

"How many head will you carry over next winter?" was asked.

"Only about a hundred," was the reply. "Last winter we found the sheep were crowded, especially at the lambing season. We believe they will do better this winter if not so crowded."

Before leaving, the Journal man was kindly shown over a portion of the farm by Mr Watter-son. As Messrs. Martin and Merrill have only been started in the business a little over a year, they have not made nearly all the improvements they intend to. At present there are four good barns and sheds, and a first-class root house. One of the barns is used as a cattle shed in which they intend to fatten 20 head of cattle this winter. Next summer a silo will be built. This winter the corn will be saved when putting it in the barn by making alternate layers of corn and dry straw.

Three milch cows, a couple of teams of horses, and a flock of hens are kept for general farm purposes.

The chief profit in sheep raising, as managed by Messrs. Martin and Merrill, seems to be in the large number of sheep that can be kept in a small space, the cheapness of the pasturage and winter food, and in the little care required to look after the flock. If Messrs. Martin and Merrill make a success out of their venture, as they seems likely to, other farmers similarly situated should feel encouraged to further develop that branch of farm work which is now so generally neglected.

—*Ottawa Journal.*

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## The Grazier and Breeder.

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### HORN FLY REMEDIES.

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During the summer live stock, especially milch cows, are terribly tormented by flies. Perhaps one of the most annoying of these pests is what is known as the horn fly, because of its habit of resting at the base of the horns. The annoyance of these and other flies cause a serious shrinkage in the milk yield and progressive dairymen have tried many remedies or preventatives in order to keep them away. In some places these preventatives are more effective than in others, but fish oil seems to be the most effective of them all. It is said to repel for from two to six days, but this depends on the exposure to the sun and the

temperature; in the southern states it does not repel for two days. The secret of success with any of these repellent dressings is their cost and the frequency with which they have to be applied.

The Kansas Experiment Station tried various substances and mixtures last season and found the following mixture as effective and cheaper than fish oil: Pulverized resin, 2 parts, by measure; soap shavings, 1 part; water,  $\frac{1}{2}$  part; fish-oil, 1 part; oil of tar, 1 part; kerosene, 1 part; water, 3 parts. Place the resin, soap-shavings,  $\frac{1}{2}$  part of water and fish oil together in a receptacle and boil till the resin is dissolved. Then add the 3 parts of water, following with the oil of tar mixed with the kerosene. Stir the mixture well and allow it to boil for fifteen minutes. When cool, the mixture is ready for use, and should be stirred frequently while being applied.

The mixture costs about thirty cents a gallon. From one-eighth to one-half pint is sufficient for one application. To apply the mixture, a brush is essential, and nothing is more satisfactory than a large painter's brush. At first it is well to make an application for two or three days in succession. Afterwards an application every other day or longer will suffice. Cows, in standing in water and mud, running through weeds and brush and rubbing against trees, often remove some of the mixture. In this case it is well to retouch the unprotected parts. It is often more economical not to attempt to protect the entire animal, but only those parts not reached by the head or tail. This mixture is very sticky and for this reason is not recommended for horses. It is perfectly safe, and in no case has it appeared detrimental to the health of the animal. There are those perhaps who may not want to take the trouble to make the above mixture. In this case we recommend fish-oil, which can be purchased at any drug-store. It also has to be applied with a brush, and at the rate of one-eighth to one-half a pint for each application. The cost of the fish oil would be greatly reduced if farmers would combine their orders and purchase at wholesale rates.

It is more difficult to protect horses. Fly nets are perhaps the cheapest in the long run. A mixture to be satisfactory must not spoil the appearance of the horse or prevent him being curried. The following mixture is safe and does not gum the hair. It is effective for three or four hours, and even longer. It is made as follows: Fish-oil, 2 qts.; carbolic acid (crude), 1 pt.;