

**SYMPTOMS**—The symptoms of impaction of the colon are not as alarming or violent as those of some of the diseases already discussed. The condition may be present for some time without any serious symptoms being noticeable. It may be noticed that for a day or two the animal has not voided his normal quantity of faeces and that voided has been somewhat dry, and also that his appetite has not been quite normal, neither has he his usual spirits and ambition. He will then show more or less well marked colicky pains, become restless, lie down, get up again, etc., and exhibit more or less general uneasiness, but seldom shows violent symptoms. The pulse, in most cases, is slightly increased in force and frequency, and as the disease advances it increases in frequency but decreases in force. The mucous membranes are usually injected. A peculiarity in the symptoms usually shown, is a desire to sit upon his haunches, or when standing to press his rump against some stationary object. He resists the introduction of the hand or injections into the rectum, and if the ear be placed against the abdominal walls an absence of the normal intestinal murmur will be noticed, there will be either an absence of sound or sounds of a metallic nature. There will be little or no faeces voided, and a fullness of the abdomen, better noticed on the right side will become more or less well marked. Where relief is not afforded, the symptoms increase in intensity, gases form which increase the fullness of the abdomen, the pulse becomes more frequent, but weaker, often almost or quite imperceptible at the jaw and the patient either walks aimlessly about or throws himself down violently, rolls and struggles. Rupture of the intestine may now take place (especially in cases in which the symptoms become violent) which causes death in a few hours, or inflammation of the bowels results, which is equally fatal, but not often so soon.

**TREATMENT**—As there is always partial or complete paralysis of the coats of the intestines the administration of large doses of purgative medicines must be avoided until the paralysis is overcome. It is good practice to administer a small purgative, say 6 drams of aloes and two drams ginger to a horse of ordinary size. Follow up with 2 drams nux vomica every eight hours. Combat pain by giving 1½ oz. chloral hydrate, 2 drams solid extract of belladonna or 2 oz. each of tincture of belladonna and sweet spirits of nitre in a pint of water as a drench every two hours, or as the symptoms indicate. Do not give opium in any form, as it increases the constipation. Remove the contents of the rectum by hand and give injections of warm water with a little soap in it per rectum every 3 or 4 hours. Some recommend the injection of a solution of aloes (about 1 oz. to a gallon of warm water) into the rectum, and when the patient will retain the injection for considerable time this may give fair results. If gases form and the patient becomes bloated, give 2 to 3 oz. oil of turpentine in a pint of raw linseed oil. This may be repeated every two hours, but after the first dose it will be wise to mix the turpentine with new milk instead of oil in order to avoid too much purgative medicine. **WHIP.**

## LIVE STOCK.

### The Karakul Sheep.

Editor "The Farmer's Advocate":

The production of high-class furs in Canada is an old-established industry; until a few years ago the fur all came from comparatively wild animals. In a sense the industry became domesticated when fox farming was introduced. A more advanced step in this domestication has been taken by introducing the Karakul breed of sheep and prospects bid fair for the production of high-class Persian lamb, such as is seen and admired every day in our winter season. As yet we are groping for definite information, but so far the attempts seem to spell success.

It is only for the last six years that such a breed has been known in America; in 1908 Dr. C. C. Young made the first importation and established a flock in Texas. A second importation was made in 1913 by the same Dr. Young. Since that time these have multiplied, and in a few places they are being bred for commercial purposes.

All Persian lamb furs, of course, have had to be imported. Their great value is due principally to the fact that they are difficult to procure, and also that they have to pass through many hands from producer to consumer. Being solely an Asiatic production, the idea of producing them in America under very different climatic conditions was not entertained until some were actually brought in. The importer, Dr. Young, is a Russian by birth, and knows something of their history and habits, their value and their adaptability to every condition, and having faith

in their future as a commercial success, after many difficulties he succeeded in landing the first Karakul, and thus become a pioneer in a business where competition could not grow keen for some time. Dr. Young was fortunate in the support received from President Roosevelt, and also in the kindly interest taken by the U. S. Department of Agriculture.

Fur farming has already made Prince Edward Island famous, but competitors to Reynard have appeared on the scene, and from all appearances may be more kindly towards those who are financially interested in them. Part of the importations made by Dr. Young have been placed on farms adjacent to Charlottetown. The new importation to be made this year is also for these farms. Their introduction into Canada has made many men think seriously regarding the outcome.

The Karakul sheep is strictly of Asiatic origin, but their particular history is as yet more or less of a mystery. One eminent student maintains that the curly, lustrous fleece of the lambs is evidence that they are native of a warm country, but the power of adapting themselves to very cold climates rather proves the opposite. The finest strains are to be found in the district around Bokhara in Central Asia. Authorities tell us that climatic conditions in that country are very severe; extreme heat in the summer, intense cold in the winter under desert-like conditions, with but sparse pasturage and little shelter at all seasons of the year, have caused them to become extremely hardy. They are great rustlers and browsers. Their great activities are only seen when in mountainous parts, and they compare favorably with our mountain sheep. If the



An English Saddle Pony.

above be correct, and as yet we have no good reason for disbelieving it, and knowing that maximum development can not be achieved except under ideal circumstances, might there not be, as we have witnessed in the development of the Thoroughbred, some improvement made upon the original? It may be quality, lustre or in the general conformation of the sheep.

Correctly speaking, they should be called Arabi, not Karakul, sheep. There are two classes,—small and large. We get but little fur from the pure-bred sheep; it is very expensive and finds only the households of Eastern potentates. We secure a less valuable grade produced principally in Afghanistan from graded sheep. A great deal of this is purchased by Persian traders and they sell to Europeans, hence the term "Persian" Lamb. They belong to the broad-tail class of sheep. Their tails are triangular in shape and larger in some strains than in others—in the large Arabi strain the tails become so ponderous that they are unmanageable; doubtless this accumulation of fat serves them, under severe conditions, as the humps serve the camel. The rams are horned, but the ewes are usually hornless. The face is narrow, and with the legs is covered with a short, glossy hair. The wool is long and hair-like, varying in color from light gray to black. The mutton is said not to have that musk or sheepy flavor so common with our native sheep. Armour & Co., of Ft. Worth, Texas, state that the use of

Karakul rams on native ewes shows quite a marked improvement in the quality of the mutton. If by this alone the consumption of mutton could be enhanced, then their introduction into America would be praiseworthy. The lambs resulting from a cross with our herds seem to be growthy and of an early-maturing kind.

The U. S. Department of Agriculture is making several experiments using a pure-bred Karakul ram, but as yet has given out no definite information, although the prospects for a satisfactory outcome are bright. Dr. N. K. Nabours, of Kansas University, has made an extended study, particularly regarding breeding problems, and sees great possibilities. The Kansas College is sending him to Asia this summer to study conditions first hand. So far he believes that there is, apart from the production of fur, the possibility of establishing a new breed of sheep which is very hardy, giving a superior quality of mutton.

Their distribution in America is very limited; Prince Edward Island, New Brunswick, Kansas, Texas, and those at the U. S. Department of Agriculture. Climate anywhere in America seems to agree with them fairly well. W. W. Birch is quoted as follows in the American Breeders' Magazine, from the Sheep Breeders' Magazine:

"A year ago last fall we bred a broad-tail ram to Delaneys and Lincoln Delaneys. The lambs were a marvel in size and constitution. They grew rapidly, and in August some of them were larger than their mothers, and went through the most severe drought we have experienced in years, and while the other lambs fell off rapidly in flesh, those containing broad-tail blood not only held their own, but gained right through the dry season, which lasted for about two months. There was absolutely no grass, and the sheep were obliged to browse, getting what they could in a burnt-over and cut-over timber country. They seemed to defy cold weather and snow, always preferring to stay out in the storms and lie around in the snow. The mutton proved to be wonderfully sweet, and the finest I have ever eaten. I am satisfied that the fat-tailed sheep will play a very important role in our sheep industry, and if you can get your Karakul crosses introduced, it strikes me that the sheepmen will find not only great profit in wool and mutton, but in fur as well." If they can survive in Northern Michigan, Ontario has nothing to fear. Every indication seems to point favorably toward the easy acclimatization which means much.

Three grades of fur are produced:

- (1.) Persian Lamb.—Lustrous, jet black and with a tight curl.
- (2.) A strakhan.—Black, but without the

regular tight curl.

- (3.) Krimmer.—Grey, with either tight or loose curls.

The absence of a fine underwool is very necessary for the production of high-class skins. A great many have a little. It is quite difficult to breed out when once established. When founding a flock careful search for it should be made, and if very much present it would be better to select another ram. A first-class pelt can be secured only by the use of a coarse-wooled sheep.

The production of fur in America is not to be from the pure-bred ewes, but by crossing Karakul rams with our longwools. They are preferable, due to the amount of lustre found which adds to the value of the fur. If any lambs are off color, they can be held for mutton purposes.

The care of the sheep is no more difficult than of our ordinary breeds. A pure-bred ram will serve approximately one hundred ewes following the hand method of breeding. The lambs when dropped are usually a glossy black, but rarely golden brown ones occur. The wool of the lamb is tightly curled over the body and well over the head and down over the legs. The qualities that determine the value of a skin are, tightness and size of curl, the lustre and size of the skin. The lambs should be killed when not more than ten days old; the skins from any lambs born dead or from those where the ewes die shortly be-