rubber nipple attached is of feeding and care should

and nipple scrupulously

ng, the use of dirty bottle

wrong temperature is the

met with in hand raising

s and ailments usually

liscussed in another section

mention them at this time,

T OF THE FLOCK AFTER

relder trouble and to carry

ying period immediately

be fed carefully for a few

a few roots together with

answer very well. The

increased until the mother

e. A mixture of two to

bran fed in conjunction

silage should maintain a

ng lambs. A little linseed

ss.—It is during the early

ife that it makes the most

ntage should be taken of

general conditions should

possible. By the time the

s old they will commence

sion should be made for

may be fed separate from

ged by setting up hurdles

nd the openings into the

ee so the lambs may enter

p to pass through. The

or the ewes is quite satis-

ition of 1/4 to 1/2 pound of

of two parts oats and one

ay together with a few

ambs and fed along with

heir growth and develop-

o feed no more than the

feed troughs should be

and frequent feeding will

f Oat Smut.

r, O. A. C., GUELFH. this Province sustain a

llars due to smut. At

his average annual loss

illion dollars. This is,

x upon our agricultural

onstrated over and over

ented by proper treat-

Why has the formalin

erally adopted by the answer to this question

ds recommended in the

eriment Stations have

ork and time, and were

prevent smut. One of

haldehyde treatment. 919) field experiments

y the Department of College. The results

600 bushels of oats

ten different farms and

were sown for check. rom the treated seed,

ated seed the amount

5½ per cent. In no

the oats by the treat-

his treated oats had

this was investigated

e check strip did not

ause was, apparently,

iments on so large a

tory results in regard

t any apparent injury

mending the so-called

or the prevention of

DRY FORMALDEHYDE

a pile on the granary

er into another pile,

er spray them with a

rmalin (40 per cent.

five bushels of seed,

n mixed with half a

re bushels of oats.

ats are treated, use

and water. Thus,

quire only a quarter

quarter of a pint of

ng about \$1 like the

Illustration, is most

in solution on the

k. One man should

rays each shovelful.

ves, nose and throat, s, provide for a free

ary and barn when

Use this solution

ed seeding.

re practical farmer. ple and easily applied

IRM.

Fine-stemmed, second

ulating the milk flow.

the work is in progress. The irritation of the eyes and throat by the strong formalin fumes is the chief objection to this method but it can be overcome by holding the sprayer down close to the grain and providing plenty of ventilation. After the oats are all sprayed they should be piled in a heap and covered with blankets or sacks to confine the formalin vapor. After five hours the seed should be uncovered, bagged, and may be sown immediately. There will be no delay waiting for the seed to dry and no wet and swollen seeds to choke the drill. It is advisable to sow the treated seed as soon after treatment as possible. In our experiments here at the College, it was found that the seed did not germinate quite so well after treatment when it was kept for three or four days before it was sown.

The other simple and effective method for the prevention of oat smut is a modification of this so-called "dry formaldehyde treatment." It has been used by many farmers with success. J. W. McCordick of North Gore, Ontario, has treated his oats by this method for ten years and states that he finds it very satisfactory. Mr. McCordick furnished the writer with the following directions for the application of this method

Put ten gallons of water in a can or barrel, add one pint of formalin. Put forty or fifty bushels of oats on a clean floor in a heap. Take a sprinkling can and sprinkle the solution on the oats while a second man shovels them over. Turn the oats two or three times, then pile them up and cover them with sacks or blankets and let them stand for four hours. Then spread them out to dry and in a few hours they are ready for the

PRECAUTIONS TO BE TAKEN.

1. Use the formalin solution of the exact strength and in the proportions recommended.

2. Be sure and cover the treated seed as instructed. 3. Take precautions to see that the treated oats are not reinfected with smut spores. Sacks, bins, implements, etc., used in handling smutted grain must also be disinfected. The sacks should be dipped in or sprayed with the formalin solution and the seed drill

should be cleaned and a little strong formalin run through it.

The Same Old Game.

We have had several complaints lately from subscribers stating that they renewed their subcsription to The Farmer's Advocate and Home Magazine through one, "B. Runnells," to whom they paid \$1.50. This man gave them a receipt on the official form of a Toronto publishing firm, whose representative he was, and said that he was also authorized to take renewals for "The Farmer's Advocate." He never forwarded the money to this office. He professed to be a returned soldier, working hard for subscriptions in order to get back his former job. He elicited sympathy in this way, just as hundreds of other strong-arm canvassers are doing all over the country. They are hoodwinking the people with all kinds of hard-luck stories to enlist sympathy and get a large number of subscriptions. They are strongarm subscription agents-that's their business-and they never intend to take a college course or do anything else but rob the people, so long as their little game Works.

We have repeatedly warned our subscribers and others not to give money to strangers unless they carry bona-fide credentials of The Farmer's Advocate and Home Magazine. Farmers and farmers' sons, known in the community, are authorized to take subscriptions and renewals. Everyone else should carry proper credentials. We want to see the country swept clean of subscription swindlers, and will honor telegrams sent collect by our subscribers to "The Farmer's Advocate," us of any stranger or travelling agent attempting to represent this paper without the proper credentials. With your help we can bring these men to justice, and rid the country of a vicious nuisance.

South Ontario Notes. EDITOR "THE FARMER'S ADVOCATE":

Those who predicted a mild, open winter have kept closely hidden, or denied their prophesies. However, a cold winter with an abundance of Nature's white

covering is usually followed by a plenteous year. The shortage of water has been quite serious, many being obliged to draw one or more miles for all the live stock. This adds much to the necessary winter's work. The ground being frozen to a depth of from 18 to 36 inches, nearly all the snow may escape, and the ground not get its share, and unless this is followed by a bountiful rainfall in the spring, we may have more shortage of

water in the coming summer. The "flu" and "smallpox" epidemics have hit this part and while not so severe as in some places, a re-visit of the same is by all means not desired.

Fewer cattle than usual are being finished; the spring outlook has not been sufficiently bright to encourage the feeding of much concentrates to beef cattle, and while generally there is sufficient roughage, cereals are very scarce and quite a number of carloads of oats have been brought in from the West. The feedmen or dealers are retailing the No. 2 feed oats at around \$1.20 per bushel. One has only to look up Ft. William prices, add freight, and see the nice profit the retailers are cleaning up.

Milch cows are selling high. Many of the dairy-men depend on their own help; if it were not for this it would be would be necessary to try other lines of agriculture. Dairymen inform me that just at present there is practically no market for young calves, and quite a number

may be slaughtered. This, on the face of it, does not seem good policy, but can we blame the dairyman? He certainly can raise nothing but the best heifers, except at a loss, and we find even farmers will not do philanthropic work. In two months' time the demand for "bobs" will exceed the supply.

Seed grain is very scarce, and will undoubtedly be more so towards spring; one is well advised to be sure of all seeds early.

The small seeds yielded fairly well; the abnormal price tempted many to cut any clover for seed that looked at all promising, and it is well this was done, as there is an abundance for the surrounding parts; and the seedsmen have also taken their share to dis-

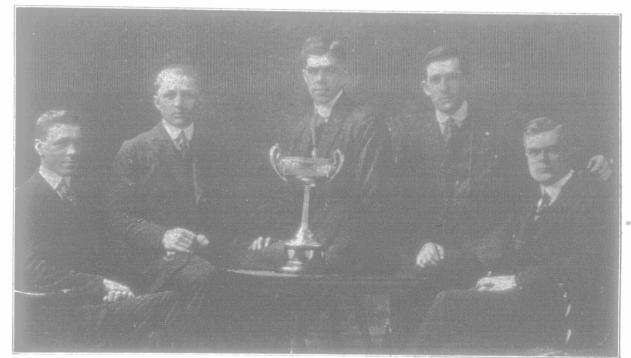
tribute over the Province. Sweet clover has some admirers, but many of the better farmers still look on it as a weed. Even the assurance of the agricultural colleges will not convince them that it can be easily controlled. The railway tracks have much to do with this prejudice; they cannot understand how it can grow year after year along the railway banks without re-seeding, and not bother on the farms, particularly in fence corners and bottoms, The writer has had experience with this clover, and while in his opinion it will never superse le the other clovers, it has its place, and may be controlled by understanding the nature of the plant, and using plain common sense But the growing of red and sweet clover for seed should not be undertaken on the same farm, unless separate barns are available for storing as they are sure to be at least slightly mixed, and the latter is classed under a useless weed by the Seed Commissioner when making a report on a red clover sample. Sweet clover will grow on land where red or alfalfa will not, but it should be remembered that soil with a certain amount of lime is necessary. It is a simple matter to gather a sample of dirt from a field and have same sent to the agricultural college, or to Ottawa, when a report will be sent showing if lime is present or not. It may be advisable on land that has not grown any clover for a number of years to procure a legume culture to inoculate the

## CANADA'S YOUNG FARMERS AND FUTURE LEADERS.

## Oxford County Judging Team Wins.

It has just been announced that the Provincial championship in the Inter-County Live Stock Judging Competition for the year 1920 has been awarded to the team of three junior farmers from the County of Oxford. It will be remembered that this competition is an annual one, and that the teams from the Counties in Western Ontario compete for the Duff Trophy at the Provincial Winter Fair at Guelph in December. Teams from Eastern Ontario Counties compete for the White Trophy at the Ottawa Winter Fair early in January, and the winners from each group come together sometime later for the Provincial championship and the holding of the cup donated by the Union Stock Yards and the packers. This year the Oxford County team won the Duff Trophy at the Guelph Winter Fair, while the Carleton County team won the White Trophy at Ottawa.

On March 4 and 5 these two teams came together under the supervision of R. S. Duncan, Supervisor of Agricultural Representatives, Toronto, and judged the various classes of stock at the places named below: Shorthorn cattle on the farms of G. W. McLaughlin, Oshawa, and W. A. Dryden, Brooklin; Shropshire sheep at G. W. McLaughlin's, Oshawa; Cotswold sheep at Wm. Smith & Son's Columbus; Clydesdale horses, Smith & Richardson, Columbus; Holstein cattle, G. H. Hunter, Brooklin; and swine at the Union Stock Yards, Toronto. The team from Oxford County,



G. R. Green, Sitting on the Right, and His Trophy-winning Stock-judging Team.

where a reasonable amount of skill and discretion is used in buying and operating, the user has been well pleased with the investment, and it is certainly astrong inducement to keep the boy on the farm.

Ontario Co., Ont.

Southern Ontario Tobacco Growers Organize.

Thoroughout Southern Ontario the soil and climate in many parts are adapted for the growing of tobacco. and a considerable acreage of this crop is planted each rear. The lack of proper driers for processing the tobacco to comply with requirements of the European market is a detriment at the present time to increased production. To overcome this obstacle, the growers ave formed an organization, and appointed provisional directors to secure a charter and draft rules and regulations for the carrying on of the organization. It is purely co-operative, and the aim is to build several driers of possibly fifteen-ton capacity, so as to have them in readiness for handling this year's crop. By so doing it will enable the growers to secure better markets and this will tend to increase production. Great Britain imports a large quantity of tobacco, a good deal of which comes from the United States. There is no reason why the Canadian growers should not secure a large share of this market if they have the facilities for properly processing the tobacco. The organization should receive the hearty support of every tobacco grower in Southwestern Ontario. As with every other co-operative enterprise, there may possibly be efforts made to belittle this movement, and it is only by the growers standing firmly by their own organization that they

Tractors are coming more and more in favor, and coached by G. R. Green, Woodstock, won by 275 points out of a possible 3,000, as the following abbreviated scores will show:

	Oxford	Carleton
Dairy Cattle	480	360
Beef cattle	490	427
Heavy horses	471	443
Sheep	286	303
Swine.	496	415
	2,223	1,948

The Oxford County team was composed of: Burns McCorquodale, Embro; John Blair, Embro; Max Butcher, Embro, while the team from Carelton County consisted of Echlin Croskery, Kinburn; Lloyd Armstrong, Kinburn; and E. Armstrong, Kinburn. The judges who made the awards were: Professor Wade Toole, Ontario Agricultural College, Guelph, and Mr. W. J. Bell, Kemptville Agricultural School, Kemptville.

The total scores secured by individual members of the two teams were as follows: Carleton, F. Croskery, 766; L. Armstrong, 622; E. Armstrong, 560; Oxford, B. McCorquodale, 769; John Blair, 710; Max Butcher, 744. Winners in the five different classes of live stock were as follows: Horses, 1, E. Croskery (180); 2, B. McCorquodale (171); 3, John Blair (163). Beef Cattle, 1, B. McCorquodale (183); 2, E. Croskery (160); 3, Max Butcher, (157). Dairy Cattle, 1, Max Butcher (173); 2, B. McCorquodale (165); 3, E. Croskery (143) Sheep: 1, L. Armstrong (117); 2, E. Croskery (108); 3, John Blair (103). Swine: 1, F. Croskery (175); 2, Max Butcher (169); 3, B. McCorquodale (165).