. Pigs are very hardy, but no young animal can without risk to life be struck, flung, driven, terrified, starved for hours together. It is generally easy to obtain young pigs from neighbours.

It is a mistake to suppose that pigs prefer to be dirty. The error arises from their being the only animal which will survive the degree of dirt and negligence to which they are sometimes exposed. They do not thrive the better for it—quite the contrary. Pigs should be regularly washed once a week or once a fortnight—say after the family washing.

If the custom is begun when they are quite young, and performed without needless roughness, they will enjoy it. If they can be granted almost entire liberty, it is less necessary, but still advantageous.

It is best to avoid the depth of winter or any particularly cold weather for the purchase of young pigs. If obtained at such a season they must not be put in an ordinary sty, but must be kept in a corner of the stable or cow-house till they are completely accustomed to their new food, take it heartily, and till the weather has somewhat modified. Some attention must be paid to their feeding till they are completely weaned. Till then (for perhaps a fortnight on getting them from the mother) their proper food is porridge and milk as warm as fresh milk, and it must be observed whether the little animals eat, and, if not, they must be

coaxed and taught to eat. It is not sufficient to merely set down their food by them. They are, however, sometimes only prevented from eating by shyness, and will eat when they believe themselves alone and unobserved, though they will not when they can see their attendant.

Unless potatoes and dairy refuse (whey, sour milk, and buttermilk) are very plentiful, it is best to buy some Indian meal for pigs and poultry. It is the cheapest meal food and is excessively fattening. Beware that the cows never by any chance touch it. It exactly resembles the pea meal, of which it may be found convenient to keep a little for occasional use by the cows, though my counsel is against it, but Indian meal is particularly hard of digestion, and is poison for cows. It should be used in strict moderation even for pigs, their messes merely thickened with a very small quantity at first, which may be gradually increased as the pig increases in size. Pigs should never be fed to the extent of their appetite. Fine well-grown pigs will eat till they actually die of repletion. Their appetites should be keen for each meal. Their voices will indicate the proper degree of hunger. Their squeals before the arrival of their food should indicate desire, but not pain. A persistent agonised squealing indicates something amiss, and if a pig is decidedly lean he is getting too little food, but he should not be decidedly fat until just about to be killed, even if then. Some purchasers prefer a well-shaped plump pig to one unwieldily fat, and the latter condition should not be even approached in the earlier part of his existence. Pigs should be fed twice a day at regular times, and their very omnivorous appetites observed to a certain extent. Even they will not eat quite everything that may be thrown to them, and unacceptable food should not be allowed to remain in the bottom of their trough to

spoil the fresh supply. If they distinctly refuse any particular food, it should be removed and put in the dunghill. There it is possible the fowls may eat some of it.

While young, and especially if the weather is cold, pigs must be supplied with fresh straw in sufficient quantity to allow of their burrowing in it, which they will do for warmth's sake; when older the used straw as described in Chapter III. will do for them, and may very well be economised in summer with withered leaves or machine-cut grass, which is not generally acceptable as food to any animal.

In most parts of the country merchants travel about to purchase pigs, and there is no difficulty in disposing to them of those fit to kill. Some bargaining has to be done with them, and it is best to be well informed as to market prices before you conclude, to demand ready money, and to arrange that the merchant shall make every arrangement. I have found it a bad plan to consent to the pig's being killed before removal, or to grant the loan of a cart for the purpose of removal. These plans give occasion for making some *stone broth.* In case any reader should be puzzled by this allusion, the story is added.[1] The permission to kill the pig on the spot is followed by the request (perhaps addressed to a servant) for permission to kindle the boiler to

[1] *Stone Broth.*—A beggar bearing a stone tied in a pocket-handkerchief calls at a cottage door, and gains permission to seat himself at the fireside, explaining that he possesses a wonderful stone which if boiled in water will make broth—can he be allowed a pan and water to show the experiment? These granted—by-the-by, a pinch of salt is a great improvement. That also is granted. Any scrap of vegetable would also be acceptable. That also provided, he still recollects how much the dish would be improved by perhaps a bone or scrap of meat. So at last he has his pot of broth, which might not have been given if asked all together.

obtain hot water to dress the pork; many coals are used in the process, possibly some removed in the cart, which may cart not your own pigs only, but many other matters; the dealer's advantages at last amounting to a very considerable difference on the price of the pig.

The alternative to dealing with these merchants is either the public market or the weekly auctions. The objection to these is the trouble and difficulty of carting large pigs alive. Those who do it on a great scale have a particular sort of cart for the purpose.

Sheep.

My experience in regard to these animals did not differ much in the latter part of my farming from that detailed in the former part of it (Chapter III.), though the increased price of sheep and a change of breed led to my paying in the last year of my farming above *2l.* for each ewe. I purchased twenty-five, costing, all expenses included, 51*l.* 17*s.* We had for some years abandoned the practice of killing either mutton or lamb at home, and our flock was too numerous to be shorn by myself, maids, and children. A neighbour's shepherd shore them for *4d.* each, and the fleeces sold at a public auction for *2l.* 16*s.* The lambs sold at various periods during summer at prices varying from *1l.* 3*s.* to *1l.* 8*s.*, and the ewes at a later period at *1l.* 10*s.* to *1l.* 16*s.* The same merchant purchased and resold them, charging for commission about 1 per cent. on transactions, and for incidental expenses attending them about as much, so that his charge eventually amounted to about 4 or perhaps 5 per cent. on the value of the stock passed through his hands. As I then had neither Joseph nor Joan, I believe that the employment of such an agent was my most economical course. After

deduction of his profit and all other expenses except rent, the profits of the flock stand at as nearly as possible 20*l.*; 15*l.* was the rent of the field, which served as pasture not only for the sheep, but also for cows, pigs, pony, and poultry. There was fully as much grass as that paid for as pasture intermixed with house, offices, and garden in such a manner that it could not have been let apart from the house—it was all utilised.

Sheep are a very pleasant sort of stock—their look, their sound, and the pretty gambols of their lambs in the long summer evenings are essential to the completion of the picture of an ideal country life, while they have so little individuality that one hardly notices their gradual removal for sale. They require little attention, but usually receive less. Care should be taken at lambing time that they be as little disturbed as possible. If dogs are kept or visitors bring dogs, not only must they not bark at or chase the sheep, but they should remain out of their sight. The mere sight of a dog will often make a sheep rise and run when the life of a feeble lamb depends on her remaining still.

If a pitiless storm of snow or sleet comes on during lambing time, it will probably cause the death of several lambs. Lambs actually born during the tempest should be carried to the kitchen fire, dried and warmed, and fed with cow's milk out of a baby's bottle. A plan which naturally suggests itself is to drive the flock, ewes as well as lambs, under cover. The objection to this is that the ewes will probably not feed in confinement, consequently have little or no milk for their lambs.

Lambs are wonderfully hardy if well fed. If the weather is very severe, or the grass particularly backward at lambing time, the flock will be much the better for a few turnips.

Sheep are excessively fond of oats or hay, and a very small quantity of these during exceptionally severe weather may be well bestowed.

The only complaint my sheep ever suffered from was sore feet. To attend to these is sometimes necessary. The sheep must be caught and the lame foot examined, thoroughly cleaned, perhaps scraped out in the cleft of the hoof with a knife, and the inflamed part dressed with Archangel tar or Venice pitch.

Pasture should be divided into at least three parts. For this purpose *flakes* or hurdles should be bought or borrowed so as to be at hand for temporary fences. During the earlier part of the season, till the month of August, or perhaps September, it is best to have the whole stock for perhaps a month at a time on each of the three fields successively, so allowing the others to grow. The time of restraining the stock to a particular field must be regulated partly by their consumption of the grass to which they are confined, partly by the growth of that from which they are excluded. If they make much noise, wander about without grazing, wait at the gates, or look too lean, their pasture is insufficient for them, and they must either be admitted to that reserved or furnished with cut grass or vegetables from the garden.

The endeavour should be made to keep the reserved fields from them till the grass has grown to a proper grazing height. Any intelligent person can judge when that is. When the grass looks its best, when the daisies and buttercups are still prominent, not overtopped by the rye-grass, when an animal can get a good mouthful between root and top of the grass, then is the proper time to put the animals on it. It should by no means be delayed till the grass assumes at all the aspect of hay, wears a brownish tinge

from the quantity of seed among it. There is much waste in pasturing animals in any way, and more in putting them too late on the pasture than even too soon. After the month of August the growth of grass is slow, and it may answer as well as any other way to let the animals wander at will over the whole of it.

Haymaking is the proper application of the save-all principle where there is grass so intermixed with shrubs or young wood that it cannot be used as pasture, and so out of sight that it is not necessary to keep it in the closely mown state effected by the mowing-machine. The process is almost too simple and well known to require description. An experienced mower must mow the hay. Dry weather in June is the proper time for doing so. After it has lain two days, if the weather is fine, it will be ready to turn. As this is done as well by a pair of human hands as by any tool, any number of assistants may be employed, maids, children, or visitors may assist. If the weather is entirely favourable, one turning may be sufficient. If rain occurs, a second will be necessary, or perhaps several. When nearly dry the hay is raked up into small cocks, when quite dry into one large one, from whence, when wanted, it is forked into the stable-loft. Besides the mowing of anything which can be at all properly described as hay, nettles and thistles should be mown down in pastures where they abound. A more radical remedy might be better, but—we were but tenants.

Nettles are said to be extirpated by mowing them down three times in the season. Their increase, as well as that of thistles, is certainly much checked by mowing them, and at their roots will grow up a tender herbage which is good pasture. It is not very necessary to remove them from where they fall when mown ; they are not fit for use even as bedding,

and will in a short time wither away so completely as to be soon invisible among the growing grass. If the scythes-man cannot find time to mow them, they may be struck down with a reaping-hook or any sort of instrument, even a stick by children or any one.

Our very rough hay, particularly if spoiled by rain, was not always good for much except bedding. Beware of the attempt to starve any animal into the use of distasteful food. It will never succeed.

In the case of inferior hay, an animal will sometimes eat it eagerly enough at first, then desist. An unobservant groom, seeing the rack still almost full of hay, does not supply more, while, perhaps, that which fills the rack might remain there for a year without being eaten. The horse or cow has drawn out of it all that is suitable for his nourishment. The remainder should be removed at once to be used as bedding. More and more of the same article may, if that appears the best plan, be supplied to the animal till the whole supply is exhausted and the loft can be filled with material of better quality. Hay is at the best wasteful feeding; it is hardly ever entirely eaten up.

'Second crop,' the grass growing after hay has been taken off, is best used for the animals' suppers, fresh cut when the nights begin to be long, and food is quite necessary between shutting up at night and letting out in the morning. For this purpose, good feeding may be obtained by mowing the grass at the sides of some public roads, against which there is generally no prohibition.

It is well to delay the use of garden produce by the use of grass as long as grass is available.

The first real frost renders grass no longer useful as nourishment, though there may still be plenty of it visible.

CHAPTER X.

POULTRY.

My own private belief is that the reason for the persistent recommendation of 'poultry farming' to 'ladies' is that gentlemen are aware that it is the most troublesome and least remunerative branch of the business—at least if pursued separately.

When I began this work, I hoped to have been able to present much more distinct money accounts, especially with regard to my last year's farming, than I find possible.

I can but offer an approximation of the balance of cost and profit. Only one thing I think must now be manifest to every reader, that no one of my various industries could have been nearly so successfully pursued without all the others. It may be a very good thing to keep fowls if they are regarded as part of the save-all principle. I at least cannot at all see how anything could be made by them if all their food had to be purchased.

But, granted that they are regarded pecuniarily, merely as save-alls or sweepers-up, that is no reason why they should not receive a different sort and degree of attention from what was their portion fifty years ago. A large egg is better than a small one, a good hen may be as cheap as a bad one. As a matter of fact, my fowls received more of my personal attention than all my other creatures put

together. They appeared to need it, and to gain by it, and I always felt that their affairs were so minute that it was more difficult to get them properly attended to by a servant than those of any other creature.

I had kept fowls for family convenience for some time before I ever thought of turning them to profit. For my former object I considered, and still consider, the Dorking breed crossed with a little Brahma or Cochin the best. The one disadvantage of that breed for private stock is the extreme delicacy of the chickens, and that is corrected by the admixture I have suggested, while it will not make the fowls less suitable for the table. It is as table fowls that the Dorking breed surpasses all others. For the production of eggs, the Spanish, Hamburgh, or Leghorn would be better, as they seldom clock. It is obvious that if fowls are allowed entire liberty, it is only by keeping but one breed that that can remain pure. I do not think my profits were at all increased by my fowls being pure bred. It is difficult to find a market in which really fine fowls command an appreciably higher price than ordinary ones, or large eggs than small ones. The breeding and selling of fancy fowls or eggs lay entirely out of my power, out of the possibility of my mode of life. I had no desire to attempt it, because it must necessitate keeping the fowls prisoners. I like to see animals at liberty and as happy as their natures allow.

Any one who has perused this work so far must perceive that I have nothing to say about high farming or any peculiarly new or improved plans about anything. My efforts were to make the best of the resources at hand.

New and highly systematic arrangements must all in the first place involve considerable expense in building and

apparatus, and many of them are still on probation. In regard to fowls in particular, I consider it still perhaps a little more than doubtful whether artificial hatching, artificial rearing, artificial feeding will eventually show a better account of pecuniary profit than the natural methods intelligently and carefully managed, while some at least of these unnatural plans seem to approach too nearly to cruelty to be approved, even if pecuniarily remunerative. There is something painful to the mind in the thought of the miserable fowl cooped up and daily crammed with its food, in the little chickens deprived of maternal care, the hen robbed of the exercise of the faculty in which she shows to most advantage.

Dorking hens excel particularly as mothers, one of the reasons which induced me to favour that breed when the production of fine fowls for the table was as much an object as that of eggs. In a pecuniary point of view it is impossible for one person to decide for others whether the sale of fowls and chickens or that of eggs is most profitable, it depends on so many circumstances varying in each case, but I am now convinced (as already said) that one or the other branch should be adopted—that better profits would be realised in that way than by carrying on both together.

To make eggs at all profitable a considerable number of hens must be kept, while the production of chickens will always succeed best where there are very few.

Dorking hens are very persevering clockers, so almost force one to allow them to breed. They lay large eggs, but only in small number, and are particularly bad winter layers, the worst fault of all in a laying hen, as eggs are three times the price in winter that they are in summer.

It is seldom possible to allow a hen to clock in the place in which she has set herself, that being generally one of the nests used by other hens to lay in, and every hen is naturally, though generally only neutrally, the enemy of every other.

I had a very well-arranged-*looking* clocking-house, twelve nests above for as many hens to clock in, and six fixed coops below for the rearing of chickens. The latter did not answer at all, as they were accessible to rats. I do not think the rats molested the clocking hens, but never more than half the eggs set in that house produced. The clocking hens were too numerous, they fought with each other. I do not know whether, if they could have had an entirely devoted guardian constantly within hearing, the clocking-house might have suited its purpose well; as it was it did not. It had a solid door and spar door with sliding-board in each, and I quite conscientiously tried to use all these appliances for their proper purpose, and then gave them up successively, and used the clocking-house as an ordinary hen-house.

I had two others, a well-constructed hen-house with nests and perches, a close door and spar door with sliding boards, a shutter opposite the door with bolt within for egress and ingress of the fowls, and an old five-stalled stable, in which I had had perches nailed across the stalls and nests attached to the walls.

As the most appropriate place for 'setting' a hen I can only suggest the quietest, nearly dark place that can be spared, not too far out of reach that the voice of the hen may be audible if enemies molest her. Thirteen is the approved number of eggs. They, as well as the hen, should be marked, and the nest should be daily examined to observe if any fresh eggs have been laid among the eggs set. No-

thing else should be done to the eggs. The hen if allowed proper liberty will damp them and turn them herself. In twenty-one days exactly the chickens will come out. The way to set a hen is as follows.

Her nest being properly prepared—that is to say, a wisp of straw patted and turned into something the shape of a nest, and the thirteen eggs placed in it, lift the hen from her self-chosen nest, and carry her gently within sight of the nest prepared for her. Let her look at it, and when her attention appears fixed on it, release her, and if she goes of herself to the eggs and seats herself on them, she is more likely to sit quietly than if placed on them by human hands. If it is necessary so to place her, it will also be necessary to completely darken the place where the nest is, and to confine the hen to the place so darkened for at least twenty-four hours. This operation is very much easier and surer if hens are very tame—if they can be lifted and carried about without any struggling and screaming. The operator should be as gentle and quiet as possible, avoid in every way frightening or exciting the hen. I have found it a good plan to set two hens at the same time, because if both produce only about half the number of chickens they ought, the two broods may be put together under one hen, and the other dismissed to lay again. *If* a hen can have close attention, is sure to be supplied with food and water when she clucks for them on coming off her nest of her own accord, it is well to leave her to do so. If you have many clocking hens besides a good many other matters to look to, it is best to gently lift the hen off her nest at a fixed time daily, place her on the ground, and place food and water before her. After her first day or two of sitting she will, besides feeding, wish

to run out to cleanse herself and roll her feathers in the dust and sand. She must be allowed to do so. It is impossible to force her to sit till she is inclined. After running about for a quarter of an hour or twenty minutes she will again wish to sit. If she does not find her way back to her eggs she must be gently driven towards them, unless she goes back to the place where she had set herself, in which case it is easy to catch her and carry her back to her proper nest.

The best time for hens to hatch chickens with facility and success is in March or April, but if it is an object to have spring chickens for market they must be set in November or December and be hatched by Christmas.

It is often difficult to find clocking hens at that season, but the Dorking breed are such inveterate clockers that if you have a large number of them that difficulty will seldom occur. Neighbours readily lend a clocking hen if they happen to have one, or exchange one against a laying hen. If a hen is lent it is expected that one of the chickens hatched should be sent as a present when the hen is returned.

If you have many clocking hens, a suitable time of day should be chosen when you can have the assistance of at least one person; the clocking hens should be all taken off their nests, fed, let out, and watched till they are all in their nests again. They should be marked when set with different coloured garters sewed on, so that you shall know which nest each belongs to.

If hatched in winter, chickens with their mother must be kept entirely under cover in as large an outhouse as may be with an earthen floor. A wooden floor is surely and without exception fatal to Dorking chickens. If they cannot scratch

in the earth their legs become paralysed and they die. A stove is necessary with which the outhouse must be raised to a temperature never above 50°. Too much heat is worse than too little, but young chickens will hardly live if long exposed to actual frost or to a temperature much below 40°.

In favourable weather in March, April, or later I have found the best plan for chickens to establish them with their mother as soon as hatched in any coop, box, or barrel in a sunny corner, as accessible and within notice to myself and assistants, and as much out of the way of the other fowls as possible. A piece of old oilcloth, slates, or bricks may be placed on the top of the little habitation to make it water-tight at top, and it should be comfortably covered up and tucked in at night with old carpet or sacking. Chickens will at first eat every hour. I never gave them any food but oatmeal and water, but that I always prepared for them myself, as I never found any one else prepare it properly. The feeding of chickens is one of the things in which the greatest economy may be effected or the greatest extravagance committed. If even the best servant or the most devoted friend went to feed the chickens it was usually done on this wise. Some meal was placed in the feeding dish—an Australian meat tin—some hot water added to it, and the mess stirred ; the water proving too little more was added, or the meal proving too little more of that ; the result in either case being a claggy mass very eatable to a stout hen or to any of all the thieves which are constantly on the watch to pick up left food, but entirely uneatable to a chicken. This material would then be thrown to the little brood a handful at a time. (A piece as large as a bean is as much as a brood of chickens will eat at a meal

during the first days of their existence.) The hen would quickly trample it under foot, mixing it with the soil so that ninety-nine per cent. of the whole was altogether unused as food. She (the hen) will manage to eat some of it, and in her devoted maternal care may manage by scratching and biting the nasty stuff to make some small fragments of it eatable to her chickens, but after being fed in this manner the little things will still continue the pitiful pee-ping which is their demand for food, and which should never be neglected.

The proper way to feed them is as follows. Place two heaped tablespoonfuls of oatmeal in a small tin dish, and pour from a kettle *at once* as much water on it as will wet the top, almost as little as one can actually *pour* from a kettle. I am sorry I can give no more exact measure, but the preparation of *dramoch* is a matter of practice. Too little water is better than too much, and the water should be nearly boiling ; it is not essential that it should be quite. What is essential is that the mess should be quickly stirred together as soon as the water is poured on it, that on no account should a second supply either of meal or water be added. If properly made it will be a dry-looking crumbly material with a small quantity of dry meal non-adherent. It can be taken in the fingers without leaving almost any flouriness on them, still less anything sticky. If the dramoch sticks to the fingers it will stick about the soft feathery little beaks of the chickens, and be useless to them as food. It ought to be in round balls in the dish, varying from the size of a small pea to that of a large marble.

It is best for very young chickens to have their food warm, but it is not necessary that it should be warm at each meal. What is necessary to their existence is that they

should not be starved in the midst of plenty by food carelessly prepared or left beside them to sodden and get dirty if not eaten up by rats or other thieves. A first principle of economy as well as of animal comfort is to have no food lying about or in dishes, racks, or mangers. Animals should eat their food when it is given them, but their feeder must not be in a hurry. In the case of fowls at least he must so arrange as to be able to remain present the whole time they are eating. With chickens this is matter of no little difficulty, as once an hour is not too often to feed them at first. When they are a fortnight old six times a day may do, and when they are a month old four times. By that time they will follow their mother freely about, and she will find many little titbits for them. A bit of dramoch the size of a bean or marble is enough for them at first. Their feeder should stand or sit close to the brood, an assistant armed with a stick watching to keep the other fowls at a distance, and gently and slowly crumble the food with her finger and thumb into bits about the size of canary seed, and watch them as they are picked up and swallowed by the chickens. When a brood hen begins to eat it is a mark that her chickens have had enough. She must not be refused a portion of their food. Very soon after the changed sound of their little voices indicates that they are satisfied, she will gather them under her wings to put them to sleep till they are again hungry.

Shallow dishes meant for water may be left in the yard if of tin ; the feeder should carry a watering-pot of water when she goes to feed chickens, and fill a dish with water for each brood as she feeds it. Chickens like to drink at

meals and between meals, and the sun quickly dries up the supply.

Having mixed a dishful of dramoch such as I have described, and fed the chickens with it myself as often as my other avocations allowed, my practice was to intrust the dish containing properly prepared food, and the watering-pan filled with water, to whichever member of my household I considered the most trustworthy, enjoining him or her to feed the chickens in the manner described at certain stated times. I was well aware that it was never done with quite the same either care or economy as when done by myself, but one's powers are limited.

Chickens hatched in March or April will begin to lay towards the end of autumn, when the other hens are leaving off and eggs are rapidly rising in price. The cock chickens become saleable about that time, and fetch *2s.* or *2s. 6d.* each from that time till they are sold off.

Any one who sells eggs would gladly have more hen chickens than they can possibly rear for themselves, and would buy them either as soon as they were away from their mother or even along with her for the sake of having a number of hens laying just when eggs are dearest, but hardly any one will sell them.

I urge that it would be a profitable line of business for people in a small way to rear and sell both their cock and hen chickens, while for persons selling eggs it is a vexatious thing to set eggs fully one half of which are never hatched, and a source of endless fatigue and trouble to guard against the manifold enemies and dangers which beset eggs and young chickens amidst a large flock of other fowls. The amount of food actually eaten by young chickens is ex-

cessively small. Not more perhaps than a halfpenny-worth per week per chicken, even if bought for them, and with a little trouble and economy enough of crumbs and scraps could be saved in most cottages to feed a brood of chickens, while the minute care which both chickens and their food require would be very much easier where the premises and whole mode of living were on a small scale.

My fowls and chickens were healthy. There were seldom any deaths except from accidents. These, I dare say, decreased the number of the chickens to the extent of ten per cent. Once (in Joan's time) we were visited by an epidemic. I can state no cause for it. Our treatment of the fowls had not varied from that which kept them in perfect health both before and after that time, and, in spite of anxious study of many poultry-books, I am unable to name the disease. Fowls, young, old, and middle-aged, refused their food, pined, drooped, and died. In one day we lost nine—three small chickens, three large ones, and three full-grown fowls. From beginning to end of the plague, which lasted about ten days, we lost almost half our stock. When the disease had reached its height and we could discern its most obvious symptoms, when most of our remaining fowls were hanging about spiritless and devoid of appetite, with their plumage all rough and staring, Joan adopted a course. She swept all the invalids into an unoccupied room, caught them all successively and gave them a large dose of castor-oil. This she repeated at intervals of two days, keeping them confined the while. All the fowls so treated recovered.[1]

[1] I may mention that castor-oil was Joan's mainstay and sheet-anchor. In her time any animal which ailed got it. She reared delicate little lambs on the bottle with cow's milk, alternated with periodical

I fed my chickens myself when I could, the large fowls always myself, with only the inevitable exceptions caused by illness or brief absence from home. Such inevitable interruptions of one's plans are always to some extent injurious, the less injurious the more distinct and systematic one's plans are. If some one or more persons have daily seen one feed the fowls, and are enjoined to feed them in just the same way, they may possibly do it or nearly do it.

My way was to have my most trustworthy servant repair to the boiler-house as soon as it was daylight in winter, about half past six in summer. She took out of the boiler about three fourths of a tubful of its contents, which were, as previously described, a sort of broth composed of garden and kitchen refuse. To this she added as much Indian meal as would thicken the mess to the stiffest consistency at which she could knead it. Well kneaded together, and in appearance almost dry, she covered the tubful and left it in the boiler-house till I was ready to feed the fowls with it. About the same time the boy had to go to the mincing machine (a second-hand butcher's) and mince horseflesh, a certain quantity of which was obtained from a tannery each time the draff was fetched, or in summer when other things were obtained. It was minced raw. A large tin spoon and knife and fork for itself remained beside it.

In regard to the time of letting fowls out in the morning, I may mention that when first I began to keep fowls I was assured by many wiseacres that fowls could not possibly thrive unless let out and fed at the first dawn of day, and

doses of castor-oil. They lived and throve, used to share the weekly washing with her pigs, and be decked with blue ribbons when company was expected.

that in pursuance of their advice I (although then in a very weak state of health) rose daily at the time indicated, went downstairs and out in my dressing-gown, and then released and fed the hens.

The appreciable effects of the plan were the loss of almost all the eggs.

Many experienced hen-wives release no hen without having first felt her to know if she is about to lay, confining her if they find her possessed of an egg till she has laid it. There is no doubt that most hen-keepers lose many eggs. For people situated like myself I consider it as good a plan as can be devised to not release the hens till after the hour of an early breakfast, say between seven and eight in summer or after it is good daylight in winter. By that time a considerable number of the eggs are laid, and hens are so very much led by example and precedent that those who come out and feed without having laid will be seen to generally return to the nests in the hen-houses to lay. The nests should be in a darkish situation furnished with a moderate quantity of clean straw (renewed once a week, to do it oftener will deter the hens from frequenting the nests) and with a nest egg in most of them. All hens like to lay where they see eggs already laid, but some of them have a perverse ingenuity in discerning the difference between a nest egg and a fresh one, and will avoid the former.

The hen-houses should by no means be cleaned in the morning. The evening is the proper time both for that and for collecting eggs. The hen-houses should be left as quiet as possible both during day and night.

The hen-houses being opened, my first work was the distribution of the horseflesh, which by the combined action

of mincing machine, knife, and fork was reduced to morsels of a size which the fowls could swallow at once. I am convinced of the advantage of horseflesh as part of the nourishment of hens. I always perceived a diminution in the number of eggs when from any circumstance we were temporarily unable to obtain it. But although one cannot doubt its being highly nourishing, it appeared to rather increase than diminish the fowls' appetites for the food which followed it, and a meal of it alone was quite unsatisfactory to them.

After trying many other plans I am convinced that the best way of feeding fowls is on the open ground. Only in exceptionally bad weather, while rain or snow were falling heavily, were mine fed under cover.

From various circumstances the waste of food seems greater when the feeding is done in a house. The fowls crowded together trample it under foot more, and it is almost impossible to get the weaker animals fed at all.

The food being well prepared in the manner described it should be pretty widely distributed by hand, portions being thrown into several comparatively retired corners where the weaker animals may get it unmolested by the others. The feeding should not be done too rapidly, though it is obvious that the smaller and weaker fowls have a better chance of being allowed to eat if the whole flock are eating at the same time.

The quantity of food prepared should be as exactly as possible adjusted to the appetite of the flock. If they cease to eat eagerly before the tub is empty, and begin to disperse, by no means continue the general distribution. Observe if any of the weaker members are still hungry and feed them, then cover the tub and let the remainder wait for next meal-time.

Two meals a day are enough for full-grown fowls which have full liberty. The second meal may be given about three o'clock (at the same time every day), and consists of grain. Indian corn is cheapest, and on the whole best. As variety is desirable it may alternate occasionally with black oats, rough barley, or buckwheat without greatly increasing expense. Feeding with corn is easy and pleasant work, and can occasionally be done by an assistant without *much* injury. No single grain of corn should remain on the ground when feeding is over. After their afternoon meal, the fowls will disperse with a particularly cheerful aspect, the ducks always to have a swim and fish up what they can get from the bottom of the pond, the other fowls all over the domain in every direction in quest of snails, worms, or any edible animal or vegetable whatever. They will go to roost at their own time. They should at no time receive a third meal or ever be fed between meals, else they will always expect both and be less diligent in providing for themselves. Ducks have generally to be driven in at night in summer, as they will continue if allowed to wander about till every one has gone to bed, and so escape being locked up—in which case no ducks' eggs will be got next morning.

Ducks are so very easily managed that they hardly require separate mention. Their period of incubation is twenty-eight days, and the ducklings are active and hardy from the first day of their existence. I have had them hatched both by duck and hen mothers, but prefer a hen. My methods with them were the same as with chickens, but they were sooner out of their minority and able to share the meals and ways of the large fowls.

Ducks' eggs are much larger than hens', and more numerous within the season in which they lay them. They

begin later and leave off earlier than hens. It is especially desirable that they should lay their eggs before they are released in the morning, as they will not afterwards, as hens do, seek a nest in an outhouse, but lay their eggs in the pond or among the grass if not in their sleeping-house.

They rarely lay them in a nest. I usually found all my ducks' eggs lying on the ground in their sleeping-place when I opened it in the morning, frequently one egg for every duck, so that I could on such occasions be quite sure I had all the eggs they laid.

Turkeys are supposed to be particularly delicate and troublesome to rear. I have never found them so. The same method and the same food which I have described for chickens suited them. I never gave them any food but carefully prepared oatmeal, and I do not think any is necessary if they are allowed entire liberty. Any fowl debarred of this from an accident or any temporary cause must be regularly supplied with green food besides the foods which I have mentioned. Chickens and turkeys are fond of chickweed and groundsel. *Trees* are said to be favourable to the health of turkeys. It is alleged that there is little difficulty in rearing them in situations in which there are many trees. My observation certainly supports the notion. In both the localities of my farming there were many large trees, and the turkeys were constantly amongst them. The turkey-chicks seemed unwearying in pursuit of almost invisible insects. I believe the trees, their mossy roots and stems, furnished them with an inexhaustible hunting-ground for these. I have reared turkeys both with a turkey and a hen mother, but prefer the hen.

During the last year of my farming a friend living in the town took charge of the greater part of my eggs and managed

to dispose of them for me at retail price, or about *2d.* per dozen more than I would have received from a grocer. We conveyed them to her two or three times a week by means of the pony phaeton. Sometimes our supply was of as many as twelve dozen. The eggs were all washed and each wrapped separately in paper before being placed in the baskets to be conveyed into town. No particularly small egg was sent. Some eggs have very thin shells and will break in packing, and from those and other causes we generally had in packing a gross of eggs at least a dozen left on our hands.

These we kept to eat in puddings, pancakes, custards, and omelets, or fried with bacon or toasted bread. During the very height of the egg season we sometimes indulged in plain boiled eggs for breakfast or luncheon, and these were always available for visitors or invalids, but as a rule an egg was always augmented by the addition of some cheaper material before it was used. One day in the week the kitchen dinner consisted chiefly of eggs, and almost every day several eggs were added to the family food in one shape or another. Fowls were also used in the house when any visitor was added to the family party.

The money received for eggs and fowls during the year was 66*l.* 16*s.* 11*d.*, while that paid for their food was 30*l.* 6*s.* 3*d.*; thus showing a profit of 36*l.* 10*s.* 8*d.*, besides the supply of the house. I must again, however, with regret explain that these accounts are only approximately correct. Not more than half of what the fowls ate was actually bought for them, the rest consisted of garden and kitchen refuse, while under the head of fowls' food must be charged all the bought food consumed by the pigs. It is impossible to separate exactly the expenses of each, as their food was largely the same and boiled together in the same boiler.

CHAPTER XI.

GARDENS. CONCLUSION.

I DO not believe there is any better way of using up superfluous kitchen-garden produce than having it eaten by animals whose produce is profitable, and had I continued to farm I am convinced that I should have taken to growing only such vegetables as without extravagance could be given to animals if produced in larger quantity than required by the family. I did utilise a very large kitchen garden chiefly in that way. More than half of it was devoted to turnips and potatoes, which the animals shared with the human beings. I am convinced that market gardening (unless under some quite exceptional circumstances) cannot be profitable except to a market gardener, by which expression I mean a person selling vegetables both wholesale and retail. The exceptional circumstances under which I can conceive of its being profitable to any other sort of person is in the possible though unlikely case of a number of friends or relations living close together, though in separate houses, and one of the group renting a garden and paying a gardener for the supply of the whole. The weight and bulk of vegetables make sending them any distance costly in one way or another. Their perishable nature is the cause of an enormous difference between their wholesale and retail prices.

For example, a good wholesale price for fine young

turnips is 3*s.* or 3*s.* 6*d.* per dozen *bunches* of thirteen turnips in each. No unusual retail price is 1*d.* per root. Thus four times the price which the grower can obtain is charged by the retail dealer. Other vegetables are the same, and from the causes named it is difficult, if not impossible, for a person living some distance from the town to command the retail price. People will seldom send a post-card the day before to state their wants in the way of vegetables, the expense is so slight of all that is wanted at the greengrocer's shop. A few kind friends, who frequented us for eggs and fowls, used to ask for vegetables also, and, the pony phaeton having been built purposely for stowage, baskets of these used to be conveyed in twice a week at the time the fowls and eggs were delivered. In this sort of business one must always remember that 'Every little makes a muckle,' that it is only by the gathering up of all fragments that anything can be gained. At the same time one must learn to count the money value of energy. By sending superfluous vegetables to the market I could always sell them at whatever might be the market price. A cartload of vegetables and a dozen bunches of flowers brought me from 10*s.* to 15*s.* That, twice a week, would seem worth having. But for that sum one had to have two men, or man and boy, at the market before six in the morning along with the pony with the loaded cart. At least the half of the previous day was spent by both man and boy in collecting and packing the vegetables for market, and at least one half of the day on which they went to market elapsed before they could set to any other work. The money value of one day of two men, a horse and cart, cannot be estimated at less than 10*s.*— in most places it will cost more. I therefore calculated

that the market price of vegetables at our distance from the town did little, if at all, more than pay for their transport, that I had nothing at all for the vegetables themselves—did better, therefore, to use them either for house or animals. Giving away sounds proverbially easy, but is practically considerably more difficult than selling many things, and especially vegetables. It is impolite not to *send* a present. Many a present did I send—as many as I could possibly manage the sending of. Sometimes a friend would exclaim at seeing fine vegetables apparently disregarded in the garden, 'Oh, *send* them to me, I have plenty of mouths; and we are so fond of vegetables.' The *sending* was exactly what I could not do. The vehicle travelled in overloaded to its utmost capacity of overloading with things either ordered or unordered. The prices I have mentioned make it manifest that it would not have paid to have kept an additional pony and boy, and those we had had quite enough to do. They could not have been spared one day each week, still less two, without their work having got into arrears which would have involved loss more considerable than the market gains.

The same remarks apply to the selling of flowers as of vegetables. The difference between the wholesale and retail price is fully 200 per cent., with some added disadvantages from the still more perishable nature of the article. The shops which deal in them have not at all times sale for their flowers at any price; much depends on the weather. The public does not buy flowers, it would appear, in cloudy, unpleasant weather. It was often my fate to see my beautiful bouquets of three days past withering in the windows of the dealers who had purchased them.

I believe there might be some money made by the sale of flowers if flowers were grown with a view to sale.

What I believe would pay would be the cultivation in large quantity of any particular hardy flower which the situation suited, and which could therefore be produced earlier and in greater perfection than was common. Two-penny bunches of lily of the valley, wallflower, mignonette, violets, &c., seem to be generally saleable, especially when first they appear in the market. Finer flowers at a higher price are much more uncertain. The flowers when I sent them to market brought from 5*s.* to 10*s.* per week ; but for that several hours of the gardener's time had to be sacrificed to putting them up in bunches, and the garden stripped bare. I should have more hope of profit from gardening by raising cuttings and seedlings to be sold in spring by the dozen. My endeavour to make the garden pay did not last long enough to give me anything to say on that subject.

If amenity is to be counted worth anything, I need hardly say that flowers are an advantage. The plainest furniture and the poorest table equipage may be made beautiful by well-disposed flowers, partly cut and partly growing, any house perfumed with them pleasant, and the mode of life of which farming forms a part disposes one to hospitality—it is so very easy.

The money realised from one's produce by no means represents its whole value. Butcher's, baker's, and other bills are excessively small where an abundance of milk, eggs, and vegetables are used. A family may draw half their maintenance from these things, without at all having them in such excess as to disgust them with them. A guest added

to the circle, or several guests on occasion, makes no appreciable difference in expenditure. Pigeons and rooks which received no food at all from us furnished many an excellent pie.

Strawberries are the best crown for a feast where plenty of cream can be spared for them. There never was any difficulty about selling strawberries or other fruit; on the contrary, I was asked to sell many more, both of these and of peas and young potatoes, than I was willing to part with, or could have *sent* to their purchasers. Considering the difficulty of transport, it seemed the best way to use these country luxuries to entertain one's friends with when one had them. A few were sold, regulated chiefly by the possibility of *sending* articles useless unless quite fresh; more were eaten in the house, and considerable quantities were preserved for our own use and as presents for poor friends.

Beautiful flowers at all seasons cannot be produced without the use of stove heat (though it was my glory in our old home to have still some autumn flowers in my vases when the snowdrops first appeared in spring, the peculiarly sheltered situation often made it possible). Stoves may burn a great deal or very little coal.

I had our whole ash-pit periodically riddled. The cinders went to supply the greenhouse fires, and the ashes, if properly laid down, made the roads just as good as if they were gravelled.

The road should be well scraped free of mud in some wet weather, and the ashes thrown down, spread out, and raked. Any unsightly objects may be removed by the rake, and if the ashes are rolled they will bind the sooner; but in any case they soon form a dry hard way where mud was displaced.

The mud, put in the dunghill, will be sure to come to use.

I would wish to end as I began, by recommending the 'Manse Garden' as containing all the instruction which can be conveyed by writing regarding a garden of the sort which should form part of your domain, dear M.

I hope you will carry out your plan, and that it will succeed. You are better situated in some respects for success than I was. Independently of any profit from it, I look back with pleasure to the many interests of my farm life, its healthy, hospitable ways. The part of it which I disliked, and which I felt myself becoming unable for as my business went on increasing, was the transport and delivery of goods. Keeping but one pony, any going into the town done by any of us had to be on the same days on which the four-wheeled vehicle conveyed eggs, fowls, and vegetables. The human cargo often travelled above and beneath huge loads of these articles, and the delivering them at their various destinations was severe labour of both body and mind. The homeward journey, up a steep hill, again loaded with all that it was necessary to carry home, often in darkness, rain, or snow, completed the exhaustion. A servant was seldom of the party: he had his work to do at home, and would have filled up space in the vehicle. Twice a week, regardless of weather or other impediment, these journeys were performed. On Wednesday the boy drove in the van to deliver produce, and fetch out draff and horseflesh, and on Sunday only we drove like gentlefolks, little or nothing in the vehicle but human beings.

This description, however, refers only to the last year of my farming, and chiefly to the winter half-year. In summer there was no draff to fetch. This left the pony at our service

for pleasure-driving at least one day in the week, and picnics and country visits are a natural part of the way of life.

I have now, I think, written down all of my experience which could possibly be useful to some one beginning the charge of a small farm. I have had no other object in view than to be useful.

In the dearth of employment for women I believe that some, both married and single, might find the occupation suit them, and I remember how very difficult, when I began the business, I found it to obtain disinterested advice on many points.

This recollection has led me more into details than will suit the taste of those who read for amusement. There is, of course, much which can be learned only by experience and practice. In my acquaintance with them I have not always found experienced and practical people able or willing to advise others, and it is in the hope of supplying this defect that I have written these pages.

LONDON: PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET

APRIL 1883.

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