WOODS

ON

THE MANAGEMENT OF SHEEP.

1864.
A LECTURE

ON THE

BREEDING

AND

MANAGEMENT OF SHEEP,

Delivered before the Wayland Agricultural Association.

BY

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A strong wish having been expressed by many large Sheep Breeders and other Persons in various parts of England, Scotland, and Wales, that my remarks on the Breeding and Management of Sheep, made to the Members of the Wayland Agricultural Society, should be published in the form of a pamphlet, I feel, that however unwilling to place myself before the public in the position of a teacher, I yet cannot but comply with such a request.

The remarks were made simply with a view of giving my friends and neighbours, at their request, my own experience in the management of Sheep. They seem to have interested those to whom they were addressed, and I now with pleasure offer them to the public.

HENRY WOODS.

Merton, Thetford, Feb. 24, 1864.
THE BREEDING
AND
MANAGEMENT OF SHEEP.

On Wednesday evening, the 23rd day of December, 1863, a Meeting of the Wayland Agricultural Association was held at Watton, Norfolk, for the purpose of discussing the Breeding and Management of Sheep.

Thomas Barton, Esq., presided, and briefly opened the proceedings.

Mr. Woods said,

Gentlemen and Brother Farmers,—It is usual on occasions of this kind to introduce the subject by a written paper, but having been told by a friend, who knows the working of these matters much better than I do, that written papers are frequently—I will not say truly—looked upon as so much borrowed matter, I determined to deliver *viva voce* what I have to lay before you. My object will be to throw as much light upon this
important subject as it is in my power to do; because I think when we come to consider the present price of corn, and what I must call its "unremunerative value," we must all be convinced, that wool and mutton are very important things for us to turn our attention to.

The subject is a very large one, and I can only touch upon its principal points, which seem to me to be these:—

1st.—The Ewes to breed from.

2nd.—The Rams to use: how to use them: and when to put them to the Ewes.

3rd.—Treatment of Ewes during Pregnancy: Abortion; its causes and effects.

4th.—Treatment of Ewes during the Lambing season.

5th.—Management of Lambs when on the Ewes, and when weaned.

6th.—Hoggets:—their Treatment from July to Michaelmas.

7th.—The Treatment of Hoggets on Turnips.

8th.—Whether most profitable to sell in or out of the Wool.
THE EWES TO BREED FROM.

I.—The Ewes to breed from.

With respect to our first head, I will begin by saying that I believe the pure breeds of sheep to be the foundation from which all good crosses must spring; and I do feel that every person who may be induced from one cause or another to put down his flock of pure-breds does a thing which is of national importance, and one that every farmer and every cross-breeder of sheep must deeply regret. I would ask you, "From whence sprung originally the numerous breeds that now exist? It is, perhaps, a dangerous question to ask, but I think it is a fair and proper one for meetings of this kind. From what did the Shropshires spring? From what did the Oxford Downs? From what did many others that are called "Downs" spring? But this is not my subject this evening; so I shall pass from the pure breeds of sheep and turn to what I may call "the Norfolk flockmasters' question;" that is, the animals from which we should breed cross-bred lambs. "Which do you consider the best ewes for a flock for breeding cross-bred lambs? Do you think the black faces, the brown faces, the Hampshires, or half-bred ewes, the best?" This is a question which must be of importance, and of deep interest to every one at this table, who is a breeder of sheep. I will not insult your judgment by expressing my own opinion as to the best ewes for the purpose, because you are men of great experience; you have your own reasons (and perhaps they are proper reasons) for having a certain description of ewe upon your farms. But there is one thing that has often occurred to me, and upon which I think many of
you must agree with me. That point is: that from whatever kind of ewe you may prefer to breed, a very great difficulty exists in getting the sort you require. There is in this room a well-known breeder of very excellent sheep, who told me he had last autumn the greatest difficulty in finding such ewes as he wished to put in his flock. Generally he was unable to do so; and when he did so, the price was extravagantly high. This, of course, arises from the fact that the price is always according to the demand. A great many persons want the good ewes, and consequently the sellers put the price on tolerably stiff; and I don't blame them for it. But now what I say is this—that there is not sufficient attention paid by those who breed your flock ewes; they attend but little to the shape and make of the animals they breed, or to the quality of their wool, because too many, I am sorry to say, make a point of getting a sheep because it is a cheap one. This is very poor economy; because that sheep is the cheapest which will produce you the lamb that will pay you the most money, whether you sell it, or whether you graze it. No doubt the production of a better class of flock sheep depends very much upon the farmers themselves; because if they would make up their minds to buy only those animals which would be considered by good and practical judges to be suitable for breeding good cross-bred lambs, the breeders in Suffolk and Essex would produce better ewes. I remember crossing an adjacent county, not one of those I have mentioned, last autumn, and seeing a very large flock of sheep,—the black-faces being tupped by black-faced rams. I was driving with as good judge of sheep as any man in the kingdom,
and the remark he made was, "Now can it be wondered at that there are so few good ewes bred, when we see here 500 or 600 ewes, possessing no peculiar merit, tupped by rams even still worse?" I know that this is a difficult question; but I believe that if the farmers of this county were to set the example, and say they would only have the best formed ewes—ewes which possessed the merit which is necessary for breeding good lambs—they would get them. If they were to say, "We will have none of your bare-polled ewes, with little or no wool on the belly and neck, and no wool under their tails; but we will have those that possess wool, and of a quality of flesh which shall produce us good mutton; if not, we will not have them at all," the breeders would produce them; because they would know that they could not sell bad ones.

Now comes another question with respect to the lambs we breed. I have often looked upon the management of the breeding of cross-bred lambs as one which deserves as much attention, and as much care, as the breeding of pure-bred Downs or Leicesters; and I base my calculations upon the following fact:—If we have well-bred lambs, we always have a demand for them. I know it from my own experience; and it is not only so on the Merton estate, but it is the case with many breeders in this neighbourhood; they breed lambs that everybody is glad to obtain; they have no running about to seek for customers; but have plenty of customers on hand; because the dealers, the farmers, and other people who purchase hoggets or lambs for feeding, are sure to turn their attention, in the first place, to the well-bred ones. Now I ask you to compare that with the
haphazard style of breeders—who put a ram to a ewe because it is a ram, and not because it possesses any particular merit; who say that a ram is a ram, and he is sure to get a lamb. Many people do that, and what is the result? The lamb bred by that careless system is sure to hang heavy on hand; no dealers run after that breeder’s lambs; they don’t care to buy them, for they know they are bred to sell; and they only take them when they cannot get good lambs from other people. Even if, however, that person does sell them, the buyer will not come to him a second time: there will be no one coming to him and saying he should like to buy from him again. The very act of trying to graze them has proved that they have no feeding properties, but the reverse, as I know for a positive fact. Those who have fed well-bred lambs from this estate, have desired to come again and again, and they have done so: and every year the value of these lambs is increasing.

Then there is another point which has frequently struck me as a very important one, and one which must have struck every man who visits Norwich Hill: go there in the lamb or the hogget season, and—(you know it as well as I do)—you see a group of people here, and a group of people there; perhaps you see a third group, but it is a rare circumstance. Why is this? There’s a good lot of lambs or hoggets, and everybody is rushing to see them, showing that it is the exception, and not the rule, to have a good lot. Now I want to see groups of people all over Norwich Hill; and instead of seeing a few pens of hoggets or lambs, which possess far more merit than others, I wish to see them all good enough to attract the attention of purchasers. I don’t think I ever shall see
this; but I do trust that we shall see a considerable advance made in the breeding of sheep. We have in this neighbourhood some most extraordinary instances of breeding: we have both good and bad. I will first give you an instance of the good, and then an instance of the bad. We have those in this neighbourhood who breed with care—who don’t buy ewes because they are sheep; but who buy the best they can lay their hands on—who select them for certain points (which they see they possess) for breeding good lambs. Not satisfied with that, they go and hire or buy a ram also possessing peculiar merits, and well adapted for the ewes they are intended to serve; they put those together, and there is no fear whatever as to what the result will be. There is no chance in breeding—no “luck.” Breeding good animals is no matter of accident. You might as well attempt to breed a pure-bred shorthorn from an Alderney bull, as to endeavour to breed good lambs from ordinary parents. And the result is this:—some breeders can sell their lambs at from 28s. to 30s. each, while other people, breeding in a different way, sell at something like 18s. or 20s. Then we have another case in this neighbourhood, the reverse of that which I named before. A farmer of the old school, living not three miles south of this town, has all sorts of mongrel-bred ewes on his farm, a sorry lot they are, and the lambs they breed are such as no man, who cares for his credit or his pocket, would ever try to fatten. Usage has, as it were, so altered the nature of his ewes, that he has actually got them to breed nearly all the year round. He runs the rams with them all the year round, and says, “Poor things, they know what’s the best; Nature taught them.” I merely give these as
illustrations of two systems. I have no desire to claim more credit for this neighbourhood than it deserves. I hope now I have cleared up my first point, viz.: "The ewes that I would breed from."

**The Rams to use: how to use them; and when to put them to the Ewes.**

We must now turn our attention to the next subject, which is, the Rams to use. After getting good ewes, the next most important step is to get good rams. I am one of those who fancy that it is not ill-spent money to give an extra £5 for a ram. I think it is far better to give a fair price than a low one. The profit, I do believe, will be greater upon breeding good lambs than bad ones; and you will never breed good lambs from bad rams. Now we know that in the breeding of cross-bred lambs there is great diversity of opinion. Some like Cotswold sheep; some like Cotswold crosses, or Cotswold crossed—(I am not in the mysteries of these crosses)—with something of a Leicester; and some people like a large Leicester, with a dash of Lincoln in it. Now it is not for me to say which will best answer a farmer's purpose. I can only venture to make suggestions. Allow me, then, to say that I think the adaptation of the rams to the ewes, and their selection with judgment, ought to rest in the discretion (and does, I have no doubt,) of the flockmaster who is going to use them.

But I have an opinion of my own with respect to the sort of ram which I think ought to be used to short-woolled ewes for breeding cross-bred lambs. I have an idea that he ought to possess merits peculiar
to himself; that is to say, he ought to have a good masculine countenance: he ought to have his neck neither too long nor too short, and placed upon his body as though it formed part and parcel of him. His breast ought to be well thrown out in front, and wide and expansive between his fore legs. There is one thing which is too often lost sight of in many pure breeds of sheep, that is, the important point of the shoulders; because I hold that all male animals ought to be so constructed as to have the right power of locomotion. Now what I assert, of many of the pure breeds of sheep, and alas! of many others, is, that the shoulders are placed upon their bodies as though they were pieces of waxwork—as if the body had been made first, and the shoulders had been a second thought, and had been stuck on after the body had got cold. Well, if we could get their shoulders right I should like to have wide and expanded loins. I should like the tail placed well upon the rump, and well surrounded with mutton; the backbone should be straight, but better a little arched than the other way. I should like to see what I call "legs of mutton," deep, full, and weighty. Then I do not want to see a ram too long upon the legs, because if he is too long, he cannot travel. Another great and important point is that the wool is of the right character, and plenty of it; and that you get a skin not blue, but of that nice cherry hue, that every farmer acquainted with breeding knows must propagate good stock, and stock which will graze. I am not going to start a theory of my own, but I am going to ask you to bear with me for a few minutes while I say how I consider rams ought to be used. We will suppose, for argument's sake, that some of those who do breed
THE RAMS TO USE.

those very good lambs, and who deserve credit from every one who grazes, give 7 guineas for one ram, 10 guineas for a second, and 15 guineas for a third. Well, it is very proper; I have no doubt they have done wisely in giving 15 guineas. But it comes to this; they turn all the rams into the flock together. Now let me ask you whether it is not within the range of possibility, that the 7 guinea ram should tup the ewe suited to the 15 guinea ram; and the 15 guinea ram the ewe best suited to the 7 guinea ram; while the 10 guinea ram perhaps takes his choice of both? I hold that after giving those prices for your rams, the way to get a level crop of lambs is to select the ewes for the rams. You have got some ewes with glaring faults which you can see, but which the 15 guinea ram would materially correct. I will go to the other extreme. You have got some ewes that show very well in some points in which the 7 guinea ram is a little deficient. Now I believe if you were to go upon the principle of selecting the ewes for the rams you would be likely to breed a level lot of lambs; because you would breed them with corrected points, which you could not do without this system of selection. I am quite aware that you will tell me that this is a very difficult matter. It is a difficult matter, even in an enclosed country, and in an open country you will find it still more difficult. It will take a great number of hurdles; it will require much attention; and altogether involve considerable trouble. But, gentlemen, let me ask you one thing—what great success has ever yet been achieved without trouble? There is scarcely any limit to the power of man if he will but direct his mind to an object, and be determined to succeed; and then, as sure as we are here together this.
night, so sure will he succeed, and only be surprised that he looked upon it as difficult at starting.

The object of almost all our cross-breeding is to get as many lambs as we can; and looking at the prices of wool, and mutton, and corn, this becomes an important consideration. My experience tells me that if we want—(and I will give you some practical instances presently)—to produce plenty of lambs, and if we desire the single ones to come strong and healthy, it is very much within our own control; and it is by these means, which you should know as well as I do—flush your ewes two or three weeks before the rams go to them, and continue that for two or three weeks afterwards. I will answer for the result. Allow me to give you my own experience last year. We were rather deficient in early turnips. I tupped some upon layers; some upon the park, and gave them a certain quantity of cake; and one lot I put upon turnips, but they had no cake. We had 25 per cent. more twins from those on turnips than from those on the new layer, or from those in the park, which had had cake.

Now as we do not wish to have failures with our rams, there are one or two little points upon which it has occurred to me to speak to you this evening. Rams, in my opinion, travel a great deal too far on our flock farms. The principle is, in a great measure, to let the rams run with the ewes indiscriminately. They run with them into the fold at night; they go out with them the next day; and they thus travel a considerable distance. I think you are destroying very much of the ram's vigour by making him so much of a traveller. What I advise you to do is to let the ewes go out to the heath, the fields, or wherever you think right; but keep the ram at home, and give him
a little cake and fresh food. I am quite sure you will be well repaid by this alteration in the present system.

Again, I believe it to be a most important matter, when you put the ram with the ewes, to notice how the ewes are running. If you do not use ochre, how can you tell when their time has elapsed? If you go upon the principle of using red ochre at a certain period, blue ochre at another period, and yellow ochre afterwards, you can tell to a certainty how your ewes will lamb; that is to say, when you may expect a number of lambs, and when you may not. I hold it to be a matter of considerable importance, and I wish that every flockmaster paid attention to it; and if you adopt the recommendation of selecting the ewes to the ram, you will see if the rams are seasoning your ewes. Here let me ask, if you make it a rule to examine certain parts of your rams when you buy them, or before you turn them with your ewes, for depend upon it, if a certain peculiar construction of their generative organs, which is, or ought to be, well understood by every flockmaster or shepherd, is not perfect, they will never produce a lamb; and you would thus not only experience much disappointment, but lose several weeks of the best part of the season.

Now the last point under this heading is one which those who have cross-breds will understand better than I do; that is—when ought the rams to be put to the ewes? I think this is a matter which is very much affected by localities, or by the situation of the farm upon which the flocks are placed. If a breeder is in an enclosed country; if he is well provided with spring food, and is well able to carry along his lambs when they come at an early time, then the ram may go in by the end of September; but as
a general principle, where lambs fall in an open country, I would certainly advise Michaelmas as the best time, considering that they would then drop about the 7th of March, and follow from that time. My experience tells me that it is not always the forward lambs that make the heaviest sheep. I will give you an instance. In our own system of breeding we mark the ears of lambs for the first month, and after the month has expired we have no mark at all. In reference to this point, let me tell you a fact worth relating at a meeting of this kind. At the last Birmingham exhibition there was one sheep, which was said to be the largest Southdown shearling ever exhibited at the Birmingham exhibition, of which you can form an opinion yourselves, when I tell you that it weighed 17 stones (imperial) live weight. That wether had no ear mark, proving that he was one month at least younger than the first lamb which was dropped. I merely mention this to show you that Michaelmas day is not a very bad time.

TREATMENT OF EWES DURING PREGNANCY:
ABORTION; ITS CAUSES AND EFFECTS.

We next come to another important subject, and one which, I think, must claim the attention of every breeder, that is, "the treatment of ewes during pregnancy;" and "abortion—its causes and effects." Everyone who has a flock of sheep will, I am quite sure, feel a deep interest in anything that can throw light upon this subject. I am going to deal with it as a plain matter-of-fact question.
The first thing, and the most important thing, too, I think, is the feeding of our sheep. I believe that our success or failure mainly depends on this. The question is,—"How are our ewes to be fed?" There are two points which I will put to you for consideration. Many of you have been longer in the county, and have had a great deal more experience than I have, but yet I will ask you one simple question:—"Taking it as a general rule, have you ever seen these two things together in Norfolk, viz., a good crop of turnips, and a good crop of lambs in the same year?" I think you will find, in nine cases out of ten, that this has not been the case. The simple fact is, I believe, we are too free in the use of our turnips. There is another question upon which, however, I do not profess to give an opinion myself, because my experience has not carried me to that. It is this:—"Is it right to allow the ewes to follow the hoggets when on turnips?" That is to say—"Is it right to allow the ewes to feed upon the refuse food of the hoggets?" My opinion is that it is not—that it is not only a barbarous custom, but also a dangerous one. I believe that by placing the ewes to follow the hoggets, they not only get a great amount of indigestible food, but that they take up a great amount of silt, which must act as an irritant to the bowels.

Experience tells me that abortion is probably produced by two causes, and comes at two periods of the pregnancy of the ewes. The first time generally happens between the 25th of December and the 6th of January; then, I fancy, it is produced by food that is too stimulating to the generative organs, and which thus acts on the uterus, and causes it to expel its contents. The next stage, and I believe the most dangerous one, happens
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about the month of February, and is, I think, produced by the quantity of indigestible food which the ewes take up about this time. You have all witnessed a great amount of fever, which produces an inflammatory action throughout the whole system of the animal, and abortion is the result. You have it shown to you by the effect the fever produces afterwards; because at that time of the year seldom do you get a case of abortion without the ewe losing its wool, and I would ask in how many cases its life also? Now how are we to alter this? I hold that it is—I will not say entirely within our own control; but if experience is worth anything, and I will give you that experience, it tells us that it is almost within our own control. Let me give you one or two startling facts, and facts that I defy any man to get over. Up to 1853, the Morton flock of sheep was known to be as unhealthy, as regards abortion, as any flock of sheep in the county. In that year, we had something like 110 cases of abortion, and we lost eighty ewes. I felt that the time was come when a change was necessary, and that to go on in that way was stamping those who had the care of the flock with a want of intelligence, care, and discretion. I, therefore, entirely altered the system, which was then in use; and I determined that never again, after a certain time of the year, should the ewes have another turnip until nearly the time of the lambing; and the system I followed out was this: we put our ewes on turnips for tupping, and kept them on for six weeks; we got an abundance of lambs by that means. I brought them back again on to the park. By taking them off in the autumn months the grass grew a good deal. There was a great amount of food which would last them very.
well in an open season until the end of December or the beginning of January. Then I gave bran and chaff until about a fortnight before the time for the first lambs to fall. I then placed them upon turnips, taking care to give very few at a time, and with good allowance of chaff. Now it is a fact, that from that day we have not had a single case of abortion on the farm, and our average number of ewes lost has never, up to the present year, exceeded five.

But there is another point to which I must come—a point in which all light land farmers will take great interest. That question is—"Does clayed land materially affect the health of the ewe?" I know the prevalent opinion is that it does, and probably it may; but I say that that is also very much within the control of the flockmaster himself. I believe that with the care and intelligence which a person may bring to bear upon the matter it may be very much controlled; and I will give you some practical experience upon this point. I have been told, time after time, that the "Waterloo Farm" would kill any sheep—no matter whether they were hoggets or ewes, or any other sort of sheep—they could not live upon it; and still more unhealthy would it be if it was clayed: and as to ewes, the man would be mad who would attempt to keep them. Now that farm has been clayed very heavily: it has been clayed, marled, and chalked. All those three materials, which are held to be injurious, have been applied, and what has been the result? Not that all the sheep died, but this has occurred. From Michaelmas, 1861, to Michaelmas, 1862, (the last year we held the farm, and consequently at a time when we had to feed
entirely off turnips, grown from artificial manure on clayed land,) there were on the farm 306 ewes, 340 hoggets, 100 shearlings; and we bred 352 lambs. Between 1861 and 1862, our loss comprised the following:—5 hoggets, 10 ewes, 3 shearlings, and 3 lambs; total 21 lost, out of 1,098 sheep, including lambs, and not a single case of abortion. But I am happy to say that this "good luck," as it is called, did not end with the occupation of Lord Walsingham. Through the kindness and fairness of our excellent tenant, Mr. Bunting, I am enabled to give you the result of his experience for the past year. He had 300 ewes upon his farm last year, and he had not a single case of abortion; his loss of ewes was only five.* I think that is a certain proof that, under judicious treatment, with proper feeding, the virulence of clayed land may be very much mitigated. But it is right to say upon what principle we went. I don't give it you as a new light; I only give the experience of myself and others. I do not attempt to push it down your throats as an original idea, for I have no doubt it has been borrowed from some other person. We gave only a limited amount of turnips; but a large amount of dry food, and some bran; and to that system I attribute the little loss we had. I hold that upon newly clayed land the evil effects upon breeding animals is produced very much by luxuriance in the growth of the turnips, and by their containing so much matter that is indigestible by the ewe; and when there is no correcting influence, inflammation is produced, and hence abortion.

* It is worthy of remark that Mr. Bunting has lost only one ewe since May, 1863. He has had 350 ewes on the farm since Michaelmas last, and up to this day, (February 17th, 1864,) there has not been a single case of abortion.
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I have now got through the treatment of ewes during pregnancy; and I only trust that I have made myself intelligible upon that point, and given you some facts worthy of your consideration.

I would here call your attention to a matter that requires your serious consideration, and that is with respect to shepherds' dogs. Is it right that they should be allowed to run about where breeding ewes are, frequently disturbing and often alarming them? I believe the evil is often more serious than we are aware of, or would be willing to acknowledge. Some shepherds know how to use dogs, but with them it requires care: but how is it with a careless lazy fellow, having a wild and badly trained dog? And then, again, with feeding or fat sheep, dogs are not required at all. Quietude is what all fattening animals require; and this I am sure they do not get where dogs are prowling about.

The next thing is the treatment of the ewes during the lambing season. This, I think, you will all admit is a very important matter for our consideration; because it is one in which every man who has a flock of ewes must feel great interest.

I believe that to keep them healthy up to the day of lambing you must not limit the supply of dry food. Go on with it: don't be afraid of spending an extra £5 for a ton of bran; for I trust the millers will one day be allowed by the cake-makers to get it down to that price.

One thing has struck me in the large flocks of Norfolk, and that is the little care that appears to be shown, or rather felt to be desirable, for the protection of the lambs. In large flocks the shepherd is frequently over-worked; the lambs are often dropped in very severe weather; there
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is very little protection for them; there may perhaps be 15, or 20, or 30 pens; but there are not pens enough; and I have seen a great many lambs perish from this cause. Now it is of great importance to every flockmaster, whether great or small, to prepare a yard for his ewes. It is not necessary to have them in yards on a mild and fine night; but you should have a good and well sheltered yard, abundantly supplied with pens; and then you can put your flocks in it, if the night becomes a bad one; because I feel quite sure, and I have proved it by my own experience, that any little outlay upon this matter is well repaid by the number of lives of lambs saved.*

Then there is another matter which I put to you who are flockmasters, and which I ask you to be good enough to consider, viz., whether there are not—I will not say through the carelessness, because it is an unkind word to apply to a most useful class of men—but through almost the anxiety of our shepherds, many ewes and lambs perish? Generally, unless the man is experienced and well up to his work, he causes the deaths of many lambs and ewes by injudicious haste. There can be no question whatever that nature is the grandest nurse and the surest doctor; therefore my opinion is, that you should let nature do its own work. When the ewes are lambing, do not be in too much haste. Watch them; but give them time and they will right themselves: and never have recourse to the use of the hand until you see that the ewe

* I have proved that a good yard, with 60 well covered pens, may be put up at a cost of (in the first instance) not exceeding £11, and if properly taken care of, when the lambing season is over, will last for several years. It may be put up again on any part of a farm at a cost of not exceeding £3.
has given up using her own efforts, and appears nearly exhausted.

There is another matter which is no doubt well known; but which to make my subject tolerably perfect it is right to go into, viz., inflammation, which frequently follows lambing. You have seen it scores of times no doubt. After about three days, some of the ewes will begin to strain and droop, showing that a violent inflammation of the uterus is going on. Now our practice has been this, and you are able to judge for yourselves how far our practice is worthy of being followed by the figures I have given you—we have immediately and frequently bathed the ewe with warm water; and afterwards we often have used injections made from poppy heads, as well as a copious supply of Day, Son, and Hewitt's Chemical Extract of Driffield Oils, which I believe to be one of the most valuable farmers' friends yet brought out. After that we give three ounces of Epsom salts, two teaspoonfuls of sweet spirits of nitre, and two teaspoonfuls of laudanum. In many cases this has been successful in saving the life of the ewe.

There is another thing which deserves to be spoken of as it affects not only the health but the life of the ewe, and frequently of the lamb also,—the garget, with which you are too well acquainted. We all know that this is produced by cold. Now our practice has been a very successful one. If it is the black garget, our shepherd, who I am happy to say always does as he is told, lances the udder very freely, applies common salt very copiously, and rubs it well all over the udder. After doing that, he turns the ewe and bleeds her from the large vein running up the centre of the belly, and very
TREATMENT OF EWES DURING PREGNANCY.

freely. He closes the orifice by a pin and a little tow (as you would in the case of a horse), and gives at once half an ounce of jalap, and half an ounce of alum in half a pint of beer. In most cases he is successful, not only in restoring the ewe, but occasionally, though of course very rarely, in retaining the value and perfection of the udder also. You know other gargets are often shown you by the hardness of the udder. In that case we do not scarify the surface of the udder; it is not necessary: we give the ewe medicine, and bleed; but we think it would be highly improper, and would produce no good effect, to scarify the udder.

In speaking on this subject, there is one other matter which will not be out of place, viz., the importance and the value of a good shepherd. A good shepherd is one of the most important servants; a man who, if he is really a good man, deserves greater consideration than any other man employed upon the farm. How much property has that man under his care? How much do we lose if he is a careless shepherd? How much do we save if he is a careful and judicious one? I will not blame the system, but I have often thought that in the annual migration of shepherds there must be something wrong; because it keeps men in a state of not knowing what they are going to do—whether they are going to leave their place, or whether they are to stay. If you get a good shepherd value him, and teach him that his place is worth keeping; pay him well and keep him upon the farm; do not let him, as soon as he knows what to do and what not to do, be moving about and endeavouring to find a better place; but make him feel, that to be a good servant, he must do his duty, and that you will
reward him for doing it. Again, in the lambing season, I think that more is expected of a shepherd than a man can do. A man's strength cannot bear more than a certain amount of labour and want of sleep. Frequently a farmer has only one shepherd, with, perhaps, a page to attend to a large flock of breeding ewes. The shepherd desires to do his duty, but he becomes worn out by sitting up night after night. He cannot attend to the ewes as he ought to do. Many a lamb has perished, not from the fault of the shepherd, but because he had more to do than should have been expected of him.

Management of Lambs, when on the Ewes, and when Weaned.

The next head to discuss is the management of lambs, when on the ewes and when weaned. I know very well the delicacy with which I ought to introduce this subject, because I am speaking in the presence of men of large experience, men who are well able to judge for themselves, and who require but a very few remarks from me upon a matter of this kind; but there is no harm in giving my own experience.

I believe that the first and most important thing to do is to feed the ewes well, so that they can do their duty as mothers, for nothing can be worse, nothing can propagate more disease and more weakness in lambs, than not to keep the ewes well, at a time when they ought to feed their lambs. We have frequently found, after about the third day, the lambs of some mothers are
troubled with a certain kind of diarrhoea. A kind of whitish excrement comes from them, which has a very disagreeable smell. This is clearly produced by undigested milk, which, if not soon removed from the bowels, will produce an amount of irritation that will end in death. We give at once two teaspoonsfuls of castor oil, a teaspoonful of ginger, and one of magnesia; the object being to carry off the irritation, but at the same time to cool and quiet the stomach. If that does not act in the way we desire in staying the diarrhoea, we give ten grains of powdered chalk, half a drachm of tincture of rhubarb, and ten drops of laudanum, which rarely fails to produce the desired result.

I am sure you don't want me to tell you, that the way to grow good lambs is to take good care of your ewes. In the first place, get good layers, and then fold the ewes; give them mangold and cake, and let the lambs run out. Of course the more cake you give the ewes, the more grateful both the ewes and the lambs will be for it.

Then another little thing is tailing the lambs. It is a simple operation, but if performed at an improper season, it often produces very unfavourable results. If a coarse night follows the tailing and cutting, with the wind in the north or the east, the lambs are liable to suffer. Our experience has told us that the best time for this is when the lamb is about two or three weeks old. We of course select a nice warm day, with a south wind, if possible, and we watch them very carefully at night. If we find any getting stiff, or lying about more than they ought to do, we take every means to make their blood circulate freely, and this generally sets them right.
TREATMENT OF HOGGETS.

HOGGETS: THEIR TREATMENT FROM JULY TO MICHAELMAS.

I now come to the sixth heading, which is the treatment of hoggets from July to Michaelmas. It will, perhaps, be unnecessary for me to say that a frequent change of pasture is desirable. We have always found that to give bran with cake has done more towards the growing our hoggets successfully up to the time when we wish them to be put on to the turnips than anything else; in fact, it keeps them healthy. In other things we have bought experience once or twice rather dearly. By too suddenly flushing our hoggets with too much highly stimulating food, we have produced a great amount of fever; but when we have done so, we use a remedy, which has very much corrected it. We give to each the decoction of half an ounce of senna leaves and an ounce of Epsom salts, frequently followed by a second dose in the course of a fortnight. We have rarely failed to carry off the fever, and our hoggets go on satisfactorily afterwards. I believe it also to be very important to dip our lambs in July or August.

I have tried most of the compositions of note which have come under my notice, and I have no hesitation whatever in saying that I have found none so good for ticks or lice, or any other insect that can affect a sheep, as the composition by Allen, of Lynn.

THE TREATMENT OF HOGGETS ON TURNIPS.

Of course we always take great care to give our hoggets turnips on the pastures for some three weeks,
THE TREATMENT OF HOGGETS.

and they have even gone on as long as a month before putting them wholly on turnips; and I have found that they do not then suffer.

I will now give you the experience of myself and others as to hoggets fed upon clayed land. This year we have 220 ewe hoggets feeding upon clayed land, clayed at the rate of something like 100 loads per acre; they are in the same field that they have been in ever since Michaelmas. I state it as a fact, that never since those ewe lambs have been fed on those turnips has one of them ailed anything; and they have very much improved in condition and appearance, and have been very much admired. They have in addition to ground white turnips, half a pound of cake per sheep per day, and we give them a little long hay in racks. I must tell you that the land used to be light-blowing sand, but I hope its blowing is stopped now.

In the feeding of hoggets, I have found another plan, during the last two or three years, to be of the greatest importance—always to give a little chaff with the cake. We have found that it has prevented any tendency to diarrhœa, or running out. I know it was the practice of the late Mr. Jonas Webb to do so. He used to say, "How would you, sir, like to be fed on a piece of roast beef day after day, and no vegetables or bread with it?" He held that the chaff was the bread or vegetables to the cake, and consequently that the animal not only ate it with a relish, but that it acted upon the bowels in staying somewhat the laxative effect of the turnips. In feeding turnips with hoggets or with any sheep, and where the sheep cut their own turnips, it is well known how important it is to give
plenty of hurdle room for the sheep to fall back. It appears as though the sheep have an instinctive knowledge that it is good for them to eat up the old, dry, and withered turnips in the afternoon, to correct the effect the fresh turnips eaten in the morning might have on their bowels.

When hoggets or any fatting sheep are being fed on common turnips, and it is intended to give them swedes, I believe it would save the lives of scores of sheep if graziers made it a rule to cart a few swedes, to be mixed with the common turnips for a week or two before the sheep are put wholly on the swedes. The stomach and system of the animal would then get accustomed to the swedes, and would not feel the change so much, nor be so liable to suffer from indigestion and inflammation, which so often ensue when hoggets are first put on them.

Then, again, I believe it to be of the greatest importance that if swedes have been clamped or ploughed in to protect them from frost, they should be exposed to the air for some time before they are given to the sheep, for I have always found that when they are somewhat withered or dried by exposure, the sheep do much better than when they are given fresh from the heaps, or from the soil. It will probably be said that in frosty weather this would be difficult, which I admit, but the heaps could be uncovered on a fine day, and again covered with straw at night. If the swedes are standing as they grow, I would, in that case, have them pulled several days before they are required. I have always found that swedes and mangold wurzel have more effect on the bladder than common turnips, and are more liable to cause inflammation and stoppage of water when the sheep are in high condition.
I have found that a little quiet gentle exercise, such as driving them round the fold, has a most beneficial effect in preventing this. If done quietly, and at regular times, the animals will soon get accustomed to it and not suffer as regards fattening.

Now there is one matter of interest in this part of my subject, viz., cotton cake. I am not able to give you any information on this subject with respect to hoggets, but from what little experience I have had myself, in giving cotton cake to Down ewes, I have determined never to give another pound of it so long as I have to do with sheep. Its effect upon the sheep was that of a powerful irritant upon the surface of the skin; 17 ewes lost the greater part of the wool off their fore-quarters, and immediately I withdrew the supply of the so-called cotton cake, the irritation ceased. My brother, who has the management of the Duke of Portland's model farm at Clipstone Park, says that his experience tells him, that the same value of linseed cake is far more useful and valuable than cotton cake. The butchers have told him that the mutton produced upon cotton cake is more yellow than that produced from linseed cake, and consequently not so saleable.

I may here mention, when speaking of feeding sheep, that we have found that when some of our animals were being forced rather sharply, they began to show symptoms of crying out "Hold hard," having had enough; we then bled them very severely indeed. I will give you a fact connected with this bleeding, which occurred to me. Within the last fortnight, we had a lot of sheep in such a condition that we were almost frightened. We found one dead; the consequence was that we immediately
bled the others so sharply, that many of them could scarcely stand. The result has been that we have not lost a single sheep since, nor has one of them ailed anything. I believe the cause of death in that one sheep was apoplexy. By copious bleeding we removed the cause, and saved the lives of our valuable sheep.

The next and the last point is a very important matter, viz., as to whether it is most profitable to sell hoggets in or out of their wool. This is a very simple question, and one which comes within the knowledge of every farmer. The answer must depend upon localities and circumstances. If a man has got a lot of sheep which are fairly ripe, which will come out of their wool and handle well, and show plenty of mutton, and that of the right quality, then I say, "By every possible means clip them." But if it is doubtful how your hoggets will come out of their fleeces—if there is something about them that makes a man doubtful whether they are quite up in condition—then I think prudence says, "Don't clip them." We don't want to enter into the mystery of these matters further than this. Feed also will regulate this matter. If a man sees that his hoggets are not quite up to the mark, if he has got plenty of mangold, and can carry them on his layers for a few weeks or months, and make them ripe, it may be advisable to keep them. However, I believe that every farmer is the best judge as
to whether he should sell his sheep in or out of their wool.

I have now gone through the heads of my subject, but in conclusion I would beg to notice one matter connected with successful sheep farming, and that is the disease of the feet. What can be more ruinous to the condition of a sheep, or more disgraceful in the management of a flock, than to see a lot of animals limping about, and many feeding while kneeling? I believe that the treatment of this disease, like many other things, is left too much in the hands of shepherds, who frequently don't know their business. There are few shepherds who will not say they know the "best remedy in the world." The master often willingly enough believes this, and lets them go on in their own prejudiced, and often ignorant way, and thus a kind of "mysterious" treatment is kept in a shepherd's family for generations. If this treatment was looked into, it would be found that it consisted of blue vitriol, oil of vitriol, verdigris, buttyr of antimony, and the like burning ingredients. The usual practice is "cut and burn"—"cut and burn," which frequently checks the development of the disease in one part of the foot, but drives it into another; punishing the poor animal most unnecessarily. I have frequently seen sheep so affected by the burning practice as never to recover from it. Now I determined to adopt a plan for our shepherds to follow, and this has been practised with the greatest success for several years. As soon as a sheep is seen to be lame (if the lameness is not caused by any simple thing easily removed) it is separated from the lot with which it was feeding, and placed so as to be handy for treatment. It is then given 3 oz. of Epsom salts and 1 oz. of sulphur.
WHETHER MOST PROFITABLE TO SELL IN OR OUT OF THE WOOL.

(which dose is repeated in four or five days if necessary) to bring the system into a state for the feet to be cured by local treatment. The affected feet are carefully pared and put into a linseed, or boiled turnip poultice, which is changed every day until it is seen that the disease is forward enough for the "burning remedy," which has seldom to be applied more than twice. By these means the feet are got into a healthy state without so much lowering the system and condition of the animal, and quicker than by the shepherd's usual violent treatment.

The object of a meeting of this kind is to provoke discussion. I trust I have thrown out material enough to answer that purpose; and I also trust no one will have any hesitation in attacking my weak points. I do not pretend to be infallible, and I shall be really glad to hear any objection that may be brought against what I have so imperfectly brought before you.
In *Bell's Weekly Messenger*, of the 25th of January, appeared the following letter:—

TO THE EDITOR.

Sir,—All flockmasters ought to be very thankful to Mr. Woods for his practical address upon the breeding and rearing of sheep. I have not the slightest doubt that a considerable amount of property would be saved if the "treatment of ewes during pregnancy," as recommended by Mr. Woods, was generally adopted. A free discussion, and an attack upon any weak part of the address, is invited by Mr. Woods. Therefore, being a member of the Royal Veterinary College, and also having had some experience with my own ewes, I hope you will allow me to point out what I consider to be the weak part of the address, viz., the "treatment of ewes during the lambing season." There is no doubt that many ewes and lambs are lost by injudicious haste. Nature will do everything (or nearly so) when the lamb is in its proper position; but if you "watch them, give them time to right themselves, and never have recourse to the use of the hand until you see that the ewe has given up using her own efforts, and she becomes exhausted," you are then waiting too long. If the lamb is not in a position for a natural delivery, nature will never right itself, and the efforts of the ewe will make the delivery more difficult. The symptoms of a preternatural labour in the ewe are occasional pains; very often there is no presentation. If this continue for half an hour, examine the ewe. If the head and feet can be felt, let nature alone; if not, the sooner the lamb is put into a position for delivery the better chance there will be for the life of both ewe and lamb. Inflammation of the uterus is a very fatal disease in ewes, and one to which that animal is greatly prone; it becomes us to be guarded against it as much as possible; therefore, in all cases of difficult labour, give, directly after the act is accomplished, ½ oz. laudanum in oatmeal gruel, with treacle added; and never, under any
The treatment of ewes.

circumstances, allow your shepherd to use hot oils, generally containing turpentine, &c. What can be more unreasonable than to apply a hot application to a part already in a state of great irritability? I have not the slightest doubt that the free use of these, "to keep out the cold," has caused the death of many a ewe. In natural, as well as in preternatural labour, give your ewes bran and cut hay, and a cabbage or two for the first thirty-six hours after delivery. By adopting this treatment, I have seldom a case of inflammation of the uterus in my own ewes. The first symptoms of inflammation of the uterus is straining, accompanied with a dejected countenance; give directly, ½ oz. laudanum, and 4 oz. linseed or castor oil, containing ¼ oz. laudanum in oatmeal gruel, with treacle added, every three hours as long as the straining continues. Take from ½ to ¾ pint of blood from the abdominal or jugular veins. Foment the soft part of the body with hot water (first clipping off the wool); directly afterwards apply a hot mustard plaster, and gently introduce with the finger, into the vagina, a small piece of belladonna and pork lard, mixed in equal parts.

Mr. Woods gave some very useful advice upon the treatment of inflammation of the udder, but I cannot understand the utility of alum and jalap combined, being internally administered in such cases; alum, being a restringent, would undo what the jalap is intended to do. In all cases where a strong aperient is necessary (as it is in inflammation of the udder), give from two to three oz. of Epsom salts, and ½ oz. ginger; and where fever is present from ¼ to ½ oz. of sp. nit. ether in gruel. Let me observe, that the doses of medicine recommended I give to my own ewes, which are large Hampshire Downs; therefore they must be varied according to the size and condition of the patient.

The cause of diarrhoea in lambs, and the treatment for it, are very ably explained by Mr. Woods. I know of no better.

I am, Sir, yours obediently,

Bale, Jan. 20th, 1864.

John Hammond.
THE TREATMENT OF EWES.

To this the following answer was sent:—

Sir,—I beg to offer my best thanks to Mr. Hammond for his very courteous and sensible letter printed in the Messenger of the 25th inst.

I am not vain enough of my own knowledge to suppose that I can with any chance of success enter into an argument on the parturition of ewes with a member of that profession, which contains in its ranks many scientific and able men; but "facts are stubborn things," and with these I only dealt in my remarks at Watton. I am sure Mr. Hammond will readily admit that a practice that has proved so eminently successful on a large scale, cannot be a bad one to follow, or dangerous to recommend to others. I most fully agree with Mr. Hammond that *when* it is discovered that a lamb is not in a position for natural delivery, it is well to attend to it and put it right; but practice has told me, and those of far greater experience than myself, that a much longer time than half-an-hour or an hour should be allowed after the first appearance of pain before making an examination with the hand. The parts of the ewe could not by any possible law of nature have adapted themselves in so short a time to admit of its being done without great pain and misery to the animal, nor without considerable risk. I have seen this attempted at an early stage with lamentable results, and on the other hand I have seen the best results follow the plan of waiting a reasonable time, until there was a natural dilatation of the parts before the attempt was made. The practised eye of an observant and intelligent shepherd will tell, in nine cases out of ten, by the working and appearance of the ewe, whether the lamb is properly placed or not. I have seen ewes show symptoms of lambing for twelve or fourteen hours, and these have generally done well and suffered little from after weakness, provided they were in fair condition before lambing.

Mr. Hammond's remarks about not letting shepherds use "hot oils" to ewes after lambing, are well worth the attention of every sheep breeder. The oils I named were "Day, Son, and Hewitt's
THE TREATMENT OF EWES

Chemical Extract of Driffield Oils;" and my experience tells me, that if they are properly used, they certainly do not come under the head of "hot oils." I find them soothing, healing, and possessing no irritating properties. Several years ago I induced the late old shepherd on the Merton Home farm (a man of great experience and strong prejudices) to try them for his ewes, against those he had previously used, which he reluctantly consented to do. Before half his ewes had lambed he desired me to keep a stock on hand, declaring they were better than anything he had ever used before, and that they were worth a guinea a bottle. I have had them used from that time, and our present shepherd—the son of the old man named above—values them as much as his father did.

Mr. Hammond's advice as to giving bran, cut hay, and cabbage for 36 hours after lambing, and the treatment he recommends for inflammation of the uterus, I consider very sound and practical, and well deserving the attention of every flockmaster.

In cases of inflammation of the udder, my object in giving alum with jalap is, that the former shall act as a restringent on the milk (which I have proved it does most effectually), while the latter acts quickly on the bowels. I have tried jalap alone, and Epsom salts with ginger, but I have never found the same marked and rapid effect as I have from a combination of alum and jalap; therefore I adhere to a plan that has proved so thoroughly satisfactory for many years.

In making these remarks, I wish it to be understood that, while giving my own experience, I do not by any means depreciate the general treatment recommended by Mr. Hammond; for although personally unknown to me, I have heard of him as a skilful man in his profession, and as a breeder of some of the best cross-bred lambs in the eastern counties.

I am, Sir, your obedient servant,

Henry Woods.

Merton, Thetford, Jan. 29, 1864.