

orse. Try the effect  
l to a cup and a half  
lose.

as it. If the horse  
as the medicine, the  
t leave this to the  
t. A little exercise  
help matters. Re-  
half hour. A little  
d.

from this form of  
complicated by the  
d many cases pass  
orm that gives the  
re-alls their credit.  
a dose of Couper's  
horse recovers. A  
sent to the manu-  
ws as much about  
knows of his, and  
tption second-hand  
r the letter is sent  
ow, note the result:  
bottle, tries it in a  
es. Why? Simply  
edicine for his par-  
"There is no uni-  
ic."

is very little known  
almost invariably  
alcoholic beverage)  
rugs to be found in  
t. It is good, and  
rm.

us notice Farmer  
ent mixture failed.  
he same symptoms,  
ation various little  
There were no in-  
pain was constant,  
violent, but it was  
appeared to be  
ords, it was swollen  
ore especially in the  
particularly on the  
e hollow had quite

ch more dangerous  
st probably caused  
may be given, but  
ou will arrive at the  
inside, instead of  
through various  
heat and moisture  
riably by bacteria  
is. Now had the  
have passed away  
d. Then all would  
usual in such cases,  
say by a mass of  
y some fold of the  
ate and inflate the  
at there may even

h a case? The gas  
ay, and we must  
entation, also. In  
the passage. Per-  
moment in such a  
alled a trocar and  
nto the bowel and  
I have saved many  
have yet to see my  
rid of the gas, we  
reely and we must  
more gas. Here a  
lled horse doctors.

dose of laudanum  
e pain, and, so far,  
the result, not the  
only the effect of  
movements as we  
bowels it prevents  
onwards, and this  
on of the products  
vords, it helps the  
of using laudanum  
as to hunt up an-

he had given, say  
full of turpentine  
a pint of raw lin-  
the result? Why,  
It destroys the  
d it is to some ex-  
nd, I said raw lin-  
ve and thus helps  
material.  
st he should have  
Fluid Extract of

Belladonna. This drug acts as readily as laudanum in deadening pain, but does not check the action of the bowels. But some method of getting rid of the gas already formed is also requisite.

It may be that the block is taking place in the rectum—the last piece of the bowel. I always use a pump or syringe and throw in about a gallon of warm water. This loosens and softens everything obstructing the way, and most likely brings it away. Not only this. The movements of the last part of the bowels being accomplished we generally find that this movement is communicated to the whole in a wave-like manner, and so the whole trouble is removed. Certainly the gas comes away readily. But you have no pump or syringe? Well, I have succeeded with a piece of rubber hose and a ten cent funnel, and once I used a rubber spout from a seed drill, inserted one end, raised up the other, and poured the water from a jug into it.

Suppose you have none of these. Well, then, do as I have often done in an emergency: Strip off your coat, roll up your sleeve, wet your arm with the warm water (or grease it with lard) and gently force it inside, and thus remove by hand, perhaps enough of the blocking material to enable the rest to pass. Meanwhile remember that the intestines are inflated with gas and if the horse throws himself violently to the ground he may even rupture these swollen bowels. It is good to give him some exercise, since this aids the action of the bowels, but he must, when in the stable, be so secured that he cannot throw himself violently.

Enteritis.—Now we come to the third and most dreaded form of colic, the deadly inflammation of the bowels. We have the same primary symptoms as in the others, namely, pawing, rolling, looking back to the flanks, etc., but unlike the first we have no periods of rest, and unlike the second we have no bloating.

To the trained eye there are many other differences, but a recapitulation of these to the average farmer would only be confusing. Still there are some diagnostic symptoms which any farmer could distinguish. The belly or abdomen is very sensitive to the touch in enteritis, and if it be rubbed he will show signs of pain and may even use his heels or teeth. In spasmodic colic rubbing his belly gives ease. In rolling then he tries to turn on his back in order to take the pressure from his abdomen because of this pain. Then again he frequently passes small quantities of manure; in fact, he sometimes almost appears to have a form of diarrhoea. Finally by everting the eyelid it will be noticed to have a kind of raw beef appearance.

It is most important to distinguish this disease from the two preceding because the treatment is radically different. In the first case our main desire was, to stimulate the animal, and to ease the pain.

In the second we relied chiefly upon getting the bowels to move, and get rid of the gas. In the present case we want absolute rest, rest for the body, and more especially rest for the bowels. If we can stop the action of the bowels for a time Nature may remove the inflammation. (I have held post mortem examinations where the inflamed part did not extend beyond two or three inches. In other cases the greater part was inflamed.)

For the purpose of quietening the bowels, one of the best drugs to give is opium in some form—either powdered opium, or the tincture (laudanum). We must have no exercise, no purging, no syringing (enemas).

Tincture of aconite would be good as an addition, if we could only depend upon it. I have known a tablespoonful from one druggist to be given to a horse and repeated without dangerous results, while fifteen drops is a good dose of another kind. For this reason I am afraid to recommend its use.

Now a few words in conclusion. Horses are worth at present a lot of money and it will take a number of years for the bills of the veterinary surgeon to amount to the price of one horse. For this reason I earnestly advise the owner to waste no time. If the pain does not cease quickly—if there be any sign of bloating, and especially, if the symptoms described under "Enteritis" be present, hurry away for the nearest veterinary surgeon.

An hour's delay may make all the difference between recovery and death. Do not rely on the patent "cure-all" and especially, do not call in the help of that wonderfully wise man, the local quack, who without spending a minute of his time of money in studying the profession

gains his experience by practising on your animals at your expense, and then probably calls in the professional to treat his own.

Still if you are too far from a veterinary surgeon then follow exactly the advice I have given and in most cases you will meet with success.

Sask.

DR. J. F. COTTRILL.

## STOCK

American sheepmen anticipate an unusually large demand this year for breeding stock in the far west. The sheep business continues to develop, at about the same pace it set last year, and large increases are expected in ram requirements on the ranges.

### Raising Angora Goats

EDITOR FARMER'S ADVOCATE:

Will you publish in your valuable paper an article on the raising and management of Angora goats, also the price of hair and where salable? Do you know where I could get a book regarding goats? I have lately purchased a small flock and would like to get some information regarding them. I have taken your paper for fully ten years now and would not care to be without it.

Alta.

H. H. J.

Goat raising is not much of an industry in this country, being confined for the most part on this continent, to the Pacific and more southerly states of the United States. In growing Angora goats for mohair, does should be secured which are at least fifteen-sixteenths Angora blood. Goats, as nearly pure as this, yield from 3 to 5 pounds of hair per shearing, worth from 30 to 40 cents per pound. The quality of the mohair of less purely bred goats, being poorer, the price per pound is less, the amount produced is also smaller. In this climate, one shearing a year is all that may be secured.

Goats may be bred up to 10 or 12 years old and are in prime condition when from 2 to 6 years old. The bucks should be put with the does in November, the period of gestation being 21 weeks. One buck will do for 50 does. Breed once a year only. They will breed twice per year if let. Shear them in spring before the hair falls out, the same as you would sheep.

Angoras require shelter from storm and rain, cold does not hurt them. They may browse out all winter if the weather is open. They should be shelled at night. They may be fed any kind of rough fodder suitable to sheep. Oats are the best grain feed.

At kidding time the flock needs close attention. The kids for the first two or three days are very weak, and will die from very little exposure. It is best to keep them in the barn for a week or ten days after kidding. The kids ordinarily are not allowed to run with their mothers on the range until 6 or 8 weeks old. It is only in exceptional circumstances that Angoras will equal sheep in profitability; certainly not under general farm conditions.

The price of mohair varies with the quality, and we do not believe that a market exists for it in this country. Definite information regarding the price of hair, and where it may be sold, might be secured from the American Angora Goat Association, Kansas City, Mo., or the National Angora Record Association, Salem, Oregon.

We have no works on goat-raising but the associations mentioned above might supply you with the most approved books on the subject.

### Stockmen's Week at Regina

A meeting of the executive of the Saskatchewan Stock Breeders' association in Regina, last week, advanced arrangements for the holding of the winter fair, spring horse show, and cattle sale on the 23rd, 26th insts. The executive decided to have the live stock arena heated during the show, and to heat one of the stables where horses can be dressed for exhibition.

The judges selected to officiate are: Heavy horses, Wm. Smith, Columbus, Ont.; sheep and swine, Duncan Anderson, of the Dominion department of agriculture; cattle, Prof. Peters, of the Manitoba Agricultural College.

The Saskatchewan horsemen are making special efforts to put on a big show, and a number of feeders have fat stock prepared for the winter fair prizes.

The royster of speakers includes: Prof. Gaumnitz, Minnesota Experimental Station; George Greig, Western Live Stock Commissioner, Winnipeg; Dr. Rutherford, Live Stock Commissioner, Ottawa; Duncan Anderson, Orillia, Ont.; Mat Brennan, Francis; A. B. Potter, Montgomery; M. J. Stow, Davidson; W. P. Osler, Wolsley; G. W. Quick, Maple Creek; R. J. Phinn, Moosomin; Prof. Rutherford, Regina; P. M. Bredt, Regina; R. H. Taber, Condie; Alex. Mutch, Lumsden and W. C. Niblock, Grand Coulee.

### The Market Capacity for Bacon Hogs in the West

The Manitoba Department of Agriculture gives Manitoba farmers credit for increasing the number of hogs in ten years 82 per cent. Considering that your increase on cattle was 88 per cent, and your sheep decreased 48 per cent, the showing in a general way seems creditable.

It is not fair however, to you or to your Province, to stop at this point, as your live stock is dependent upon your grain.

In 1902 you had a little over 2,000,000 acres in wheat, and that year you averaged twenty-six bushels to the acre, which with one exception, is the best year you have ever had. In 1908 you have almost 3,000,000 acres in wheat and averaged less than eighteen bushels. Your average for the past ten years is eighteen bushels. Your average increases by 800,000, yet you show a decrease of 3,000,000 bushels raised.

In 1902 you had 725,000 acres in oats and averaged 47½ bushels. In 1908 your acreage had increased 500,000 acres, but you are only averaging 36.8 bushels.

The conditions in regard to the barley crops are similar. You show a falling off of 12 bushels to the acre.

I have given these comparisons that you may realize the importance of the connection between live stock and grain. Grain and live stock should go hand in hand. The future welfare of one is absolutely dependent upon the success of the other.

A farm without its live stock soon loses its fertility and with the loss of its vitality, it will soon become unproductive. Rotation of crops may help for awhile, but in the end you will find the real secret of diversified farming to be live stock.

Live stock is dependent upon the crops.

The crops are dependent upon the soil.

The fertility of the soil is dependent upon live stock.

Twenty-five years ago the wheat craze hit Minnesota. The farmers thought of nothing but wheat—dreamed of nothing but wheat. Wheat they almost worshipped. Minnesota became the great wheat growing section of the country, the greatest in point of area of the world. They were a glad people there then.

As the years flew by, her productions became less and less, the laws of nature could not be denied any longer. The fertility had been sapped from her soil. Today she averages 10 to 11 bushels to the acre. In the beginning they prospered, for she raised as much per acre, as you did a few years ago. She then was like you today with scarcely any live stock at all.

Do you know that with your 30,000 farms in Manitoba, you average less than one sheep to the farm, only four pigs to a farm, and less than fifteen head of cattle, including your dairy stock, and I understand your farms average about a half section each.

Minnesota has since learned her lesson and to-day she boasts of having 2,400,000 cattle, 1,400,000 hogs, and 800,000 sheep.

It is live stock that is putting those farms in shape again. It is live stock that will keep you from ever seeing your farms produce their ten to eleven bushels of wheat to the acre, if you will only put it on.

It is the cheapest soil feeder there is. Cheap because it is the best. It gives two returns—increased crops and the sale of the progeny. Now compare the value of your farms with those of other provinces: Ontario, \$47.30 per acre; Manitoba, \$27.30 per acre or \$20.00 less. And what makes the situation worse for you, is the fact that the average valuation of all Canadian farms is \$35.70 per acre, or \$8.40 more than yours.

#### HOG SUPPLY.

And now as to conditions of the hog supply: The market capacity for hogs in Western Canada, is a big subject. It is hard to see far enough in the future, and yet see the time where there could be too many hogs raised in our Western Provinces. The returns show that for the year 1908, hog receipts at Winnipeg were approximately 150,000; for the year 1907, 82,500, and for the year 1906, 86,000. It is conservative to say that Winnipeg packing concerns in 1908, could have absorbed at least three times the number of hogs which were offered them, and it is only good business to say that, as fast as an increased supply offers itself, that capital and facilities will be forthcoming to take care of them. I do not believe that hog raisers and shippers need to worry, about the danger of hog values getting to an extremely low level, such as may have happened a good many years ago.

There is a limit to the quantity of hog products which can be marketed in Canada, but after our home demands are supplied, we have the big advantage of being able to look to Great Britain as an outlet. The English demand is practically unlimited, and England, with her small producing power and immense consuming demand, will always be the world's biggest customer for grain and meat products. An index of big demand from England, is shown by figures covering annual exports for meat and meat products, from United States to Great Britain, which have averaged about one billion pounds a year during the past five years.

Canadian bacon and hams stand high on the English market, and while prices are not so high as