

616

The
FORMATION OF
PURE BRED FLOCKS
AND
THEIR SUBSEQUENT MANAGEMENT,
BY Alfred Mansell.



6.3
36f



Nº

808



COOPER'S

DIPPING POWDER

Is used on

ONE HALF of the DIPPED FLOCKS

of the Entire World.

**OTHER WORKS PUBLISHED
BY WILLIAM COOPER & NEPHEWS.**

“ SHEEP FARMING,”

A TREATISE ON SHEEP, THEIR MANAGEMENT
AND DISEASES.

163 pages, illustrated. Pronounced by the Press to be the most
popular book on the subject yet published.

PRICE ONE SHILLING.

**“ THE WORLD’S SHEEP FARMING
FOR FIFTY YEARS.”**

PROFUSELY ILLUSTRATED BY FRANK FISHER
AND OTHERS.

This is a memento of the Jubilee of the Firm, and contains a
large number of readable sketches of the history of Sheep
Farming in all countries.

FREE TO FARMERS.

**“ SHEEP DIPPING AND ITS ADVAN-
TAGES TO THE FLOCKMASTER.”**

With a full description of Scab and its proper treatment.

FREE TO FARMERS.

THE
FORMATION
OF
PURE-BRED FLOCKS
AND
THEIR SUBSEQUENT MANAGEMENT.

BY
ALFRED MANSELL.

BERKHAMSTED :
WILLIAM COOPER AND NEPHEWS,
1893.

INTRODUCTION.

IT is not many years since a flock of pure-bred sheep among the average class of farmers was practically unknown. All this is now changed.

The splendid work of Bakewell among the Leicesters has found its counterpart in every other breed, resulting in a higher class of animal, breeding true to type. The urgent necessity which every farmer now feels to get the utmost return from the land of which it is capable, gives added importance to this question, and as a practical sheep-man, with a love of my subject, I have ventured to record the methods which a wide experience has shewn to be associated with success, in the hope that they may point the way to some alleviation of the present difficulties; for the fact should ever be borne in mind that it costs no more to rear a good sheep than a bad one.

My acknowledgments are due to the various gentlemen who have in their replies given particulars of their system of management; to Messrs. Evans, for the details of their sheep-shed; and to Messrs. Wm. Cooper and Nephews, whose interest in all sheep questions is proverbial, for undertaking, at their own cost, to publish and circulate this little production.

ALFRED MANSELL.

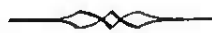
Shrewsbury,

June, 1893.

PURE-BRED SHEEP



FORMATION OF FLOCK AND SUBSEQUENT SUCCESSFUL MANAGEMENT



MAIN FACTORS.

A BREEDER to be successful must be an enthusiast, and take special means to obtain the best information as to the attributes and characteristics of the breed adopted.

THE MOST SUITABLE BREED.

The first consideration is, which breed is the best adapted to the locality and the particular farm where the flock is to be kept, and in arriving at a decision many important points must be looked at, such as the nature of the soil, the quality of the pastures, the climate and altitude, and the breed of sheep most likely to find customers in the district.

Sometimes it will be found a wise course to be the only breeder of a particular breed of sheep in a neighbourhood, and thus escape the severe competition experienced for that particular breed in its great stronghold. This latter consideration is worth more attention than is usually given to it, as a comparatively unknown breeder in a locality where his particular breed is not the breed of the district can generally sell a considerable number of rams at good prices for crossing purposes, whilst a market for the very best can always be found amongst the flockmasters who keep that particular breed.

FOUNDATION OF FLOCK.

Even after having definitely decided which breed to take in hand, it is not wise to be in a hurry. An opportunity should be taken of seeing all the best flocks of the particular breed at

home, and we feel sure all breeders are not only willing, but glad to see anyone on such an errand, and would give him every opportunity of seeing their flocks and accord him a hearty welcome. If any difficulty be experienced in getting the names and addresses of the best breeders we would advise a perusal of the awards at the R.A.S.E. for the last 10 years, and a careful study of the existing flock books of the respective breeds, from which an intelligent reader will be able to gather which flocks are principally resorted to for sires, thus stamping them as flocks of high repute. As sometimes it happens that some of the best flocks are never exhibited, and it is therefore politic to take other means besides those alluded to, to secure the names of these breeders, which no doubt the secretaries of the various societies would readily furnish.

Armed with the names and addresses required, we would recommend a careful look through each flock ; and if not qualified to form an opinion as to their respective merits, the services of an expert whose judgment and integrity may be relied upon, should be secured. Having thus decided which flocks on the whole exhibit the best characteristics of the breed, we would suggest the following course as the one most likely to prove successful.

Instead of buying 5, 10, 15, 20, 30, or 50 ewes from several breeders, and so getting together a homogeneous lot with different character, type, and breeding, we strongly advise selecting the whole from one, two, or three breeders at the most, or where the flock is limited to 80 or 100, two breeders ought to supply the lot ; but of course in cases where big flocks are established more breeders must be resorted to. It will, however, be sound policy to begin with a small flock of undeniable breeding and merit, rather than with a larger one of inferior animals.

By founding a flock with judicious selections from the best breeders the greatest point is achieved, viz., a sure and certain basis upon which to build up a flock of the highest class. Many breeders have never been able to eliminate the results of a bad start with the ewe foundation, despite the fact that they have used high-class rams for many years. The bad points that

existed in the ewes have appeared again and again ; one generation will be free from them, and still they may reappear with vexatious persistence the next. Too much importance cannot be attached to making a correct start.

Probably the reader may say "sound advice," but how is it to be done ? Will breeders sell selected sheep at a reasonable price by private treaty, or is it necessary to attend their annual sales ? Some breeders prefer to sell by private treaty, whilst others prefer to have annual sales. Whether the foundation sheep are bought by private treaty or at the public sales, the right sort must be selected even if an apparently high price has to be paid. We say "apparently," because the best specimens of a breed rarely prove to be dear in the long run, whilst second-rate ewes are not cheap at any price, and are a constant source of disappointment and loss. High individual merit, soundness of constitution, and a thrifty condition in the sheep purchased are points of great importance. Where the pluck and means to buy the best are absent, the idea of establishing a flock of pure-bred sheep should not be entertained, as disappointment would assuredly result.

EAR MARKING.

Every ewe in the flock should have a distinctive number from 1 up to 100, 200, or 500, as the case may be, and her pedigree should be clearly written in a private Flock Book, in which her subsequent mating and breeding can be entered. The metallic ribbon ear tag is the one most to be recommended.

SUBSEQUENT MANAGEMENT

Possessed of the ewes, what is the best course to pursue ? Should attention be given to improving the ewe flock, or should an effort be made to acquire a reputation as a ram breeder by extensive showing ? We unhesitatingly say the first few years should be devoted to improving the ewes, an object which, though equally important, is more easily achieved and far less costly than ram breeding, inasmuch as sires suitable for getting good ewes never command such high figures as those likely to beget high-class rams. Again, once possessed of a good ewe

flock exhibiting uniformity of character and type, the greatest difficulty has been overcome, and, by judicious mating, a long and successful show and sale yard career may be counted upon.

SHEPHERD.

The importance of a good shepherd cannot be over-rated ; not one of those men who can only trim and get up sheep for show, for which he receives wages which many a highly educated clerk would be glad to get ; but a sensible steady man who is fond of his calling and puts his whole energies into his work, one who understands the treatment and feeding of sheep, and who has a general knowledge of their common ailments, and believes that in such matters as Foot-rot, Husk or Hoose, Maggot, &c., prevention is better than cure.

Of late years shepherds have commanded high wages, but if possible it would be better to pay less in wages and more by actual results, even if the payment in the first instance were greater. It practically gives the shepherd a direct interest in his calling, and is really a system of co-operation.

The payments by results might include :—

- (1.) A bounty on each lamb at weaning time.
- (2.) A bonus if he does not lose more than 2 or 3 per cent of ewes in lambing or 4 per cent in the year.
- (3.) A small percentage on the show-yard winnings and on the amount realised in sales during each year.

SELECTION OF SIRE.

Having obtained the ewes on the lines laid down, it would be well to look carefully through the whole flock and endeavour to find out the weak points, as undoubtedly they will be present, however careful the selection has been. In choosing a ram, care should be taken to secure one that is strong in the points where the ewes are weak. Experience has proved that where this course is followed the weak points of the dams are usually much less marked in their offspring, and, if it is persevered in, are in time often entirely got rid of. As the object is first to get a thoroughly good ewe flock the sires should be chosen with that view, and therefore a somewhat

non-masculine ram of good character and type, with as much size and length as possible, is recommended; but of course it is absolutely essential that the ram should possess all the true characteristics of its breed and be practically unassailable, except for a slight inclination to feminine character about its head. By the use of this type of ram for a few years a first-class flock of ewes should be the outcome, and then none but the highest-class rams possessing strong masculine character should be used. It is not so necessary to obtain size in the sire, provided the animal is masculine, and big, so to speak, in his points. Many really small rams have proved themselves remarkable getters both as to quality and size, and it would be an easy matter to trace several Royal Winners which have been sired by, comparatively speaking, small rams. Some breeders recommend that one ram should be selected annually with the object of getting ewes to keep up the flock, and this suggestion is certainly deserving of serious consideration. At any rate it is of primary importance that the ewes should be kept up to a high standard, and this is one way of doing so. As before stated, the size should if possible be secured in the ewe flock, and the stamp or impress through the sire.

Rams from old-established flocks are recommended, as they are undoubtedly the most reliable and the most impressive. This is accounted for, no doubt, by the greater strength of blood, inherited by a long course of careful, and probably close breeding.

When ram lambs are used it is even more desirable to resort to breeders of renown, as lambs from newly formed flocks usually show to better advantage than from old established ones, explained probably by the fact that they possess more vigour, not having been so closely bred as the older flock. For the foregoing reasons, the use of ram lambs cannot in most breeds be too strongly condemned, although in others, notably the Hampshire, the system of using ram lambs appears to answer. In many breeds the adoption of this practice would result in a rapid deterioration of the flock.

LINE TO ADOPT IN THE IMPORTATION OF SIRES.

During the first few years, the selection of sires is not so difficult, provided judgment is used, and adequate means are available ; but afterwards it becomes a matter of grave importance. In the course of time, fresh blood is wanted. What is to be done? Shall a direct cross, so far as blood is concerned, be looked for; or shall line breeding, with a slight outcross, be decided upon? The writer, from such experience as he has had, inclines to the latter opinion, but it is much more easy to decide as to what step to take, than to find the animal suited to our requirements.

Here the difficulty lies ; but on it so much depends, that the enthusiast in the art of breeding, should try his utmost to secure the animal best suited to his flock, and sooner or later, success will follow his efforts.

Lastly—do not be in a hurry to dispose of the rams in service until they have been really proved, as sometimes lambs with little promise develope into grand sheep, and perhaps in the meantime their sire has been passed on, or handed over to the butcher. Success in breeding is so largely dependent on the sire, that extraordinary means should be taken to secure the best, and when once this has been obtained and proved, it should be made extensive use of.



MANAGEMENT OF FLOCK.



DATE FOR PUTTING RAM TO EWES.

One of the chief points to be considered before putting the ewes to the rams is, when will the farm be able to keep the lambs growing and thriving, without a check? In a pedigree flock, it is desirable to have the lambs as early in the year as possible; because, for showing purposes, an early-dropped lamb has a considerable advantage over a March or April lamb. At the same time it is of equal importance that lambs should suffer no check, but continue to thrive during their whole career, if successful results are to be obtained. If the Spring keep is likely to be short, and the farm rather cold and exposed, it might be advisable to put a limited number of the ewes to the ram early, so that lambs for showing purposes may be secured, and to put the bulk of the ewes to the ram at a somewhat later date. If this course be adopted, the ewes most likely to breed well should be selected for the purpose.

MATING.

All the rams for service should be branded in pitch with a distinctive number—say 1 to 10, or any smaller or greater number according to the rams in service—and their breeding, &c., entered against that number. The ear tags of each ewe drawn to No. 1 ram should be entered in a small memo. book; and so on until the respective numbers of each ewe are taken, with the number of the ram each is served by.

If any changes are subsequently made, a note must be taken of the same, and at the end of the season when the ewes are all served, the mating can be entered up in the private flock book.

The utmost care should be given to mating, because it is rarely, if ever, that we get perfection in any one animal, and it is only

by judiciously mating a ewe which is deficient in some points, with a sire strongly developed in those particular points, that we can hope to arrive at approximate perfection; if both sire and dam are deficient in the same points, they will only be accentuated in the offspring.

If possible, in mating, profit by experience; that is to say, call to mind or actually see the result of previous mating. This is such a complex question that the best of judges are deceived; and some of the best stock in the Kingdom has been bred from animals that might easily have been passed over by experienced judges in the show-yard.

Again, it is often the case that an undersized ewe or other female produces large-framed stock.

When the ewes are first put to the ram, flushing, (*i.e.*, placing them on a fresh pasture), or folding on rape, mustard, or kale, is considered a good practice, usually resulting in an early and prolific crop of lambs.

It is sometimes dangerous to give a sudden change, and so care should be exercised for the first few days, and the ewes only allowed to remain some three or four hours on the green fold. This will minimise, and eventually overcome the danger. If any of the ewes are very low in condition, they should, if possible, be treated more liberally than the rest of the flock. The great point for success in breeding is to have both the ewes and rams in a healthy and thriving condition, and to get as small a percentage of barren ewes as possible. Ewes must not be too fat or too lean, but of the two extremes the latter is preferable.

As to whether a ram should be allowed to run with the ewes or the latter should be hand-ridden, and a teaser used, one must be guided by circumstances. If the ram has been prepared for show, is excessively fat or inactive, or a valuable one, a teaser would undoubtedly be desirable, as the ram with this help would serve many more ewes, and probably much more effectually, than if allowed to do all the work in the field. In reference to the teaser—a good-looking one should always be used, as several authentic cases can be quoted, where bad results have followed the use of an ugly ram for this purpose.

A ram, as a rule, should not be used extensively the first year—that is, until his lambs have been seen—because should he prove a bad getter the flock would suffer greatly; and secondly, after seeing what his first get develop into, it is an easier matter to draw ewes likely to nick well with him the next season. There are exceptions to all rules, and in the case of a very superior ram from a flock which can be thoroughly trusted, a deep dip may be made the first season with an almost absolute certainty that good will result.

TREATMENT OF SHOW EWES.

DOUBTFUL BREEDERS.

As soon as the Agricultural Societies' meetings are over the best course is to turn the show ewes out, at first for a few hours in the cool of the day, and then later on they can be left out altogether. Possibly before turning out some gentle aperient medicine might be given with benefit, and this with exercise obtained in the field and the different food usually brings them into a breeding state. Of course, if the ewes are housed until all the Summer Shows are over, the probability is they will not breed.

Should these fat ewes and others perhaps with patchy rumps turn several times, a ram lamb must be resorted to as a last resource.

TREATMENT OF IN-LAMB EWES.

During the period the ewes are with the ram it is desirable to keep them in as thriving a condition as possible, but for a month or two afterwards sound old pastures or second year's seeds provide all that is required, and as winter approaches a few roots may be given daily with a little hay, either in racks where no crushing would result, or else in small heaps on the field.

Some month or six weeks before lambing, a little trough food is sound economy, as the lambs are much healthier and the ewes much stronger and less likely to succumb to a difficult lambing time. The best linseed cake is an excellent food, so also is a mixture of boiled linseed, crushed oats and bran, with pulp and cut stuff. In practice this strengthening and emollient mixture

greatly assists a safe and easy parturition. It is of great importance that no crushing should take place at the troughs, therefore ample trough accommodation must be provided.

By a simple process of marking with paint, say on the left or right hip, the ewes which are to lamb first, and continuing different markings for each succeeding period the shepherd will be able so to arrange it as never to crowd the lambing fold, and so minimise this risk of abortion.

The first batch of ewes to lamb should be placed in a small field as near the lambing fold as possible, which should consist of an enclosure of hurdles, with pens on two or more sides of the same, well stuffed with straw, and thatched or covered with hedge brushing, or any other rubbish easy to hand. Arrange the fold so as to be open to the South, and protect as much as possible against North and East winds. A barrel with a hinged lid, with some nice dry hay in it, is a capital place to put a sick or weakly lamb in, and is really much more effective than placing it in a warm room, or near a fire.

TREATMENT AND FEEDING OF EWES AND LAMBS.

It is of great importance to get the ewes and lambs from the fold as soon as possible (except in cases where lambs are very weak, and these must have special care), because sheep, and especially highly-bred ones, will not stand confinement. The twin ewes and lambs should of course have the best pastures, but at the same time the single lambs must not be allowed to suffer. In the case of twins, the ewes can be put on generous diet, as there will be no fear of their getting too fat, and so far as artificial food is concerned, nothing beats a mixture of beans or, peas in small quantities, malt-dust, malt, good linseed cake, crushed oats and bran; or, to save trouble, a prepared lamb food, which meets every requirement. If any of the permanent pastures are really fresh, we would recommend these for the first few days, because, should the seeds get bare and a change to old pastures becomes absolutely necessary, both lambs and ewes generally fall back, whereas by depasturing the old turf first and following with the seeds, an improvement is rapidly seen, as the ewes milk

better. A few swedes, cabbage, or mangolds, and good clover-hay in racks is of great assistance, and keeps up the flow of milk, so essential to the well-being of the lambs. In the case of the ewes with single lambs it is advisable, if possible, to let the lambs run forward on to green rye, kale cabbage, or even to young seeds, where the corn troughs can be placed. This is easily accomplished with lamb hurdles, and prevents the ewes getting too fat for breeding purposes. If it can be spared, a little good clover-hay in racks may however be given them. As much change of pasture as possible is recommended, and if that they are taken to is not so good as the one they have left, they should be assisted with an increased supply of roots or other succulent food. A change apparently for the worse sometimes proves better than no change at all.

LAMB SHELTERS, &c.

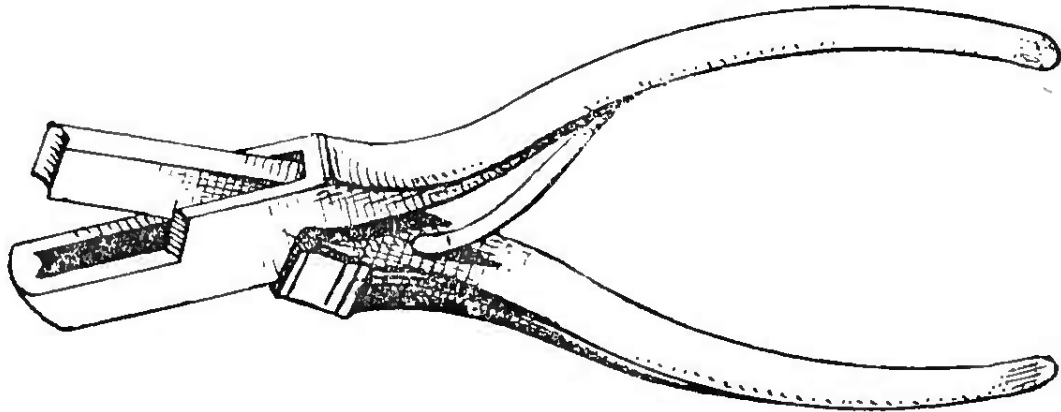
A circular enclosure of flake hurdles, with a lamb hurdle open to the South, affords capital protection for lambs from the cold North and East winds; so also do treacle, sugar, or other large barrels with one end knocked out, placed about the field and open to a warm quarter. These barrels can easily be turned daily against the wind, and lambs will make extensive use of them. Warmth to a young animal is equal to so much food. Heaps of soil or rubbish, with one or more loads of fresh lime spread over them, may be advantageously placed in each field for the lambs to gambol about on, and the lime will be found to prevent the same becoming unduly tainted and unhealthy.

A CAUTION TO SHEPHERDS.

It is often the practice to burl the ewe, *i.e.*, cut away the wool on the inside thighs and round the tail, and trim the wool round the udder before sending the ewes to a distant field. It no doubt is right in theory, but practical men say it is wrong, for should cold East winds prevail gargetted udders will be the result with the loss of several ewes. Just take away any quite loose wool near the teats, which may possibly get into the lamb's mouth and so cause death by swallowing, but do not interfere with Nature's protection to the udder.

MARKING THE LAMBS.

When the lambs are a few days old—say at the end of every week, all the new comers should be ear-marked with a fine pointed nipper, (*vide engraving*).



This is very simple, and answers all purposes until such as are passed into the breeding flock have the metallic ear-tags inserted. It is best to commence with the No. 1 in both sexes. These numbers should be entered in a small memorandum book, and from that copied into the private flock book.



Where the figure required is above five, two cuts are made; e.g., for 8—cut 5 and 3; and the same on the other ear, for 90—50 and 40, and so on.

CASTRATION OF LAMBS.

This in the case of a pedigree flock is not recommended, as lambs alter so much, that possibly one of the best may be sacrificed to the butcher, whereas, if the ram lambs are kept in a thriving condition throughout the Summer and Autumn, the selection can then be safely made, and some two months' extra pushing will make the culls ready for the butcher.

DIPPING.

As soon as practicable—say, when the ewes are shorn and before they are weaned—all the lambs should be dipped. The object of dipping is the destruction of parasites in the fleece of the sheep, killing the young insects as they hatch, and preventing re-infection.

Experience has taught us that sheep thrive much better when their skins are clean, and it has been clearly proved that a good dip increases the quantity and improves the quality of the wool.

Hence most leading flock-masters dip twice in the season, once as indicated, and again in the autumn. The modes of dipping are various. For ordinary flocks the hand-bath is in general use. The swim-bath is by far the best when flocks are large enough for its adoption, as this system is much less trouble, saves labour and expense, and the dip is far more effectual.

As to the kind of dip opinions differ. If it is required to preserve the flock from fresh attack—surely a matter of paramount importance—a “poisonous” dip must be selected, and amongst these the name of Cooper’s is of course supreme, as it is most carefully prepared by qualified men of large experience, whose sole aim during the last fifty years has been to produce a first-class Dip.

WEANING.

This must depend on the particular breed of sheep and the locality, and the breeder must be guided by circumstances, but it is important to put the lambs when weaned on a good pasture. Early weaning is in most cases to be recommended for the following reasons:—Keep is usually scarce at this season, and this affords an opportunity of giving the lambs the best pastures and putting all the ewes into one field instead of being all about the farm robbing the lambs. As a matter of fact, ewes after weaning should have a poor pasture. In some districts weaning is so late that aftermath clovers are available, but in the majority of cases this will not be so, and if cabbage, mustard, or other green crop be to hand, so much the better, as the object is to minimise the loss of the milk as much as possible. A little corn should be given, but it must not be of a heating or too stimulating a nature; probably nothing for safety surpasses extra good linseed cake with crushed oats and bran. The lambs must be divided according to sex; and should, as soon as vetches, common turnips, and mustard, can be got in succession, be put on the arable land and pushed forward in a healthy natural way, thus avoiding an undue proportion of artificial food. As

the harvest is cleared the young seeds afford a good change for the lambs, from which they should be removed at night to the arable land. Close folding, if possible, should be avoided, as it tends to fatten and not to develop muscle and strength, which should be the object in a breeding flock. By this is meant that the hurdles should not follow close upon the sheep, but that they should be allowed to roam at large over the field.

HUSK OR HOOSE.

Prevention is better than cure, and to endeavour to secure immunity from this most fatal complaint, it is an excellent plan to drench the whole of the lambs once, or, better still, twice, with one of the well-known patent remedies, or with the following which costs less and is to all intents and purposes as good, viz:—

$\frac{1}{8}$ oz. Asafetida,
 $\frac{1}{8}$ oz. Turpentine,
 $\frac{3}{8}$ oz. Linseed Oil,

given in half a gill of milk or thin gruel two days consecutively upon an empty stomach.

SHOULD LAMBS BE SHORN OR NOT.

Most breeders recommend shearing as giving greater immunity from the fly in summer, and also in preventing the clinging of the soil to the belly when on turnips, but it should not take place until June, or the lambs may suffer a severe check from the exposure to cold.

SELECTING SHEEP FOR AGRICULTURAL SHOWS.

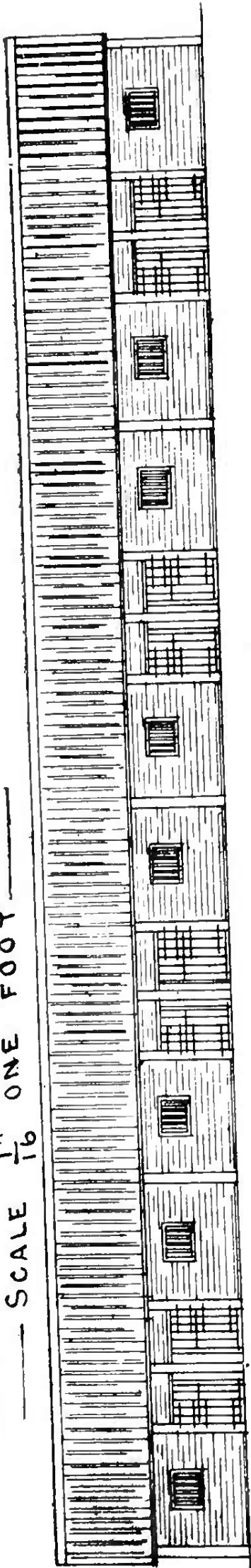


At the end of October, or early in November, some 10 or 12 ram lambs, and about the same number of ewe lambs (if required), should be selected with a view of pushing them a little more than the rest, for exhibition purposes. This requires a great amount of care and discrimination on the part of the breeder. In the first place, we would recommend that double the required number be drawn out, the lambs from ewes which have previously bred exceptionally well, being specially noted. After this they must all undergo a careful scrutiny, and all that have defects which would bar their winning, must be discarded at once, as it would only be time and trouble thrown away to prepare and feed for show an animal that could not be successful. What is a defect which cannot be passed over in a show ring must be left to the judgment of the breeder, but it is quite clear to any observant person that many breeders never exhibit their best sheep. They either do not take the care in selecting that they should do ; or, what perhaps is very probable, they delegate the same to the bailiff or shepherd.

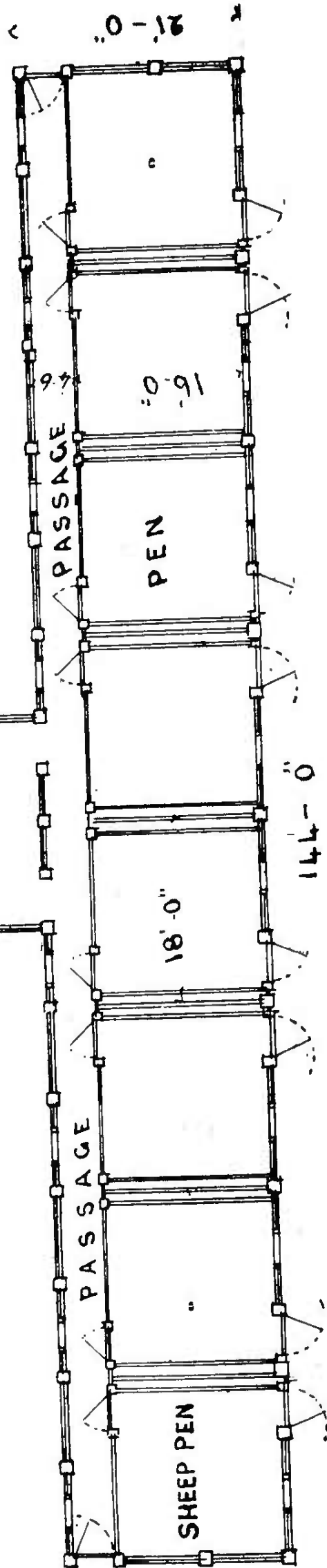
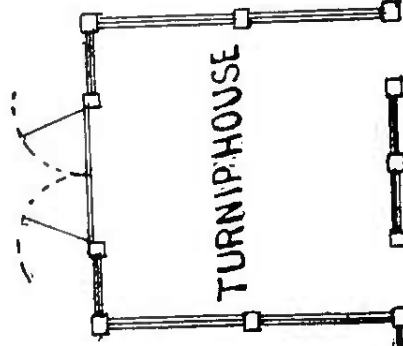
The young sheep intended for exhibition should be allowed to run out daily until about March, on an old turf for preference, and at night should be housed. They should also receive a liberal allowance of such succulent food as the farm will allow, such as turnips, kale, cabbage ; with $\frac{1}{2}$ lb. to 1 lb. of artificial food, consisting of crushed oats, best linseed cake, bran, and as much good clover-hay as they will consume. Beans, peas, lentils, or any other highly nitrogenous food is not considered desirable, as it heats the body and tends to produce gouty acids and derange the system, and if given in

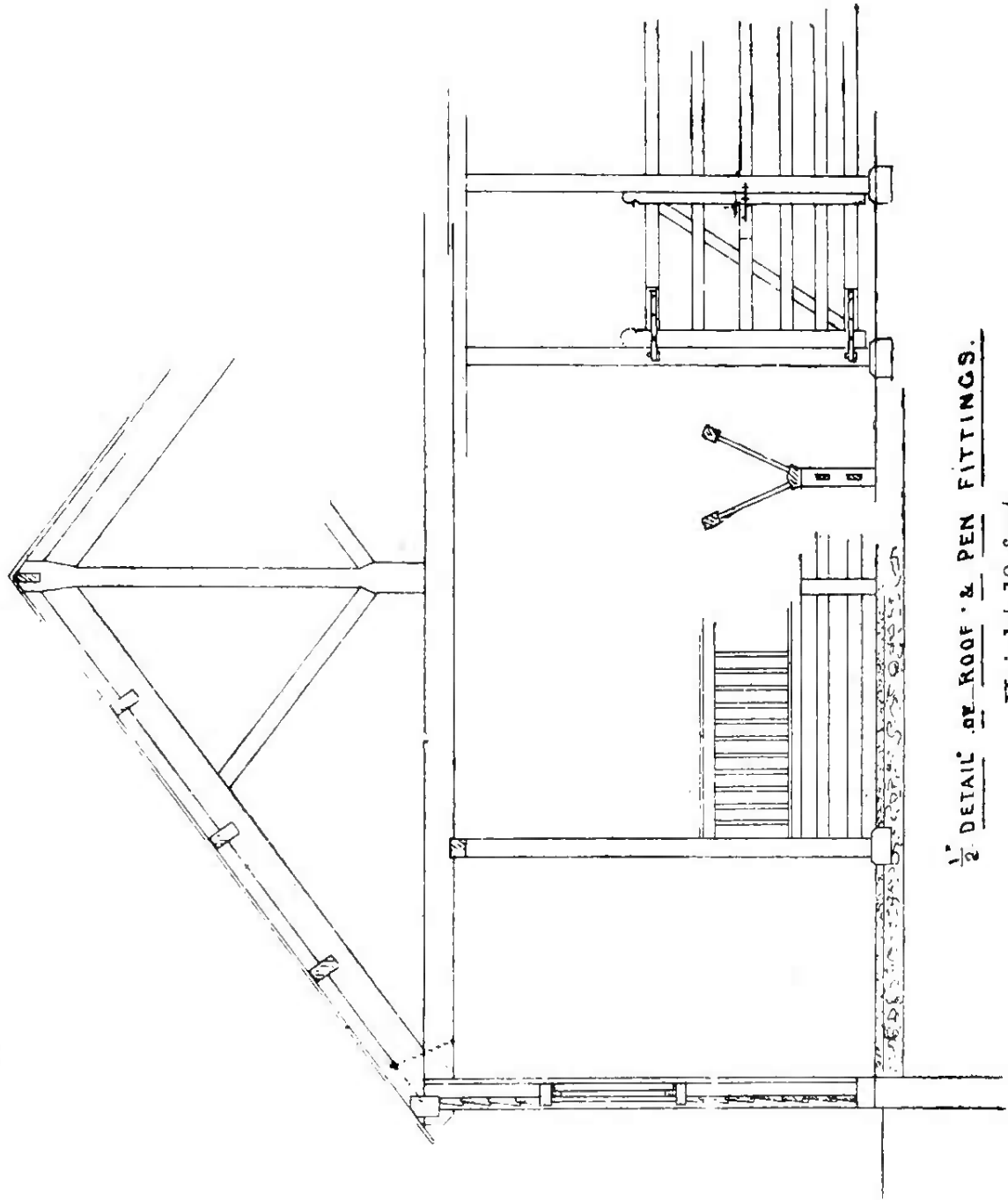
SHEEP SHED

SCALE 1" = 16'



SOUTH ELEVATION





1/2 DETAIL OF ROOF & PEN FITTINGS.

Height 18 feet.

excess, it will soon be seen in ricketty legs and a shrunken appearance of the barrel. A small quantity of malt is sometimes used, but it must be given with great care, and it is perhaps best left out of the dietary of breeding animals. One of the difficulties to be overcome is to impress upon the shepherd the fact that sheep grow and thrive better upon plenty of green food, and good clover or sanfoin hay, with a moderate allowance of corn, than with corn *ad lib* and a short supply of nature's own food. How many breeders have had a good pen of ewes or a valuable ram completely ruined by the injudicious use of too much trough food! The most successful feeders of show sheep are invariably warm advocates for a variety of green food, using, comparatively speaking, little else. All young or inexperienced shepherds make this grand mistake, and the watchful eye of the master should be ever on the alert to counteract the tendency of the shepherd to use too freely of artificials.

As soon as April comes in, the yearling sheep intended for exhibition should be shorn; but in the case of older sheep, it is advisable to postpone it somewhat (at any rate, in the case of Down breeds), as it is too early to house aged sheep, and they could not stand the inclement weather usually prevailing at this period of the year. On no account wash the sheep intended for exhibition before shearing, as it may at such an early period cause death by chill.

The young sheep should, after shearing, have their feet carefully looked to and pared, and again undergo a close examination with a view of finding if there are any that are too faulty to push on for show; and if they all pass muster, they must be divided into small lots and pushed on (with judgment) as rapidly as possible, as the summer meetings will soon be here and no time must be lost. The best rams should not be put more than two together,—they are still better alone, and the ewes say in two lots. Sheep thrive and do better in small lots, and in the case of rams it is absolutely essential to divide them as much as circumstances will allow.

The sheep shed (*vide* engraving) should be placed on a dry spot, and a good system of drainage is as essential. In erecting the same, the floor of each pen may be gently sloped so as to drain

away any excess of urine, and so keep the shed dry, and minimise the tendency to foot-rot. It will be observed that the turnip house is placed in the centre of the shed, and the sheep can be fed right and left by means of the gangway. In practice, it will not be found advisable to put the show ewes and rams in the same shed; and generally, another building may be so arranged as to accommodate the ewes.

Exercise is, however, essential, even after the sheep have been shorn and housed, and the shepherd should be made to understand that the chances of success are greater if the sheep have a little gentle exercise daily. It keeps them well on their legs, giving them increased appetite, and promotes health, which results in a thrifty growth and firmness of flesh not to be seen in the ungainly obese creatures often sent for exhibition. Exercising the show animals is pleasant occupation for the proprietor, and if he be accompanied occasionally by a friend so much the better, as the animals get used to strangers, and become docile and quiet. In some cases, the master rarely goes near his sheep, and when he does do so a few days before the commencement of the show season, he is rather annoyed at finding them scared and frightened as soon as he presents himself. The most successful men the writer has been brought in contact with, play and fiddle with their animals and notice their daily growth, and if they are not doing as they would wish, change the diet somewhat, or perhaps administer some corrective medicine.

SHOW SHEEP IN APRIL, MAY, JUNE, &c.

Roots have become scarce by now, but there is generally a fair supply of mangolds, and these should be mellowed by exposure to the sun. Mangolds may be safely given to the feeding ewes, but with rams there is considerable danger if the weather is very cold, and if the mangolds have not been well mellowed they are apt to produce the water complaint. So many valuable sheep have, indeed, been lost by their use, that many breeders discard them for their best sheep, and substitute a hardy white Swede (a native of the Cotswold Hills), supplemented with an early cut of rye, grass, and clover (pushed on with nitrate of soda), kale,

winter vetches, cabbage, rye, &c., &c. The great aim should be to get a succession of green crops to follow; and though undoubtedly they are costly to secure, it is of paramount importance that there be no stint, as animals feeding for exhibition should not suffer a check.

PREPARING LAMBS FOR SHOW.

These should be chosen with care, examining each lamb minutely as to wool, skin, and other points characteristic of the breed; and, as a rule, early well-grown lambs have much the best chance. Let the lambs selected be dipped at once, repeating the operation a month or six weeks later; give them as much room as possible on land which has not been fed with sheep, housing them at night, and supplying them with green food, and about $\frac{1}{2}$ lb. of linseed cake, oats, and bran, mixed, (no beans or peas); and as the year advances, house in the heat and glare of the day, and allow them recourse to a field for a few hours in the evening. As the show-time approaches, it may, perhaps, be advisable to trough feed entirely and only allow them out for the sake of exercise, as they are apt to fall away when from home, if not so treated, and unaccustomed to confinement. Attention should from time to time be given to the lambs' feet, for should foot-rot ensue they rapidly lose both flesh and bloom.

BEFORE THE SHOW.

Having brought the sheep of the respective classes to as near perfection as possible as regards growth and condition, much will still depend upon the way in which they are placed before the judges, and here the skilful master, bailiff, or shepherd has the advantage of the tyro. Every care should be taken in matching the ewes and lambs for each pen, as often a prize is thrown away by putting together animals of different sizes and types: and in the case of rams, those which handle well and are in the pink of condition, may perhaps run a better race than much superior animals not so forward.

Again, it would be bad policy to send the best animals away from home the week or so preceding the Royal or other important meetings, where the breed musters in great numbers

and the prizes are more valued. Such a step would be placing the sheep at a disadvantage, as they would undoubtedly lose much of their bloom.

ADVICE AS TO SELECTION.

If the exhibitor feels convinced he cannot show to win, he should not select the biggest to represent him, but rather those which are the truest to character and type and likely to attract the attention of breeders, because by so doing he will probably ensure their attendance at his sale, with perhaps more remunerative results than the mere money value of a prize. Undoubtedly many men have injured their reputation by exhibiting animals not true to character, when perhaps their flock in its entirety was a very good one.

TREATMENT OF THE MAIN PORTION OF THE YOUNG SHEEP.

The young rams and ewes not for exhibition should be kept on turnips, kale, &c., on the arable land until wanted for barley sowing (folded, or otherwise, according to the nature of the farm), and then on turf or seeds until about May, when it is desirable to shear them, as well as any two-shear rams it is intended to exhibit ; and should the weather be very cold it is better to house them entirely for a few days, until they get less liable to contract a chill. Mangolds are apt to cause mischief in freshly shorn animals unless the weather is warm, so perhaps it is safer to leave them out of the dietary for a short time.

Such of the older rams as are to be exhibited must be placed under the same conditions as the other show animals ; but for the majority of the rams, it is better to allow them, say in May and early June, to spend the day time in the field, and afterwards to remain out at night as well, housing in the day if the weather is very hot. This treatment tends to growth and muscular strength instead of fat, and rams brought up in this way usually prove prolific sires.

Some month or six weeks before the annual sale, the rams may be housed, without in any way detracting from their value, but even then, exercise should be given.

The shearling ewes for sale should be placed on as good a pasture as the farm affords, and treated in such a manner as to promote a swelling of the frame rather than a making of flesh; for this purpose, green foods—such as vetches, rape, cabbage, with a small addition of corn some six weeks before selling is the best.

PREPARING FOR SALE.

The cull rams should have gone to the butcher early in January; and now, mid-May or so, a further batch must go. It is far better to keep for the sale none but good animals, because 30, 40, 50, or more really first-class sheep will make as much, or more, than double the number of indifferent ones, and this weeding out of the weak ones will help to keep the demand on a level with supply. Thus, in addition to securing better prices, the breeder will put the money realised by the drafts into his pocket some three months earlier than if they had been kept for stock purposes. Again, if only the best are sold as sires, the results obtained by their use redounds to the credit of the breeder, and he soon reaps the benefit of the course adopted, by the increased demand for his rams.

If breeders would well consider this, gluts would rarely occur, and the sheep stock of the county would be much improved.

The same treatment should be adopted with the ewes, and no ewe should be sold with a pedigree unless she is passable and likely to breed well. It must be suicidal to a breeder to disseminate animals that will not do him credit; and it is far better to sacrifice a few at butchers' prices than to secure a few shillings extra by allowing cull sheep to be sold for breeding purposes. If the ewes are sold in pens, carefully draw them to match, and do not marry one or two of the inferior ones with some of the best of the flock. This would probably be the means of losing a good customer for the best.

MANAGEMENT OF BREEDING FLOCK, AND DRAFTING.

The lambs from each ewe should be carefully noted by the shepherd (and master if practicable), so that when the drafting comes (usually June or July), it can be seen which ewes are

breeding satisfactorily, and what class of ram suits them best; because, possibly, some of the most promising lambs may be the offspring of ewes that would otherwise be discarded. In a pedigree flock, a system of drafting at a certain age cannot be followed with advantage, for in some cases it is wise to keep a ewe—a good ram breeder—as long as she will continue to breed, while others which produce nothing good as yearlings or two-shears may safely be put aside.

As to the number of ewes which should be drafted annually, one must be guided by circumstances. Should the young ewes be exceptionally good, and by one or more sires which you have a high opinion of, it will be politic to draft from the breeding flock more largely than usual. If on the other hand, the shearling ewes are not to your liking, it may be well to add none to the breeding flock, and dispose of the young ewes in their entirety, when they usually sell exceptionally well. These matters must be left to the judgment of the breeder, but all such details are of great importance, and whether they receive due attention or not, means success or failure.

SELECTION OF SHEARLING EWES TO ADD TO FLOCK.

The selection of the shearling ewes to add to the flock is a matter of great importance, and every breeder who is wise will not fail to give it his personal attention. To begin with, we would recommend that the selection should be made in the first instance before shearing, when one has a better opportunity of judging of the quality and staple of the fleece, and then, finally, the selected ones should be carefully examined a month or so after shearing, when probably, some which had a pleasing appearance and looked well-developed, deep-grown sheep in the wool may strip somewhat ugly in feature, and prove leggy and shallow. Of course, more ewes must be marked than are actually wanted, and it will also be well to look carefully through the discarded ones to see that no really good animal has been rejected. The marking is easily done with a touch of paint, and each sheep can be re-marked as soon as it is shorn. Appearance and exemption from defects must not be the sole guide in selection,

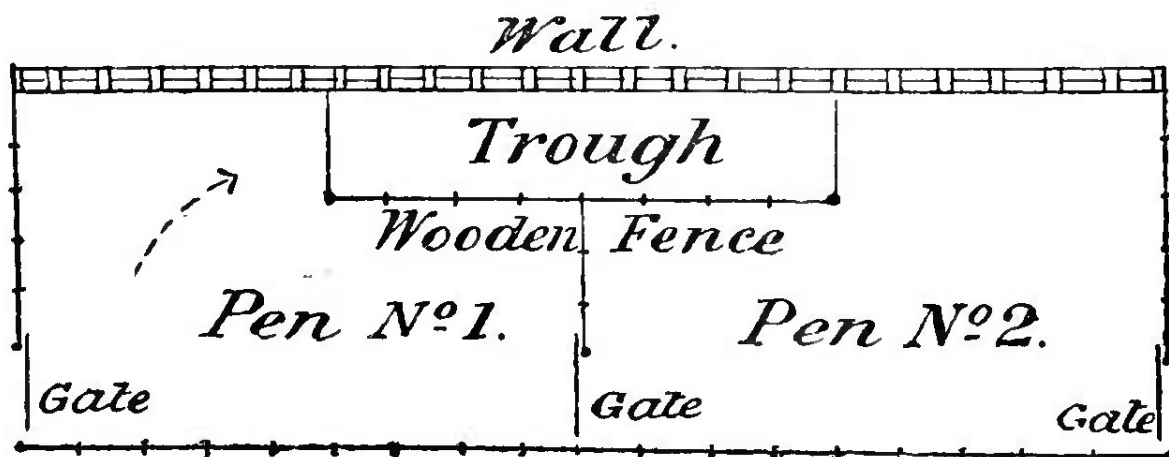
as ewes from well-known good breeders should always be retained, unless there is some cogent reason to the contrary.

FOOT-ROT AND ITS PREVENTION.

No flock can thrive where this is present, and as undoubtedly it is contagious, it is wise to submit all bought sheep (which should be few), to a thorough disinfecting before being allowed to mix with the general flock.

The plan adopted by Mr. David Buttar, of Corston, Coupar Angus, Forfar, N.B., for dealing with foot-rot, and strongly recommended, is as follows :—

“Pass the whole flock twice during the year through a solution of arsenic, which is thus prepared :—Boil 2 lb. of arsenic with 2 lb. of potash (pearl ash), in 1 gallon of water over a *slow* fire for half-an-hour. Keep stirring, and at any signs of boiling over pour in a little cold water; then add 5 gallons of cold water. Put this solution to the depth of 1 in to 1½ in. (just sufficient to cover the hoofs of the sheep), in a strong, well-made, water-tight trough 12 ft. long by 18 in. wide, and about 6 in. deep, with narrow strips of wood nailed across the bottom to prevent the sheep from slipping. The trough must be set and fixed perfectly level alongside a wall or other fence in some out-of-the-way place. It should be provided with a good water-proof lid, secured by a padlock, so as to prevent the possibility of danger from any poison which might be left in the trough. There should also be a wooden fence on the other side of the trough, extended somewhat at the entrance end, to guide the sheep into it, as indicated in the diagram.



Before the sheep are driven through the trough, their feet should be well pared ; then walk them gently through and let them remain in Pen No. 2 for half-an hour or so before taking them back to their pasture.

If sheep are badly attacked, we would recommend drawing out all the affected ones and passing them through the trough a second time, after remaining for half-an-hour in the pen. Should this not cure them, repeat the process in a fortnight or three weeks time.

Having got free from foot-rot, the passing of the flock through the solution twice a-year will completely prevent any new attack.

Before adopting this plan my sheep were scarcely ever free from the disease. Now I have not a single case, and I have had none since I first resorted to the practice in 1885."

Mr. R. E. Turnbull used the following recipe for the extensive flocks of the Earl of Carlisle's home farm :—

Dissolve 1 lb. of arsenic, 3 lbs. washing soda, and 1 pint of pure carbolic acid, in 12 gallons of water.

Have a trough—say 16 ft. long, 10 in. wide at the bottom, 14 in. wide at the top, 1 ft. in depth. Place the trough alongside a wall, and fix hurdles on the side of the trough opposite the wall. Make a pen at one end of the trough in which to collect the sheep to be treated. See that the sheep walk slowly through the trough, and let them pass through twice a-week till cured.

A simple and effective remedy is to walk the sheep through a trough containing a solution of Cooper's Dipping Powder, one packet to two gallons of water.

MAGGOTS.

The old adage "prevention is better than cure," applies with special force to this, in many cases, the shepherd's most troublesome enemy. If you can only make the fleece distasteful to the fly you will have no maggots.

A general summer dipping a month after shearing will practically free the flock from attack for the rest of the season. Of course, wounds and abrasures, and wet or manure-stained places

on the hinder parts will lay the animal open to risk, but such can be readily attended to.

Where this dipping has been neglected, animals struck with maggots should in the early stage be dipped with Cooper's Dip. If the maggots are very bad they should be removed by hand, and the affected parts dressed with a mixture of carbolic acid one part, water thirty parts.

The concluding pages contain the opinions of some of our leading sheep-breeders on many questions vital to the farmer. There is of necessity great difference of opinion upon details of management, but much of this is explained by the varied conditions under which the several breeds of sheep are reared.



REPLIES TO QUESTIONS from the following Breeders :—

Name of Flockmaster.	Index Letter	Address.	Breed of Sheep kept.
D. Buttar	A.	Corston, Coupar Angus N.B.	Shropshire Sheep
J. E. Farmer	B.	Felton, Ludlow	Ditto
Alfred Tanner	C.	Shrwardine, Montford Bridge, Shrewsbury	Ditto
A Shropshire Breeder	D.	Shropshire	Ditto
A Shropshire Breeder	E.	Ireland	Ditto
A Breeder of Black-faced Sheep	F.	Scotland	Scotch Black-faced Sheep
Jacob Robson	G.	Byrness, Otterburn	Cheviot Sheep
John Robson	H.	Newton, Bellingham	Ditto
R. Garne	I.	Aldsworth Northleach, Gloucestershire	Cotswolds
Henry Mayo	J.	Dorchester	Dorset Horns
W Newton	K.	Crowmarsh Battle, Wallingford	Hampshire Sheep
George Harrison	L.	Underpark Lealholm Grosmont, Yorks.	Leicesters
T. H. Hutchinson	M.	Manor House, Catterwick	Ditto
Chas. Smith, (<i>Factor to the Rt. Hon. A. J. Balfour, M.P.</i>)	N.	Whittingham, Prestonkink	Border Leicesters
Thomas Clark	O.	Oldhamstocks, Cockburnspath, N.B.	Ditto
James Dean, (<i>Agent for His Grace the Duke of Buccleugh, K.T.</i>)	P.	Dalkeith Park, Dalkeith, N.B.	Ditto
H. Dudding	Q.	Riby Grange, Stollingborough	Lincoln Longwool
John Treadwell	R.	Upper Winchedon, Aylesbury	Oxfords
E. Ellis	S.	Summersbury, Shalford, Guildford	Southdowns
T. J. Other	T.	Howgrave, Ripon	Wensleydale
C. Howatson	U.	Glenbuck, N.B.	Black-faced Scotch

No. 1 QUESTION.—*When do you put your ewes to the ram?*

- A. October 1st.
- B. About last week in September.
- C. Second week in September.
- D. The beginning of September.
- E. About the 20th of September.
- F. About the 6th of November.
- G. Generally the 21st of November.
- H. November the 22nd.
- I. August, September, and October.
- J. The rams are put in the first week in July.
- K. On the 7th of August.
- L. About the first week in October.
- M. First week in October.
- N. Beginning of October.
- O. 1st of October.
- P. First week of October
- Q. 1st of September.
- R. Usually about the last week in August. This year it was September 9th, on account of the short hay crop.
- S. Turn in 14th of August, but few came into service for a month.
- T. In September.
- U. Second week November.

No. 2 QUESTION.—*Do you put your show ewes (if any) to the ram at the same time as the general flock, and in all other respects treat them alike?*

- A. Yes.
 B. When I have any I put them late and keep them better.
 C. Yes.
 D. Yes.
 E. Same time as general flock, but show more kindness to them during winter months than the others.
 F. About three weeks earlier, but treat them all alike.
 G. The show ewes are put to the ram in the beginning of October.
 H. No earlier, October 1st. They are left in the fields, and get artificial food.
 I. Do not show ewes.
 J. Yes.
 K. I always sell my show ewes.
 L. Yes.
 M. Yes.
 N. Yes, after show season they are turned out among the general flock and all treated alike.
 O. We don't feed up ewes for exhibition, we exhibit gimmers or shearling ewes; after the showing season is past they are turned away amongst the general flock and treated alike.
 P. No alteration.
 Q. Same time but treat them better.
 R. When I used to get up show ewes, I always found them later in taking the ram, but always had to keep them better.
 S. No. They are gradually brought down in condition, and put with ram in October.
 T. Treat them all alike.
 U. No show ewes kept. A few select stud ewes put to the ram, 1st week in November.

No. 3 QUESTION.—*Do you make any alteration in the keep at this time; if so, what are your reasons?*

- A. I put the ewes on better pasture a week or two previous to flush them, and thus secure a larger crop of lambs.
- B. If possible, I like to have the ewes rising in condition at the time of taking the ram in hopes of getting more lambs.
- C. We endeavour to keep the ewes better than before, it makes them go to the ram faster and bring a larger crop of lambs.
- D. Raised from worse to better keep, to increase strength and fall of lambs.
- E. Only change to fresh pasture, such as aftermath to insure a better drop of lambs.
- F. Change in the keep at this time.
- G. The Show ewes are fed much the same as they have been in the summer. The hill ewes get no extra keep.
- H. No, if the grass fails, they get a few turnip tops.
- I. No.
- J. Very little difference.
- K. No.
- L. If you wish to have a large crop of lambs, it is necessary that the ewes have some freshening pasture or rape.
- M. I give rather better keep, to make the ewes come quickly in season, and I always think when they are improving in condition I get a better crop of lambs.
- N. No.
- O. About two weeks before the rams are put among the ewes we give them half a lb. per day of cake and oats to bring them sooner into bloom, said extra feeding being continued for about six weeks.
- P. No alteration.
- Q. Keep a little better, more likely to get more lambs.
- R. I draft out my ewes into the pastures in lots to suit the rams, and they are kept in an improving condition.
- S. After lambs are weaned and ewes sheared, the latter are kept bare till the beginning of August, then flushed with mustard or other stimulating diet to induce them to come into service.
- T. Give the ewes a good pasture, fog, or rape, in order to increase the crop of lambs.
- U. None.

No. 4 QUESTION.—*What system do you adopt with the rams? Do they run with the ewes, or are they hand-ridden?*

- A. Run with the ewes.
- B. Run with the ewes as a rule, occasionally hand-ride an uncertain working sheep, and a sheep in high condition, house nights, and out days.
- C. If the ram is fat we use a teaser, if in store condition he is run with the ewes.
- D. Both systems are adopted.
- E. Run with the ewes, unless a show animal, which is kept up and worked inside.
- F. Rams always run with the ewes.
- G. The best of the hill ewes are taken out of the lot and put to the best rams in suitable numbers in the fields to breed tup lambs from. The rest are tupped on the hill.
- H. Rams run with the ewes.
- I. Hand-ridden.
- J. The rams and ewes are selected and run together.
- K. The rams run with the ewes.
- L. I always hand-ride.
- M. My lambs are generally hand-ridden.
- N. Run with the ewes.
- O. The rams run at large amongst the ewes.
- P. Run with the ewes generally, but occasionally hand-ridden.
- Q. Both; the fattest are hand-ridden.
- R. Some run with the ewes, but if I am using any fat show rams they are usually hand-ridden.
- S. Every ewe as she comes to service is brought to a ram specially selected as a suitable partner and with qualities calculated to relieve her deficiencies.
- T. Run with the ewes.
- U. Run with the ewes.

No. 5 QUESTION.—*What is the average number a ram will serve effectually? (1) in the field; (2) hand-ridden; and at what age do you consider a ram gets the best stock?*

A. 50 in the field. A ram gets the best stock after he is fully developed; *i.e.*, he will get the best stock when from 1 to 3-shear. I think he gets the worst stock as a ram lamb.

B. (1) 60. (2) 80 to 100; should say at two years old.

C. 50 or 90 if the ram runs with the ewes. (2) By using a teaser, a ram can serve 100 or more.

D. (1) 60. (2) 80. Yearling if not worked as a lamb.

E. 50 in the field, from 70 to 80 hand-ridden; gets best stock at two years old.

F As a rule from 50 to 80 in the field. From my experience the begetting of his best stock by any rams does not depend so much upon his exact age as the fact of his being in a healthy and proper condition.

G. (1) 80 ewes in the field; I think up to four or five years old; there is not much difference in the stock got by a Cheviot ram.

H. On the hill 60, when in fields 80 to 100; though I have known one sheep serve 200, and once 220.

I. (1) 40. (2) 60.

J. A ram will easily serve 100, but is usually required for about 70. The ewes are never hand-ridden; I consider it immaterial whether one uses a ram lamb or a yearling.

K. (1) About 100, but this of course all depends on how thick they come on; (2) I have no experience. A ram lamb 7 or 8 months old will get most stock, but a shearling or two shear, or even older ram will get as good.

- L.** (1) 50 ewes is sufficient in the field loose ; (2) hand-ridden, a ram will serve 80 or more ; but there is a difference in rams for serving ; one of our rams (a shearling) served over 100 one season in another flock. I do not think it makes any difference to the ram's age.
- M.** (1) Loose in the field, I should say 40 to 50 ewes sufficient. When hand-ridden I have had rams serve 100 ewes. I like a shearling ram.
- N.** About 50 ewes in the field ; more in the flock hand-ridden ; age of rams considered immaterial in regard to quality of offspring.
- O.** A ram will serve 60 ewes ; I cannot state at what age a ram gets the best stock ; with us the first season they are only tried with a few until we see how they are going to breed, and used more extensively after we see how to mate them.
- P.** (1) In the field with the ewes, 40 ; (2) handling or hand-ridden, 70 ; a two-shear.
- Q.** (1) 70 ; (2) 100 ; a young ram.
- R.** About 60 ; (1) about the same ; (2) rather more if they do not come too thick, but I find they get slack shut up. if they go very fast. I don't think the age of the ram (as long as not too old) makes much difference.
- S.** Very various, 70 or 80 ; (1) 70 ; (2) 120. A ram lamb gets the largest and strongest lambs as far as my experience goes.
- T.** 50 or 60 in the field ; double the quantity hand-ridden. Shearling rams considered best.
- U.** (1) Four score enclosed in the field and three score on the hill ; (2) none. I often use lambs for 17 days with about 30 ewes, with success, for hill purposes. Rams are generally used till they are five or six years old. Some of my stud rams have been used till nine years old.

No. 6 QUESTION.—*If a ram is over fat, or otherwise shows a disinclination to serve, what course do you adopt?*

- A.** Give him a dose of Epsom salts, and repeat the dose if necessary.
B. Give him a dose of physic and hand-ride him.
C. Reduce him.
D. Reduce him to a proper state of activity, and provoke him by the presence of another ram.
E. A ram over fat or the reverse, try to get him into a healthy and proper condition.
F. If a ram is over fat it is a good plan to give him a few ewes before you put him to the big lot.
G. This seldom happens with Mountain Sheep.
H. Give plenty of exercise and keep short of food; what food is given should be good, run another ram or ram lamb with him.
I. I never allow a ram to be over-fed for his work.
J. If a ram is over fat, I should turn him out with the ewe lambs when he would get no corn two or three weeks before I wanted his services, so that he might get plenty of exercise.
K. Run the ram with a few ewes giving him a dose of physic occasionally, and when he is required to serve put him in a pen in the house and only feed him at night after he has done his work, and then only a small quantity of food, but good.
L. Give him a dose or two of salts, ginger and treacle; afterwards a ball of salts of Prunelle.
M. The flock being naturally active, there is little or no trouble from disinclination to serve.
N. Shut him up and give him less food.
O. Give him cooling physic, and exercise with ewe.
P. Shear him, give him some physic, salts and ground ginger; and in some bad cases lift him on to the ewes at first.
Q. He is assisted in jumping, but find no better plan than letting him walk about with a flock.
R. Keel the ram, and if the ewes return to him I at once change the ram.
S.
T.
U.

No. 7 QUESTION.—Should a ewe turn several times, what do you do to induce her to breed?

- A. Put her to another ram.
- B. Change the ram and try a lamb.
- C. Use a ram lamb.
- D. Change the ram.
- E. Take some blood from her.
- F. If a ewe does not settle or seem to breed, I do nothing beyond allowing the ram to run with her for 3 weeks longer.
- G. Change the ram if possible.
- H. Change the ram and clip her tail.
- I. Nothing.
- J. Nothing, simply give her another chance in the ordinary way.
- K. If a ewe turns 3 or 4 times, and I particularly wanted to breed from her, I should put a fresh ram to her.
- L. Serve her by two or more rams at the same time.
- M. Send her to the butcher.
- N. Change the ram, and if ewe fat assist ram.
- O. Any renegades we have, if good, are kept on but reduced in condition before they are put with the ram a second time; seldom such fails.
- P. If too fat reduce her, and if too poor give her better keep.
- Q. Change the ram.
- R. Nothing.
- S. Nothing.
- T. Try another ram.
- U. Reduce her condition.

No. 8 QUESTION.—*If a valuable ewe you do not wish to discard has proved barren two years in succession, what is the best way to treat her?*

- A. Shut her up and starve her till she is very lean.
- B. Try to make sure that the ram really serves her, as some good ewes are so wide that it is not every ram that can serve them, and they require to be placed in a different position from usual.
- C. It is almost hopeless as they get so fat; the only plan is to starve the ewe all summer so as to reduce the condition, and use a very vigorous ram.
- D. Keep her poor and put active tup on her.
- E. Same as No. 7; give opening medicine, and change of food.
- F. With such a ewe I can advise nothing better than to make same not fat, but in fair condition.
- G. I am sure I can hardly say, as a ewe that is barren two years in succession rarely has a lamb.
- H. Store her if she has been well kept.
- I. The best way is to send her to the butcher.
- J. No. 7 will answer this.
- K. After being two years barren, I should discard her as an unprofitable ewe.
- L. Send her to the butcher.
- M. Send her to the butcher; if a ewe proves barren two years, she is not a valuable ewe.
- N. Poor keep, but when barren two years in succession there is no prospect of breeding, and it is best to sell for slaughtering.
- O. Answered in No. 7.
- P. Send her to the butcher.
- Q. Feed her for butcher.
- R. Fat her and get rid of her.
- S. I have nothing to suggest.
- T.
- U. Keep in moderate condition, and allow her to be served with a tup lamb.

No. 9 QUESTION.—*What is your usual way of keeping the flock from date of service to within a few days of lambing?*

- A. On the pastures alone, except during severe snow-storms, when they have a few yellow turnips thrown on the pasture, and some hay or oat-straw in racks. About a month before lambing commences they get about a ton of common turnips per 120 per day.
- B. Run on the clover leys and pastures; about December begin to give hay in racks, and later on a few turnips; of course the time of beginning to give hay and turnips depends on the weather and state of the pastures; as they get nearer lambing, if any ewes appear getting low in condition, draw by themselves and give a little corn.
- C. The ewes range over the meadows, and have a few roots and little hay in bad weather as the grass gets scarce.
- D. 1st—run on clovers; 2nd—run on grass land within a fortnight of lambing; 3rd—at that time give $\frac{1}{2}$ lb. of mixed oats and cake.
- E. In Meath where there is fresh grass all the winter, with a plentiful supply of sweet clover hay. At lambing, a daily allowance of turnips and trough-feeding.
- F. If sufficient grass, nothing else.
- G. They go on their natural hill grazing, and don't get extra keep unless it is a very severe snow-storm, and then they get hay laid down to them.
- H. Their food is never varied, unless in a deep snow-storm, when they get a little hay; they run on the hill and get what food they can.
- I. The ewes have the run of stubbles, seeds, and old sainfoin fields, until the middle of November, then a few roots, and as much dry food as they will eat. Hay when plentiful; when short of hay, a mixture of hay and straw cut into chaff.

- J. Generally on grass, with a little hay ; but if grass is short, a few roots.
- K. First on spring tares, then second crop clover, next stubbles—which we usually hurdle—then possibly clean up behind wether lambs on rape and kale, with hay chaff ; then for a month before lambing, it is best to give liberal supply of cabbage and hay chaff.
- L. Run on grass, with plenty of good hay and a few roots.
- M. Run them on pastures ; eat up swede tops ; before lambing give them turnips and hay.
- N. Grazed in fields, getting a little hay and a few turnips in stormy weather, up to January, when folded on turnips with a little hay or straw, Through the Winter we allow a cart-load of white turnips to about 70 ewes, giving them always the run of a clean pasture.
- O. Allowing them, in addition, for about two weeks before they begin to lamb, and about two weeks after they lamb, a small quantity of cake and oats or crushed barley.
- P. A certain allowance of yellow turnips and hay.
- Q. On grass until November, then on turnips, with a little hay.
- R. On the pastures until mangold is got up ; then eat up the mangold tops, with a run on the grass.
Later on a few swedes and hay. If we keep them on grass until lambing, we get scour among the young lambs.
- S. Keep them running on leys or meadows till about half time has expired ; then be very careful that they go rather forward in condition by having oats, hay, and possibly few roots thrown over their fold.
- T. Turnips eaten on with a run on grass, and a feed of oats every day for a month before lambing.
- U. No change from any other season for hill stock.

No. 10 QUESTION.—*Does your shepherd get anything extra in the lambing season to induce him to do his utmost, such as so much per score of lambs reared and alive at weaning time, or a bounty if he only loses 2 per cent. of the ewes in lambing?*

- A. No.
- B. No.
- C. Yes, 6d. for each lamb alive at weaning time.
- D. 1s. per head per lamb alive on June 1st, over the number of ewes put to the ram the previous September.
- E. Nothing of the kind here.
- F. I am not aware of any such custom in this district.
- G. No.
- H. No. In some cases he is paid in kind—*i.e.*, he will be allowed to run 50 sheep or more along with his master's, and their produce is his wage. In this case he participates in a good yield.
- I. Yes, extra pay for the lambing season.
- J. 1s. 6d. per score per lamb reared; and £2 extra for night work, and beer money.
- K. No.
- L. No.
- M. My shepherd gets extra wages in lambing time.
- N. No. A shepherd interested in his work needs no inducement to do his utmost.
- O. We see to the lambing of our ewes ourselves, the shepherd only doing the rough work.
- P. No change from the ordinary wages.
- Q. So much per head for lambs reared.
- R. He gets 2d. per lamb alive on the 1st of June.
- S. No.
- T. Gets nothing extra.
- U. Nothing; my shepherds are trustworthy.

No. 11 QUESTION.—*What is your opinion as to the selection of sires?—that is to say, which is most successful, Line breeding, a certain amount of similarity of blood, or decidedly fresh.*

- A. Line-breeding, when judiciously and carefully managed, is I think most successful, but a little fresh blood occasionally is necessary.
- B. Line-breeding with a strain or two out, and back again, taking care not to get too close.
- C. Line-breeding, and not too violent a cross, although I have known instances when a carefully in-and-in bred sire makes an extraordinary impression in a moderate ewe flock.
- D. Line-breeding.
- E. Fresh blood of a high class.
- F. While I am of the opinion that the success of some breeders has been attained through line-breeding to a certain amount, yet I would advise such to a limited extent, and to be followed by careful selection of really good specimens from fresh blood.
- G. I think the produce of rather in-bred sires bear more resemblance to each other, and the general flock look better, but of course an occasional cross is sometimes required.
- H. I believe in line-breeding if you have a good flock, and if you stick to hardy, well-constituted animals.
- I. A certain amount of similarity of blood; when using fresh blood, work it in carefully.
- J. Line-breeding.
- K. Fresh blood from an old-established flock, the characteristics of which you know and have watched for years. I would prefer even a very moderate sire from a flock I "knew," than ever such a good one from a fresh flock.

- L.** Most certainly fresh blood breeding; in-and-in weakens constitution.
- M.** Line-breeding produces a few of the neatest sheep, but minus constitution, and loss of size. It may do for show purposes, but won't do for a rent-paying farmer. I prefer a certain amount of similarity of blood, with a decided cross of fresh blood carefully introduced occasionally.
- N.** Line-breeding, avoiding very close breeding on the one hand, or violent outer-crossing on the other.
- O.** We approve of a certain amount of similarity of blood, most frequently our show sheep have been bred from horn-bred rams.
- P.** Fresh blood, but great care must be taken in using it.
- Q.** Line-breeding, occasionally a cross of fresh blood.
- R.** I like to use my own bred sires, but crossing them to different strains in my own flock, usually buying one or two sheep each year from flocks possessing my own blood. If by one of my own sheep so much the better—in fact, getting my own blood back again diluted.
- S.** (Difficult question to answer in a few words). To get a type and general character you must have line-breeding, and I do not object to its being rather close for two or three generations, so as to get the type fixed; but nowhere is the evidence of a first-class pedigree sheep so evident in the first generation as on fresh blood, and possibly of a coarser character.
- T.** Fresh blood, so as to retain a good constitution—of course retaining similarity of type.
- U.** Line-breeding.

No. 12 QUESTION.—*What artificial food do you use, and how much do you give the ewes and lambs, and do you make any difference between the singles and twins?*

- A. I use no artificial food before lambing, but after I allow 1 lb. per ewe per day of a mixture of linseed cake, bruised oats, and bran. I make no difference between singles and twins.
- B. Generally bran and oats, and cotton cake. Singles, as a rule, do without, or get some for a week or two; but of course this, and the quantity of corn given, depends on the weather, and what natural food they can get. Try to keep twins and singles separate, and in small lots if possible.
- C. Before weaning the twin lambs get a little lamb food; after weaning they all have a little.
- D. Oats, cake, and bran, $\frac{1}{2}$ doubles; none, or sometimes $\frac{1}{4}$ lb. singles.
- E. A mixture of linseed cake, oats, and bran; $1\frac{1}{2}$ lb. each to twins and ewes; singles can do without it.
- F. To hill ewes and lambs give no artificial food, but ewes with twins select the best grass available on the farm.
- G. Artificial food is not used except among the show ewes. The latter get linseed cake and Indian corn, with turnips and hay.
- H. None, except in the case of the few ewes and rams kept for show purposes.
- I. $1\frac{1}{2}$ lb. cotton cake, or 1 lb. of cotton cake, and 1 pint of oats, to ewes with twins; seldom give any to ewes with only one lamb.
- J. The ewes with single lambs get none, the ewes with doubles get about 1 lb. cake, or 1 pint oats.

- K.** Old beans, best linseed cake, cotton cake, and pea-chaff. I usually begin giving my ewes a $\frac{1}{4}$ to $\frac{1}{2}$ lb. of cotton cake a-day a month before they begin lambing. After lambing, those with singles have the same quantity, but the doubles have "double," (1 lb. each per day). I give the lambs as soon as they can eat, pea-chaff—of which they are very fond, best linseed cake and old beans.
- L.** Corn and mixed cakes; all get alike.
- M.** I prefer a mixture of food, linseed cake, cotton cake, malt, bran, oats, malt dust, peas, ground locust-beans, a little chaffed sweet hay, all mixed together, a little salt added. I give according to the condition my ewes are in.
- N.** After lambing, along with some turnips, each get daily about 1 lb. of a mixture consisting of cake, oats, bran, in equal parts, till there is a full bite of grass. When no artificial feeding is given, the twins get the best grass, if it can be so arranged, otherwise no difference is made.
- O.** Only the twins receive the extra feeding as stated in No. 8.
- P.** Cotton cake and oats until there is plenty of grass, no change between singles and twins if plenty of pasture.
- Q.** A little cake and corn, the twins double.
- R.** Our ewes with lambs go on the pastures after a few days, getting some roots—swedes in preference, at first—the singles seldom get corn, but the doubles get about two pints of oats each daily, until about the middle of April. If the oats run short they get partly beans.
- S.** Mixed linseed and white peas for feeding, but otherwise crushed oats, bran, and a small portion only of linseed cake. Strongly object to cotton. Keep a flock of singles, and another of doubles.
- T.** Oats, cotton cake, and linseed cake. No difference.
- U.** A few select stud ewes get 1 lb. Indian corn daily during the winter months. No difference between single and twins.

No. 13 QUESTION.—*When do you castrate the ram lambs not considered good enough for stock purposes?*

- A. May.
 B. About the beginning of May.
 C. Never castrate any, sell the small rams to the butcher in the Spring.
 D. October.
 E. At a month old, on second selection the cull ram lambs are castrated in October with medicine. A safe process.
 F. Third week in May.
 G. In the end of May. The ewe lambs from the selected ewes get an extra week along with the tup lambs.
 H. End of May.
 I. Do not castrate any.
 J. From 8 to 10 weeks.
 K. We draw them when a few days old, and should we find at weaning time, that we have a few that "won't do," which is seldom the case, they are sold to the butcher intact.
 L. Don't castrate any, every ram or ram lamb is sold for stock purposes; my ewes are very select, and and only high-class rams of good breeding are used.
 M. I don't castrate any lambs, I feed those not good enough for stock purpose for the butcher as they are, sell them in March.
 N. When three weeks to a month old.
 O. About the 1st of August.
 P. All kept until Hogg's, and then the weeds drawn out and sold fat.
 Q. In April.
 R. Rarely have any castrated.
 S. Greater part about six weeks old; a selection are left to further select from, and those not kept for rams are castrated at about four months old.
 T. November.
 U. June.

No. 14 QUESTION.—*When do you wean the lambs?*

- A. July.
- B. Depends how the lambs are thriving, but think well to wean early, especially if the lambs are not thriving and want drenching, say middle of June.
- C.
- D. June 1st.
- E. 1st of July.
- F. About 20th of August.
- G. About the 25th of July.
- H. End of July, or first week in August, except lambs for sale, which suck till August 20th, or later.
- I. From four to five months old.
- J. If the male lambs are fattened they are not taken from the mothers until they go to the butcher; if they are stored they are weaned at the same time as the ewe lambs, about the latter part of April.
- K. About the third week in May.
- L. About the middle of July.
- M. I wean my lambs in July.
- N. End of July.
- O. About the 1st of August.
- P. In July.
- Q. July.
- R. Sometimes the end of May, but generally in June.
- S. No fixed rule, depends on various circumstances, such as weather, succulence of green crops, &c. I am not inclined to defer weaning very long if conditions are right.
- T. July or August.
- U. 1st week in August.

No. 15 QUESTION.—*After weaning, how are the ram, ewe, and wether lambs kept? Please state briefly usual treatment, until, say, Michaelmas.*

- A. After weaning, I put the lambs on the best grass I have; from that on the clover aftermath; and then on the young seeds after the grain-crop is carried, I give them about $\frac{1}{4}$ lb. of artificial mixture.
- B. On Felton Farm I draw males from females, and make a small lot of weakly ones, and perhaps a small lot of any I may wish to put forward, and try to give as much change of pasture as possible. As my farms have a much larger proportion of pasture than arable, the lambs generally have to run on the pastures, with a little artificial food to those I wish to put forward; and the weakly ones, I draw into about three lots; those I wish to put forward by themselves, and the weakly ones by themselves; leaving the main lot together, and trying to give a change as often as possible; they sometimes have a clover ley to run on for a change, and the seeds after harvest.
- C. They have a little lamb food, also cabbage, rape, and other green food, until the young seeds are ready for them to run on.
- D. All run together on clovers, folded as much as possible.
- E. All run on grass till November, except ram lambs, which are allowed cake.
- F. Ram lambs put on good Foggage, and ewe lambs returned beside ewes after a week, until beginning of October.
- G. The ram lamb; are kept in the fields in fogs. The ewe lambs on heather, and wether lambs also.
- H. Ram lambs are run on fogs if possible, ewe lambs and wethers, if not sold, are put on a part of the farm specially trained (or cleaned) for them, or are weaned for a week and returned to their mothers; latter is the usual course where the farms are adapted, except on the Cheviot Hill in Sutherland, where lambs are sent to lower grazings.

- I. On young mixed seeds, old sainfoin ley aftermath, mixed seeds sainfoin, with turnips and cabbage as soon as we can get them.
- J. The ram lambs are put on the best natural keep the farm affords. The wether and ewe lambs run on downs in the day time, and young grasses (if possible) at night.
- K. All are kept on (1) Italian rye grass; (2) Winter barley; (3) trifolium; (4) vetches and cinquefoil, then rape and cinquefoil. With the first four they have ground mangolds; all have the same green food, but the ram lambs have, if possible, a "double tie" first, and a liberal supply of artificial; the wethers follow after, but do not get any artificial till the ram lambs are gone—about first week in August; they then are pushed along in the same way, and sold to the butcher in September, October, November; the ewe lambs follow after them but have no artificial.
- L. Clover fog, or rape all together.
- M. When first weaned they go on to old pasture land until the aftermaths are ready; then on to thousand-headed kale, rape, or cabbage, with a small quantity of my artificial food.
- N. Generally grazed together on clover foggage, without anything else, unless in a wet season, or grass failing, they get of the mixture noted in answer No. 12.
- O. On foggage if we can get it.
- P. They get artificial food, consisting of linseed and cotton cake, oats, Indian corn, and clover foggage, and young seeds. (I have omitted to say lamb food instead of the above mixture for the first four or five weeks after being weaned).
- Q. They run on seeds, then rape, or mustard and turnips.
- R. Usually on the pastures, the ram lambs getting some cake and beans, ewe lambs only grass.
- S. Push ram lambs and keep others in good condition.
- T. Ram joins the ram hogs, ewes into a large pasture, all lambs to fog or rape, also a little cake.
- U. Ram lambs put on young grass. Ewe lambs returned to hill after being weaned. No wether lambs kept.

No. 16 QUESTION.—*Do you dip lambs? When?*

- A. Yes ; after weaning.
 B. Generally ; soon after weaning.
 C. Yes.
 D. Yes ; after weaning, and sometimes a second time in August.
 E. Yes ; in July ; ewes in September.
 F. On weaning.
 G. Yes ; generally end of September, or beginning of October.
 H. Yes.
 I. Generally have them dipped.
 J. Yes ; at Midsummer.
 K. No.
 L. Lambs are dipped in June, the ewes as well.
 M. A week after the ewes are clipped.
 N. Yes ; during the early Summer, and again in October.
 O. Yes.
 P. Yes ; ten days after the ewes are shorn.
 Q. Yes.
 R. Yes ; as soon as weaned.
 S. Yes.
 T. Yes.
 U. Yes ; September and April.

- No. 17 QUESTION.—*Do you shear the lambs? If so, when, and your reasons for doing so?*
- A. No. Climate too cold, late, and wet.
 B. Occasionally the ram lambs, in hopes of their thriving better, but cannot say that I found much benefit.
 C. No.
 D. No.
 E. Clip the ram lambs in Autumn; are more comfortable in sheepcote, and do better through the Winter.
 F. No; until June year following.
 G. No.
 H. No.
 I. Only a few in June; think they grow faster, and carry less dirt in Winter.
 J. Yes; the end of June.—(1) Because we get 3 to 4 lbs. of wool to sell.—(2) Because we find they winter better.
 K. No.
 L. No.
 M. Don't shear lambs.
 N. No.
 O. No.
 P. No.
 Q. No.
 R. I have occasionally shorn the ram lambs, but do not continue to do so, although they do better in the Summer, but they romp one another about so much in the Winter that I discontinued it; still, on good dry land, I think it right.
 S. No.
 T. No.
 U. No.

No. 18 QUESTION.—*Are your lambs subject to Husk or Hoose? What is the best remedy? and do you know a preventive?*

- A. No, never have it.
B. Yes; have been in the habit of using Pettifer's mixture, and found a recipe taken from the *Live Stock Journal* last Summer of considerable use, which can be had on application to me.
C. Have not had Husk for five years. We drench before weaning, and two or three times during the Summer with the following mixture—turpentine 1 pt.; asafetida 2 oz.; balsam of sulphur 2 oz.; linseed oil 1 qt. Dose—about one teaspoonful, according to size of the lamb.
D. A.—Yes. B.—Fresh folding and clean ground.
E. Nothing of the kind here.
F. Lambs in the district not subject to such a complaint.
G.
H. No.
I. No; very little. Do not know a remedy, but if I had it badly amongst my lambs, should try Stockholm tar, the same as is used for calves with husk.
J. No.
K. No.
L. No.
M. Sometimes. Turpentine and linseed oil, with a little carbonate of soda, to make them mix.
N. No.
O. No.
P. No.
Q. Yes; best remedy let them have constant change.
R. Occasionally; but as soon as we perceive them coughing we get some drinks and powders from our Vet.
S. No.
T. Seldom have it.
U. No.

No. 19 QUESTION.—Describe briefly the usual mode of keeping the young sheep through the Autumn, Winter, and Spring.

- A. When the young sheep begin to fail, I commence giving them a few cabbages. Young sheep on a stubble field, and give them pulped roots and chopped hay and oat-straw; I also allow them a few cabbages if I have them. Their artificial food is mixed with the pulp.
- B. Get them on common turnips as soon as possible in the Autumn, and if the land is suitable on the tillage, to eat them on with hay and corn, but much of my land is too stiff a clay for doing so. If the weather is at all wet, therefore, cut their turnips for them on the grass; of course swedes follow when the common turnips are finished.
- C. As soon as there are any white turnips ready, we fold the sheep on, also giving hay and corn.
- D. Swedes cut on turnip land, hay in cratch, and $\frac{1}{2}$ lb. mixed cake and corn, increasing, with rams and wethers, to $\frac{1}{2}$ lb.
- E. Frequent changes to fresh pastures in Autumn; turnips, hay and trough feeding in Winter and Spring till grass comes.
- F. All our young stock sheep or lambs are sent off to lower lying arable farms, for from 5 to 6 months, from 1st October, and in severe weather generally are supplied with a little hay or a few turnips.
- G. The young sheep are kept in the heathery part of the farm by themselves and get hay; should the Winter be stormy the tup lambs get turnips.
- H. Some treatment as their dams; when by themselves they get hay as soon as hay comes; lambs, if not sold, are now often wintered on turnips, and brought home to their grazings in March.
- I. All on roots and hay; feeding sheep have a mixture of linseed and cotton cake, with some beans or other corn.

- J.** Hay and roots.
- K.** The only young sheep I keep through the Winter and Spring are the ewe lambs; they, as in No. 15, follow behind till the wethers are sold, they then have ground swedes and hay chaff till the middle of April, and then ground mangolds.
- L.** Plenty of good food and attention, consisting of cut roots with a little hay, corn, and cake, folded on the land.
- M.** They are put on to the turnips, which are cut, and allowed hay, salt, and artificial food.
- N.** They get turnips on grass till November; then folded on the turnip field (globes or yellows) in January. Ram lambs get cut swedes and 1 lb. each of a mixture of cake, oats, beans, peas; the ewe lambs getting only turnips and hay.
- O.** They are disposed of; the ewe lambs only receive turnips and hay through the Winter.
- P.** They are put on the turnip break, get yellow turnips, and the mixture of artificial food in No 15 until January, and then get cut swedish turnips on the grass.
- Q.** Mustard, rape, and tares in Autumn, turnips in Winter, swedes in Spring.
- R.** Get them on to roots as soon as we can, which we cut; give the ram lambs corn, cake, and hay chaff; and the ewe lambs as a rule only get hay chaff, sometimes a little cotton cake. Get the rams some green food as soon as we can in the early Spring with the roots.
- S.** Rape, turnips with hay or straw and cake, cut swedes with hay or straw and cake until the middle of
- T.** May, then clover.
- U.** Ewe lambs are wintered in the low country in open pasture, grazed by dairy cows during the Summer; rams kept in open sheds and fed on hay, a few turnips, and about 1lb. of Indian corn daily.

No. 20 QUESTION.—*When do you house the sheep intended for show?*

- A. 1st of April, when they are shorn.
B. Generally house a few all winter, but run them out days.
C. April.
D. In February.
E. In November, but have the run of a paddock.
F. About beginning of November.
G. The lambs in October; shearing tups end of December; ewes and ewe lambs are not housed.
H. If at all, in December.
I. April 2nd.
J. Never, except for the Royal and Bath and West.
K. The ewes and rams for the Summer shows about Christmas time; the wethers for year following are then put in. The wether lambs for the Christmas shows are put in about the end of August; the ram and ewe lambs for the Summer shows are never housed.
L. After they are shorn.
M. I have sometimes housed them as early as November, but only a few can stand it; those that can, do wonderfully well for show purposes, but are for other purposes not improved.
N. Show sheep not housed, but during Summer, sheds are erected for them in the fields, consisting of hurdles laid flat on top of post about three feet high, and covered with straw, but a pen all round.
O. We don't approve of housing sheep; we maintain they should be accustomed to weather in the field.
P. 1st April.
Q. Never.
R. We used to put the show sheep in the house in October, and sheared them then.
S. Action varies so much with different conditions.
T. January or February.
U. End of December.

No. 21 QUESTION.—*When do you house the rams, other than those preparing for show?*

- A. Four weeks before my sale.
B. About May or June; but this depends how I am off for food for them to eat; and I think they grow quite as well out for a month or two after shearing, at least during the day.
C. Middle of June, or beginning of July, according to date of sale.
D. Not at all.
E. July; in all day and out at night.
F. A few more rams generally housed in December.
G. I don't house them at all.
H. Never.
I. Not at all.
J. Never.
K. Never house these sheep, as by so doing, you make them certainly better looking, but ever so much more deceiving for the purchaser.
L. Not at all.
M. I don't house them, and if farmers knew their own interests they would not have any ram that had been housed.
N. Never housed, but generally shaded as above.
O. Never.
P. We never house them.
Q. Never.
R. Not at all.
S. Try to let them have a hovel to run in all through the year.
T. Never.
U. January.

No. 21a QUESTION.— *When do you draft the ewes intended for sale?*

- A. 1st April (shearling ewes).
- B. Young ewes generally just before shearing; old ewes soon after weaning.
- C. July.
- D. In May, after shearing.
- E. First July.
- F. First October.
- G. Generally sell them in beginning of October, having drawn them at clipping time in end of June.
- H. October.
- I. June or July.
- J. First week in May.
- K. May.
- L. Soon as lambs are weaned.
- M. As soon as the lambs are weaned.
- N. In August.
- O. In September, but we don't dispose of draft ewes for breeding, they are fed off.
- P. September.
- Q. July.
- R. Generally in July.
- S. Just in time to catalogue.
- T. A month after weaning the lambs.
- U. October.

No. 22 QUESTION.—*Do you consider a thatched, tiled, or slated building the best adapted for a sheepcote?*

- A. Thatched is the best.
 B. Thatched.
 C. Thatched.
 D. Thatched, unless non-conducting safeguards are arranged, in which case it is immaterial
 E. Thatched roof.
 F. A thatched building I think perhaps the most comfortable, but not so durable.
 G. I don't think there is much difference.
 H. Do not use one.
 I. Thatched.
 J. We always lamb in the open.
 K. Thatched.
 L. Thatched; tiles or slates are too hot.
 M. My building is tiled, but I should think thatch the best and slates the worst.
 N. No experience.
 O. Cannot state
 P. A tiled roof with plenty of air.
 Q. Thatch or board.
 R. Decidedly thatched.
 S. Thatched.
 T. No choice.
 U. Thatch.

No. 22a QUESTION.—*Kindly describe briefly your mode of treating the rams for sale and the draft ewes during the late Spring and Summer until they are disposed of.*

- A. The rams get pulp as before until the grass is a full bite ; they then remain on the pasture till a month before the sale, when they are housed and get vetches or clover, and cabbages if I have any. The draft shearling ewes run on pasture up to day of sale and get no artificial food.
- B. The rams get clover or rye-grass and vetches in the house, as soon as it is ready, with a few mangolds ; or mangolds and hay before the green meat is ready, with cabbages when I can get any. The ewes run on the pastures or clover leys with a little corn, and on aftermath when ready.
- C. Hurdled on the turnips during winter, house and shear the first week in April, feeding with cut roots, principally mangolds, until vetches and clover are ready.
- D. Rams mangolds, cake and oats, cabbages, vetches, &c., *ad lib.*, or so regulated by feeder as to suit animal's constitution ; ewes cake and corn, or clover or grass.
- E. Rams allowed cake and corn in Summer, vetches and cabbage, &c., in Autumn ; ewes grass alone, except that thin ones may be helped.
- F. Rams for sale, besides good grass, have a moderate allowance of oil-cake and corn ; draft ewes graze upon their regular ground until drafted for sale.
- G. The rams intended for sale get turnips and cake in the late Spring ; after the turnips are finished they are put into a grass field and fed on cake and Indian corn. Draft ewes get no extra keep.
- H. The rams are left in fields, and are fed with cake and maize ; ewes get no special treatment.
- I. Swedes in the Winter for rams ; seeds and vetches in Spring as soon as we can get any ; ewes on the seed pastures, finish them on turnips in Autumn.
- J. The rams get a little extra feeding, and all sold in May, and the ewes run on the best pastures.
- K. Rams (other than lambs) plenty of exercise and very little corn ; ram lambs the best of everything you can give them, and plenty of it ; draft ewes a good fill of whatever green food there may be plenty of—ground mangolds and 1lb. of mixed cake per day.

- L. Rams on grass, with a little cake and corn. Draft ewes are often put on the poorest grass we have till sold. Leicesters are always ready for butcher or anything else.
- M. Give them the best pasture I have, and as much good food as they will eat.
- N. The rams grazed in open fields and getting about 2lbs. each of mixture of cake, oats, and peas, and also, when grass begins to fail, green tares and a few cabbages; the draft ewes treated as the general flock till August, when drawn out and then get cake and corn or grass with a few turnips.
- O. Answered before.
- P. The rams are kept on clean fresh pasture, and if that fails, tares and cabbages are used with the above mixtures of artificial food, No. 15. Draft ewes get fresh grass—no artificial.
- Q. Run on clover or tares with cabbage.
- R. Rams are shorn in April, kept in for a few nights if the weather is cold, and in the open field in the days; put on kale or rape first, then rye, and then to tares as soon as ready, getting mangolds with it, corn and cake being increased, and cabbage as soon as ready, Spring vetches following on the Winter-sown ones, mown and put in racks; a good sowing of cabbage twice a day, and some mangolds as long as they last, which we like to be until August, when they are sold. The first Wednesday they are drafted into lots of 9 or 10, and a shade to each lot as soon as they go on the tares in the Spring. Draft ewes are kept in the pastures until about October, when they come on to cabbage or turnips, and fed off as soon as the trade suits; the theaves are generally sold in summer off grass.
- S. Rams are run on clover or tares, and have a little corn; draft ewes the same, but no corn.
- T. Rams for sale have cake and corn or grass; draft ewes join the feeding sheep.
- U. Rams are kept on green pastures during Summer months, getting about 1½lb. hand feeding, then sold in September. Ewes are taken direct from the hill.

No. 23 QUESTION.—*What special green foods do you grow for the sheep?*

- A. Clover, vetches, rape, and cabbages.
 B. Vetches, clover, and cabbage.
 C. Vetches, cabbage, and rape.
 D. Rye, vetches, clover, and cabbages.
 E. Cabbage and vetches.
 F. No special green foods grown.
 G. Sometimes tares.
 H. A few turnips and cabbage.
 I. Vetches.
 J. Rye and vetches.
 K. Rye, Italian rye grass, Winter barley, trefoilium, vetches (2 sorts), kale, cabbage, swedes, mangolds, cinquefoin.
 L. Tares and rape.
 M. Sometimes a few cabbages.
 N. Tares and cabbages.
 O. Tares.
 P. A few tares and cabbages.
 Q. Tares and cabbage.
 R. Vetches, rye, kale, and cabbage.
 S. Vetches, sainfoin, clover, trefoilium, kale, and cabbage.
 T. Thousand-headed kale and rape.
 U. None.

No. 24 QUESTION.—*What cabbage (if any) do you grow for the sheep, and at what periods of the year do you plant?*

- A. Early and late drumhead, and thousand-head. The former are planted in Spring, and the latter in Spring for Summer use, and in July for Spring use.
- B. Generally "Enfield market" sown in autumn, transplanted in Spring.
- C. Enfield market, sown in the Autumn and transplanted in the Spring; also drumhead, drilled in April, and hoed for Summer and Autumn use.
- D. Enfield market, planted out in February, drilled in May.
- E. Early description, planted in September for early Summer; late description (drumhead), planted in beginning of April.
- F. About an acre of late drumhead cabbage is planted in April, principally for young show sheep to begin with.
- G. Very seldom grow any.
- H. Drumhead; April.
- I. Enfield market. Wheeler of Warminster. Plant September, October, and February.
- J. Very little grown.
- K. Sutton's Imperial or Enfield market; for first eating sown in July; planted out in October; fed in June and July. The large drumhead, for general crop, sown in August; planted out in February, March, April, May, and June, according to the time you want to feed them.
- L. Enfield market for summer use; late drumhead for Autumn, all planted in April or May
- M. Early York, and thousand-headed kale; planted in April.
- N. Early sorts in Spring, as weather suits.
- O. Early York, about the 1st of April.
- P. Both early and drumhead cabbages, and plants in March and April.
- Q. Early Enfields in February.
- R. Enfield market, planted in October and November, coming into use in June, July, and August.
- S. Drumheads, planted in April; thousand-headed kale, planted out in July.
- T. None.
- U. None.

No. 25 QUESTION.—*How do you manage with the motherless lambs, as some may be the offspring of ewes you have a high opinion of?*

- A. Feed it with cows' milk until you have an opportunity of putting it on a ewe with a single lamb, or if a lamb dies take its skin off and put it on the motherless lamb, and give it to the dead lamb's mother.
An experienced shepherd ought to be able to do both.
- B. Put them on ewes that have lost their lambs, or feed from can with cows' milk.
- C. Rear them with cows' milk.
- D. Marked to their mothers, and go into flock; retained if from good breeders.
- E. Numbered on the wool; afterwards put in ear marks.
- F. Put to ewe in milk if such to be had; if not, rear by hand best way possible.
- G. If a lamb is from a select ewe, it gets a special mark so as to be known.
- H. Set them on to ewes which have lost their lambs.
- I. Put them on to other ewes as opportunity offers; feed with corn milk, but not more than can possibly help.
- J. We never take a lamb away from its mother, but should the ewe die, the lamb is put to another ewe or reared with the bottle.
- K. Motherless lambs are usually brought up on cows' milk, but we find a foster mother very often by making singles twins.
- L. Put them to a ewe with a single lamb.
- M. Bring them up on cows' milk.
- N. By a foster mother, or by hand with cows' milk.
- O. Just enclose them in a corner of a field, giving them a little milk until they can eat cake.
- P. Put them on other ewes, or fetch them up on cows' milk.
- Q. Rear them with milk from bottle if no other ewe to take them.
- R. Put them to another ewe; make a double of a single.
- S. Generally place valuable lambs with ewes that have lost their lambs, but the others with cows' milk.
- T. Mother them out to another ewe if available, if not hand-feed with cows' milk.
- U. Twin on foster mothers.

No. 26 QUESTION.—*What is the best cure for Foot-rot, and what is the surest preventive against it?*

- A. Boil equal weights of archangel tar, hog's lard, and blue stone (powdered) together. Apply after thoroughly paring off all diseased horn. The best preventive is to take care that the hoofs do not get over-grown, and walk the sheep occasionally through arsenic, rendered soluble, 2lbs. to 6 gallons of water.
- B. The receipts are numerous, and most of them efficacious, if care is taken in paring the hoof, and frequent attention until well; driving the flock through a trough with a strong antiseptic solution is a good thing.
- C. A good careful shepherd.
- D. Constant attention; one re-agent is then pretty well as good as another, and it can be subdued.
- E. It is hard to say, there are so many dressings in the market. I make my own. A good preventative is to run the sheep through an arsenic lotion occasionally.
- F. Hooper's ointment; and the surest preventive is to keep them on ground and clean short grass.
- G. Running sheep through a long trough periodically, partially filled with William's Dip, pitch oil, or some other dip is a good plan; but it is very hard to say what is the best cure for foot-rot; Strawson's ointment is a very good one to apply when sheep are turned and pared.
- H. Careful paring and dressing with any preparation, putting them through a trough containing a mixture of pitch oil, or arsenic.
- I. Not much troubled with it; could hardly give a reliable opinion as to the best cure or preventive.
- J. A.—Hellier's Paste (Yeovil). B.—A good and active shepherd.

- K.** The surest preventive for foot-rot is a preparation supplied by the Agricultural and Horticultural Company, Glasgow, and this will also cure if the disease has not been of too long standing.
- L.** Blue-stone vitriol (powdered) mixed with hog's lard.
- M.** Sulphate of copper, 3 ounces; lithage of gold, 3 ounces; burnt alum, 3 ounces; verdigris, 6 ounces; honey, 1½ lb.; heated in an earthen jar until well mixed. Before applying it pare the foot properly, and wash with carbolic and water; when dry apply mixture. The best preventive is to run the flock through carbolic and water.
- N.** Many of the cures are much alike, and are often successful under the shepherd's watchful eye, which is specially required for certain kinds of pasture.
- O.** We generally keep our sheep on light gravelly land, where foot-rot is a stranger.
- P.** Arch. tar and Cuff's powder. The best preventive is to run the sheep through a trough with the usual quantities of arsenic and potash.
- Q.** Vitriol, verdigris, spirits of tar. Preventive—prompt attention.
- R.** We use a dressing peculiar to ourselves—a mixture of verdigris, soft soap, honey, sugar of lead, and bole ammonia. The best preventive is to draw every lame sheep as soon as they drop; dress them and keep them away until cured.
- S.** I have not had it for some time, and have found running ewes through a trough of water with a little soluble arsenic in it, the best remedy, taking care to remove any sheep from the flock if it falls lame.
- T.** There are many cures, but sheep soundest when folded on arable land.
- U.** Keep hoofs in a proper state with the knife, and now and again a dressing of carbolic acid and oil. Keep land dry as possible, and pasture with cattle, to prevent grass getting too rough.

No. 27 QUESTION.—*Do you wash your show sheep before shearing*

- | | |
|----|--|
| A. | No. |
| B. | No. |
| C. | No. |
| D. | Yes. |
| E. | Yes. |
| F. | Never before shearing. |
| G. | Only the ewes. |
| H. | Yes; Cheviots, Black-faces, and Herdwicks. |
| I. | No. |
| J. | No. |
| K. | Yes. |
| L. | Yes. |
| M. | Don't wash my show sheep before shearing. |
| N. | Yes. |
| O. | Yes, about 10 days before clipping. |
| P. | Yes. |
| Q. | Yes. |
| R. | Not of late years. |
| S. | No. |
| T. | Yes, 10 days before. |
| U. | Not washed. |

JUBILEE
OF
COOPER'S DIPPING POWDER,
1893.

FIFTY YEARS OF PHENOMENAL SUCCESS.

ITS ACHIEVEMENTS.

It is the Government Scab Remedy in Western Australia.

It is, and has always been, at the Head of Proprietary Dips on the Government list at Cape Colony.

It is used by the Queen and the British Government, by the great Tasmanian Stud Breeders, and by the principal

ROYAL SHOW WINNERS and BREEDERS in GREAT BRITAIN.

The highest-priced Wools in the London Wool Market for years past have always been Cooper-Dipped.

ITS SALES HAVE INCREASED EVERY YEAR.

It is now used on 100 millions of sheep annually, or more than all other Dips combined.

THE EXPLANATION

BECAUSE IT IS ADMITTEDLY

THE BEST DIP AT EVERY POINT
IN THE MARKET.

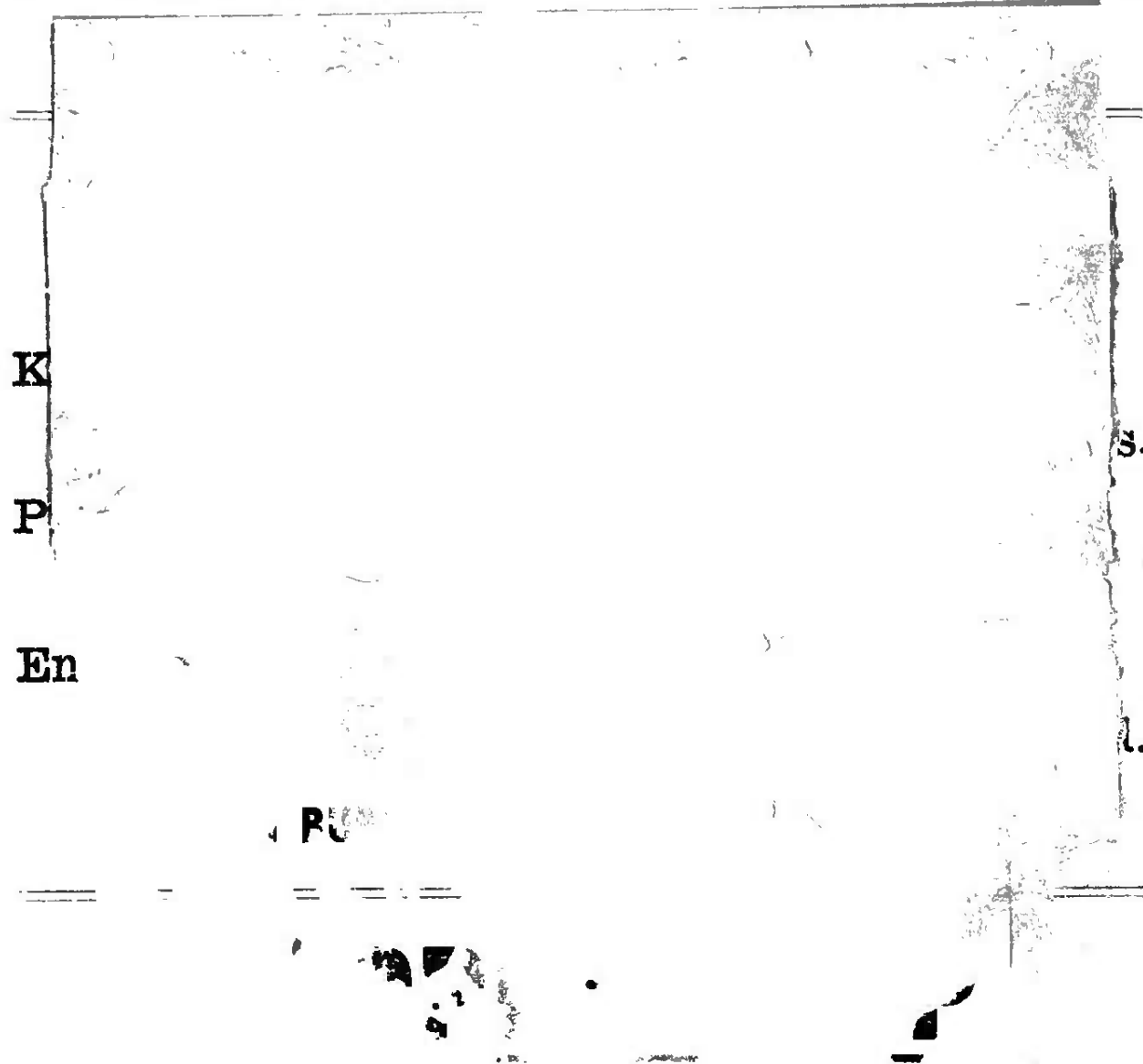
WHAT A DIP SHOULD BE.

Easily Mixed. Portable. Safe.

Handy. Cheap. Effectual. A Certain Cure.

Soluble in Cold Water.

Uniform in Strength. Not liable to deteriorate



Is th , all
these requirements.

BEWARE OF INFERIOR IMITATIONS.

Avoid Non-poisonous Dips which encourage Maggot Fly.



Printed and published by Willm. COOPER & NEPHEWS.
BERKHAMSTED.

ORIENTAÇÕES PARA O USO

Esta é uma cópia digital de um documento (ou parte dele) que pertence a um dos acervos que fazem parte da Biblioteca Digital de Obras Raras e Especiais da USP. Trata-se de uma referência a um documento original. Neste sentido, procuramos manter a integridade e a autenticidade da fonte, não realizando alterações no ambiente digital – com exceção de ajustes de cor, contraste e definição.

1. Você apenas deve utilizar esta obra para fins não comerciais. Os livros, textos e imagens que publicamos na Biblioteca Digital de Obras Raras e Especiais da USP são de domínio público, no entanto, é proibido o uso comercial das nossas imagens.

2. Atribuição. Quando utilizar este documento em outro contexto, você deve dar crédito ao autor (ou autores), à Biblioteca Digital de Obras Raras e Especiais da USP e ao acervo original, da forma como aparece na ficha catalográfica (metadados) do repositório digital. Pedimos que você não republique este conteúdo na rede mundial de computadores (internet) sem a nossa expressa autorização.

3. Direitos do autor. No Brasil, os direitos do autor são regulados pela Lei n.º 9.610, de 19 de Fevereiro de 1998. Os direitos do autor estão também respaldados na Convenção de Berna, de 1971. Sabemos das dificuldades existentes para a verificação se uma obra realmente encontra-se em domínio público. Neste sentido, se você acreditar que algum documento publicado na Biblioteca Digital de Obras Raras e Especiais da USP esteja violando direitos autorais de tradução, versão, exibição, reprodução ou quaisquer outros, solicitamos que nos informe imediatamente (dtsibi@usp.br).