

SPANISH MERINOS AND THEIR MANAGEMENT.

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BUT a little more than fifty years ago the first pair of Spanish merinos ever introduced into this country were brought to Cambridge, Massachusetts. So little knowledge of their value had the man into whose hands they came, that they were butchered and eaten. Now, two or three thousand dollars for a single ram, and as many hundreds for a ewe, of this same breed of animals, is no unusual price. Such has been the change in the public estimation of this class of sheep, in little more than a half century. And the man who should now be found feasting upon thorough-bred Spanish mutton would be classed as a near relation of the woman in the fable, who killed the goose that laid the golden egg. Indeed, such is the zeal now displayed by the devotees of this famous stock, that it is a matter of serious question with some, whether, at this day of almost universal intelligence, when nearly every one knows something of almost every subject that comes before the public mind, these men, "gone crazy" on the sheep question, show wisdom much in advance of the ancient Greeks in their mystic age of fable, with their belief in the existence of a ram which bore a golden fleece.

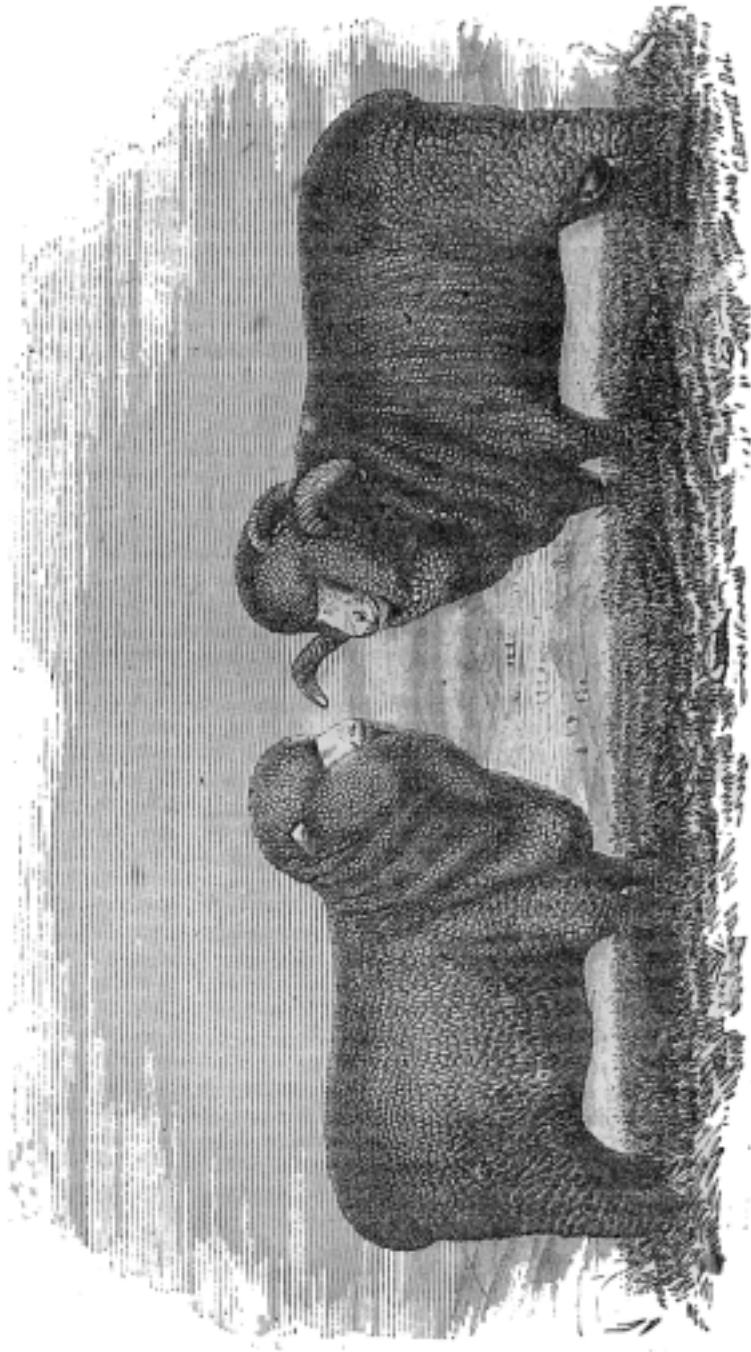
There have always been some men like the narrow-minded John Randolph, who have been ready at all times "to go a mile to kick a sheep;" yet in every age, from the earliest beginning of civilization to the present day, sheep have always held a high place in the estimation of those best qualified to judge of the sources of a nation's wealth, and it should be a matter of sincere congratulation to the American people that the subject of sheep husbandry is receiving such earnest and intelligent attention. Some things each generation must learn for itself, and one of them is the fact that the sheep is as necessary a companion for man now as in the more nomadic condition of the race, when Laban kept his flocks, or the angels sang their song of joy around the shepherd on the plains of Palestine. So true is this, that a history of the attention paid to sheep husbandry in any nation forms no inconsiderable means of judging of that nation's progress in wealth and civilization.

THEIR ANTIQUITY.

It is a significant fact that an authentic history of the Spanish merino reaches back for a period of nearly two thousand years.

The fine, rich fabrics worn by the Roman officials in the early days of the Christian era, and which found their way to the courts of most of the nations lying along the shores of the Mediterranean sea, were made from the wool of the flocks which grazed on the plains of Truditania, in Spain.

Through all the political convulsions which have harassed that country, which has given them their name, through all its conquests and reconquests, this race of animals has sustained itself. It has suffered transportation across the seas, endured the rigors of a cold country, stood the test of acclimation, taken even firmer and deeper root in our soil than it had in the sunny plains of its native Spain, and recently, through the skill and energy of a Vermont gentleman, has proved, at the international exhibition at Hamburg, that the American production of the Spanish merino stands at the head of all other sheep of the world.



SPANISH MERINOES.

Bred and owned by Nathan Cushing and Henry Boynton, Woodstock, Vermont.

THE DEMAND FOR THEM.

The interest that is now being manifested, and the largely increased attention given to sheep husbandry, in a great portion of our country, has created an unprecedented demand for thorough-bred Spanish sheep, and prices have risen with the demand, till many call the present awakened interest in the business the "sheep mania," and hint of the "hen fever" and "morus multicaulis" times, predicting that the same fate awaits this enterprise.

Ten dollars per head is now paid for the service of some of the first-class rams in Vermont, and hundreds of applicants are refused even at these terms. Some breeders, not over-enthusiastic men either, confidently believe that the time is not very distant when one hundred dollars will be paid for the same service. So great has been the demand for this class of stock that not a thorough-bred flock can be found in the State of Vermont which has not been reduced below the number its owner has chosen to retain. It has now become a serious question with many men whether such a demand and such prices can continue. As to all other branches of business, the war has given an increased stimulus to that of sheep husbandry, resulting in a temporary inflation of prices; but when this stimulus has become abated, thorough-bred stock will hold the same relation to all other classes that it does now. Thirty-five years ago first-class merino rams could be bought for ten dollars per head. Old ewes, "culls," sold in the autumn for three dollars per head. At this time native sheep sold for one dollar and twenty-five cents. As the prices of the merinos gradually increased, till culls sold for five dollars and an extra ram for fifteen, there were a plenty of men who said such prices could not continue—men buying sheep at such figures must fail. The wise prophets of that day held on to their native sheep, and in many instances are holding on to them still, contented to clip 4 pounds of wool per head, and to sell their surplus stock in the autumn at three and four dollars, while their neighbors, who went into the "ruinous speculation" of fine-wooled sheep twenty-five years ago, now clip from 8 to 10 pounds of wool from their ewes, and from 15 to 25 pounds from their rams, and sell all the stock they will let go from their flocks at prices which would severely tax the credulity of a man not acquainted with the business. This experience of the last quarter of a century will form a very reliable basis on which to base a calculation relative to the future.

The fact that the Spanish merino now stands at the head of all other classes of sheep, as regards quantity and quality of wool, may be regarded as established beyond all question, and when we consider how small are their numbers when compared with the "native flocks" of the country, all of which must, from year to year, be improved by an infusion of pure-blood, no man need fear that the demand for this stock will so far abate as to constitute any discouragement to those who wish to engage in the business of sheep-keeping. When our civil war shall have been finished, a reduction in the prices of all the staple products of the country may be expected; but so long as our national debt shall require a high protective tariff, wool can never reach the low figures to which the fluctuating legislation of the country in years past has several times sent it, and we may safely predict that what has been the experience of the English breeders of pure-blooded cattle will be substantially enjoyed by the flock-masters of pure-bred sheep in this country.

For a hundred years the English breeders have been doing everything that skill, energy, perseverance, and unlimited wealth could do in perfecting their famous breeds of cattle, yet who has ever heard that their stock was not in demand, or that the prices of former years had fallen off? Prices have kept abreast with their improvement from year to year, till 400 and 500 guineas is no uncommon sum paid for a single animal.

But there are other considerations which may strengthen the faith of the wavering and encourage the hearts of the doubting. When the cotton-growing States of the south produced three hundred and fifty thousand bales in a single year, men of foresight and sagacity hesitated about making further investments in *cotton lands* and negroes, through the fear that the markets of the world could never demand more of this article than was already produced. But from that three hundred and fifty thousand the country went on producing till the yield reached six million bales, and yet the markets were not glutted, and cotton-growing was one of the most profitable branches of industry in the country. The condition of cotton-growing in those days when men were doubtful of its future was not unlike the present condition of the wool-growing business. It is just in its infancy, and men need not trouble themselves with forebodings of such times as were experienced under the tariff of 1841, which sent fine wool down to 34 cents per pound. But all this might be reasonably predicted even on the supposition that our population would make only a nominal increase for a series of years. But this country is now about entering on a new era. Once through with our war, and a career of greatness and expansion is open to us which will call into the fullest activity every department of industry. While we look only to the production of so much wool as will be needed to meet the demands of our own people, we shall see that the field which is open to the American shepherd is a large one, and not likely to be fully occupied for many long years.

In 1860, there were about 23 million sheep in the United States, which yielded in round numbers 60 million pounds of wool. In the same year we consumed about four and one-half pounds of wool to each individual, making a total of about 120 million pounds, or twice as much as we produced. Let, then, our population remain stationary, and we must double our wool clip before we can clothe ourselves.

But among the many lessons the present war has taught us, not the least is this: the superior sanitary properties of woollen fabrics. As a matter of necessity we have begun to reduce this teaching to practice, and so well satisfied are we of the adaptation of woollen goods to the varying conditions of our climate, that in the future there must be a largely increased demand of the raw material to meet the necessities of the rapidly multiplying varieties of manufactured articles. If before the war it required four pounds of wool to clothe each individual in the country, the present reform in dress fabrics will prepare us hereafter to use at least six pounds. This amount added to what we consumed in 1860 would make about 160 million pounds, or about three times as much as we then produced.

But no man is so short-sighted as to suppose that our population is to remain stationary, or that it is to be augmented only by the natural ratio of increase. From 1850 to 1860 our rate of increase was three per cent. per annum. Supposing, then, that for the next thirty years our population shall multiply in the same ratio, we shall have within the present limits of the United States not less than 75 millions of people.

Admitting, according to the above estimate, that each individual will consume six pounds, it will then require 450 million pounds of wool to fit up our national wardrobe every year, or about seven and one-half times as much as the clip of 1860.

Now, put by the side of these facts one other, namely, that when a good merino ram is crossed upon a flock of common ewes, the progeny will show an increase of from one-half to three-fourths of a pound per head; and when we remember to how great an extent the demands of the market must be supplied by the "native" or common sheep of the country, the question of the future demand for thorough-bred Spanish merinos may be considered as settled beyond a doubt.



Improved Spanish Merino Ram "Crape Defiance," in full fleece, three years of age. Weight of fleece, 20 pounds; weight of carcass, shorn, 110 pounds; bred by Edwin Hammond, of Vermont; dam one of six ewes purchased by George Campbell from Mr. Hammond, in winter of '61 and '62, and purchased of Mr. Campbell a lamb, in September, 1862, by his present owners, Glenn and Brothers, Noblestown, Allegheny County, Pa.

Still there is one other point which should not be lost sight of in connexion with this matter. American wool can be made to compete with that of other countries even in their own markets. We shall never be satisfied with simply clothing ourselves. When the fertile prairies of the west, the immense domain of the great northwest, with the magnificent plains of Missouri and Kansas, and the region stretching on the west of the Mississippi, down to the Gulf of Mexico, shall have become stocked with sheep, the United States will take the same rank as a wool-growing country that she has heretofore held in the production of cotton.

No field is there wider or richer in promise for the future than what is here opened for the intelligent American shepherd.

MANAGEMENT OF SHEEP IN WINTER.

What is said on this subject will relate to the care of flocks in the latitude of New England, or where sheep must be fed at the barn five or six months in the year.

As a convenient point to begin the round of the year, let us start with them as they are gathered about the barns in the late autumn.

To insure successful wintering for a flock of merinos, these things are, first of all, indispensable, namely: *good shelter, food sufficient in quantity and variety, running water, and skilful attendance.*

The best shelter is a good bank barn, located on a dry soil, facing the south, and so constructed that it can be closed in on all sides by windows and doors, when desirable.

The ground around the barn should slope gradually from the building in every direction, to prevent the water from the melting snow and ice in the spring from settling into the ground, and making the enclosure damp and unwholesome. If the soil is not naturally sufficiently dry, let it be thoroughly underdrained.

Such barns are usually built with a wall on the back side and one-half of the ends, like the cellar wall of a house, but the sills of the building should be placed high enough above the general surface of the ground to admit a window two feet wide. A barn 60 by 40 feet should have at least ten such windows. They should be hung upon hinges, so that they can be opened and shut at pleasure. By this arrangement good and sufficient ventilation can at all times be secured.

The space in the basement of such a barn can be divided into several separate enclosures to meet the wants of the flock, and each enclosure should open on the front side into a yard at least twice as spacious as the apartment under the barn. Around these yards should run a substantial board fence five feet high, and if in a dog region, it should be surmounted with a row of pickets. This simple provision will render it dog-proof.

Much will be gained by keeping only a small number of sheep in the same enclosure. If fifty sheep are to be wintered in a given space, let the space be divided into two pens, and twenty-five put in each. With the same keeping they will go through the winter much better than if allowed to run together. In pleasant weather sheep should be allowed to run in and out at will, and thus secure the exercise necessary to the fullest degree of healthfulness.

When shut in the fold at night the windows should be so adjusted as to allow the admission of a plentiful supply of fresh air. This latter point becomes the more necessary as the spring approaches, when the still cold season of mid-winter has passed and the air becomes heavy with damp exhalations. Not long since I visited a sheepfold, where the animals, a flock of fine ewes, seemed to be in a state of semi-torpidity, so closely was all the pure air of heaven shut out, and all the foul emanations of fermenting manure kept in. The best sheep in the world could not flourish in such a condition.

Pure air is as indispensable to the health of an animal as to the health of a man, and it will suffer proportionably when deprived of it.

WATER.

Many men once thought that sheep could live very well without water, but it was when the same men thought that because they had a covering of wool they could winter very comfortably on the northwest side of a hay-stack.

It is true sheep will go through the winter without water, but they will do very much better with it, and not only so, but it should be running water.

Sheep will drink more frequently and with far keener relish at a trough where the water is constantly running in and out, than at one into which the water is pumped.

The drainage pipe which carries off the waste water should be so adjusted as to allow the trough to fill within an inch of the top. The trough should then be covered with a closely fitting cover, and through this, and quite near the edge to which the sheep come to drink, two or three oval-shaped holes should be cut, about two and a half inches in the short diameter and five in the long.

If the sheep are to come up to the side of the trough, have the holes cut cross-wise in the cover; if they are to come to the end, cut them lengthwise. A sheep will quickly learn to put its nose through these holes for the water, and then the wool about the face and heavy folds of the neck will be kept out of the water, and thereby the animal saved from a vast amount of discomfort arising from the wool about the neck becoming wet and frozen.

The more one studies the habits of the sheep, the more will the fact of the extreme fastidiousness of the animal be impressed upon his mind, and the careful flock-master will soon learn that when he regulates his care in accordance with this peculiarity he will be well compensated for all his painstaking.

Not only will sheep drink with better relish of running than of standing water, but a little observation will convince any one that they will visit very often a trough arranged as already described, where they are obliged to touch only their lips to the water, when they would hold back till driven by sharp thirst from a trough where they could only drink at the discomfort of having the wool about the neck wet and frozen for hours.

THEIR FOOD.

Many experiments have been instituted to determine the relative value of various kinds of food for stock. But while not one man in a thousand is so situated as to be able to carry out in detail the lessons these experiments are calculated to teach, there is one fact which all can understand and reduce to practice, namely, *that sheep require a variety of food*. There can be no question but what if a part of all the grasses and herbs which they crop in the summer could be provided for winter, the healthfulness of our flocks would be much increased; but as this is out of the question, every careful keeper of sheep will aim as much as possible to meet this demand of nature.

Of the various kinds of grasses for summer and winter feeding, clover stands at the head; hence every man should stock his fields as frequently as possible that he may have a plentiful supply for his barns.

Much may be gained in winter by changing from one variety of feed to another. A feed of well-cured corn fodder or straw will be relished three or four times a week. If a given amount of fine and coarse hay must be fed, let a change from one to the other be made every three days. From the first of December to the first of March sheep should have as much hay as they will eat, with none to waste, twice a day. During March and April they should be fed three times a day.

In every apartment there should be a salt box kept constantly supplied with salt with which about two ounces of sulphur to the quart has been mixed. This simple provision will go far towards preventing all the intestinal diseases that are likely to attack sheep while being confined to dry feed.

Stretchers are very seldom known when sheep have access to a plentiful supply of salt, and I believe if they were provided with sulphur in addition to the salt the disease would never make its appearance.

FEEDING TURNIPS.

The fact which should decide what use should be made of turnips in winter feeding is not how many pounds of turnips are equal to 100 pounds of hay, and what is the relative cost of their production, but it is this: *stock does better with than without them*; therefore *feed them*. Turnips furnish much that the animal gains by direct contact with the soil in summer, and which meets a necessity of the animal organization that dry food alone fails to supply. How much good a given amount of turnips will do an animal is not to be determined by the amount of nutriment the chemist may find in them, but by the noticeable fact that a flock will thrive better on a less amount of hay and grain where a daily ration of turnips is fed.

The amount to be fed each man will regulate according to circumstances. A bushel per day to seventy-five sheep is a fair allowance, and may be increased to advantage, especially with breeding ewes, as they approach their yeanning time. Having been cut, they should be put into a trough and the daily allowance of meal for the flock sprinkled upon them, and both will be eaten with greater relish than if fed alone.

FEEDING GRAIN.

There is no uniformity in regard to the practice of feeding grain by good flock masters. One man feeds only a fair amount—a half bushel of mixed grains, as corn, oats, and bran, in equal parts—and carries his sheep through the winter in good condition; another keeps his sheep fit for the shambles the year round. The more judicious method is to feed enough to keep the sheep in good thriving condition. Other things being equal, sheep that are only kept in good vigor will give better stock than if kept over-fat.

The same rule in regard to variety should be observed here as in feeding hay. Bran or shorts, if fed liberally to breeding ewes as yeanning time approaches, will promote a full flow of milk. Breeding ewes should also be fed more freely during and for a few weeks succeeding the coupling season, in order to give the fetus a good start.

REGULARITY OF FEEDING.

When all the foregoing conditions have been complied with—warm shelters and dry yards, pure running water, the sweetest of hay, and the richest of grain—it is a notable fact that some flocks of sheep never look well. Some are poor and feeble, and go drooping in an abject condition around the fold. Their wool starts off and hangs in ragged tag-locks along their sides and flanks. They never come to the newly filled crib with a keen appetite, but drag themselves round with evident reluctance, and take their food as though eating was a task. Much of the cause for such a state of a flock will be found in irregular feeding—irregular in point of time and quantity of feed.

Feeding should always be attended to as nearly as possible at the same hour of the day, and the same amount given at each time, except at such times as it is desirable to increase or diminish the usual amount, and then such changes should always be made gradually. During mid-winter sheep should be fed as early as eight in the morning, and never later than four in the afternoon.

As the time approaches for turning the flock to pasture, if grain has been regularly fed during the winter, the amount should be gradually lessened, that the change may not be too great when they are sent to the hills to subsist themselves.

It is not the design of this article to notice many of the minor matters which must receive attention in every well-regulated flock, such as "tagging" and the care of lambs. These points are made sufficiently plain in works upon sheep husbandry. There is, however, one point which seems to demand a moment's attention in this connexion, namely:

DOCKING LAMBS.

This operation should be performed when the lambs are about ten days old. Let an attendant take the lamb, holding its feet firmly in his hands, and press its hind-quarters snugly up to a smooth block, on the top of which the tail of the lamb should be drawn out straight. The operator should be provided with a broad chisel, made quite dull, and only sharp enough to sever the bone without crushing it. The edge of the chisel should be placed firmly upon the tail, about one inch and a half from the body, and the loose skin crowded up towards the body till the point for amputation is reached. Then, with the chisel held inclining outward at an angle of forty-five degrees from the body of the lamb, a single blow with the mallet completes the operation. The bleeding arteries should be immediately seared by a hot iron, which can easily be made ready by a small portable furnace. By this method the usual loss of blood will be prevented, and the consequent check to the growth of the lamb obviated. If lambs are docked when a month or six weeks old, or indeed at any age, and allowed to bleed till the flow stops of its own accord, it will not unfrequently require two weeks for the lamb to make up for this vital drain upon his young and tender organization. Cases of bleeding to death, or so that death occurs as a consequent in a few days, are by no means uncommon.

By this method of amputation two other advantages will be gained—the skin will always readily cover the end of the bone, and the tail will be left in a desirable shape.

THEIR MANAGEMENT IN SUMMER.

For two weeks previous to sending the flock to pasture their allowance of grain should be gradually lessened. When pastures are near the barns the sheep may be allowed to run out for a few hours a day for several days before the final "turning out;" but if they are to be driven any distance, and where they will receive no shelter, they should not be taken from the fold till there is grass enough in the pastures for full and generous feeding. The practice which is often noticeable of allowing sheep to run out about the yards and barns as soon as the ground is bare, or the first shoots of green grass are seen, does not result in any advantage to the flock.

The practice of shearing without washing, and before sending away to pasture, is now quite common with the best breeders in Vermont. The entire flock should be dipped in a decoction of tobacco immediately after shearing, as a preventive against ticks.

When once the flock is "turned off" it should not be forgotten that the salt-trough is as indispensable for the pasture in summer as it is for the fold in winter. A quantity of tar, sufficient to cover the bottom of the trough, should first be put in, and the salt sprinkled upon this. In lapping the salt the sheep will get more or less of the tar on the nose, and this is not only healthful for the sheep, but is an excellent preventive against that inveterate enemy of theirs, the *fly*. A few fresh furrows, turned over as often as once in two weeks, from

the middle of July to the middle of September, will aid the sheep essentially in defending themselves against this vile tormentor. When attacked they will instantly take refuge in the furrows, and, by placing their noses close down to the fresh soil, prevent the fly finding access to their nostrils. This simple means is thought by some to be an infallible remedy against that scourge of the sheep-fold, "grub in the head."

What has been said in relation to the necessity for changing food in winter is equally applicable to summer management.

If the pasture to which fifty sheep are allotted for their summer's fare can be divided into two lots, and the flock put into each every alternate week, they will flourish much better than if allowed free range of the whole. Fifty sheep, if unrestrained, will travel over a hundred-acre lot every day, and each day be obliged to feed just where they did the day before, finding but little fresh grass; whereas, if they should be confined to one-half the field which is to support them for a given number of days, and then changed to the other half, they would find a constant succession of fresh and tender feed.

Particular watchfulness is needed if the flock contains any ewes which are expected to bring up "adopted lambs." Such ewes are quite likely to desert the lambs thus forced upon their care and leave them to "shift for themselves."

As the season for the cold and rain storms of autumn approaches, provision should be made for sheltering the flock from the inclement weather. A drenching rain of two or three days' continuance not only detracts from the appearance of sheep, but is a positive injury to them, and is one of the discomforts which should not be visited upon them when it is possible to avoid it. At the time of coupling the greatest care should be exercised in separating the ewes designed for breeding into lots, according to certain characteristics or qualities, so that those designed for a particular ram can be easily managed. Those having qualities which it is desirable to remedy in their offspring should be put to rams which possess the opposite qualities in a marked degree, and thus a uniformity of size, form, and quality of fleece may be secured.

No man who expects to make any improvement in his flock will allow a ram to "run with the ewes." Six or eight ewes in a day is as many as one ram ought to be allowed to serve when he has the very best of care; with a less number his chances for giving good stock would be much increased.

Many men mistake in leaving their sheep out too late in the autumn, as well as turning them out too early in the spring. They imagine, when the snow holds off till the first of December, that if they can keep their flock in the fields during the greater part of November, they have saved just so much of their winter's forage. This is a mistaken notion, and such men too often find that it will take all the month of December to make up what was lost by compelling their sheep to live for two or three weeks on the dead, frost-bitten grasses of the late autumn.

Thus the circle of the year has been completed by giving some hints in regard to the general management of merino sheep. The multitude of details which it would be interesting to notice, and important for new beginners in sheep-keeping to learn, are not admissible within the limits of such an article; neither is it necessary they should be, since they can be so readily learned from journals in part or wholly devoted to the interests of this great and increasing branch of American industry, and from the very interesting and thorough articles which have appeared in the last two reports from the Department of Agriculture.