

ure of the os uterus (mouth of the womb) after delivery. Old or poorly-fed cows are said to be subject to the accident, giving cold water to drink too soon after calving, etc. Some one or more of these causes may occasionally operate, but during a practice extending over twenty-four years I have noticed the abnormality in question in cows of every age and condition and under every system of management—good, bad, and indifferent. There are grounds for believing that the chief cause which produces retention of the placenta is not yet discovered. It may eventually be found to be, to a great extent, due to some peculiar nervous influence, in certain cases, brought to bear upon the cow during the last stage of pregnancy, or during, or soon after, parturition.

The treatment is medicinal or mechanical, or a combination of both. The former consists in the administration of so-called "cleansing draughts," which are supposed to hasten the expulsion of the placenta. These are, or should be, composed of a laxative, diuretic, ecbolic, carminative, and a stimulant, and should be given within three days after parturition. If this treatment is not effectual in expelling the "afterbirth," its removal must be accomplished by mechanical means, which embraces an intelligent use of the hands and arms of the operator. The time when manual interference is necessary will depend very much upon the temperature of the atmosphere and the physical condition of the animal. If the weather is cool or temperate, and the cow has a good appetite, gives a natural flow of milk, is lively, and apparently in no respect suffering any inconvenience from the prolonged retention of the placenta, in such cases a too hasty interference is not indicated. Patience should especially be exercised when a large portion of the placenta has already been expelled and is hanging from the vulva, because there is evidence that the whole mass will shortly become detached in the natural way. When, however, the weather is warm and the cow exhibits symptoms of constitutional disturbance, manifested by uneasy movements of the hind legs; straining, with frequent attempts to micturate; and appetite and flow of milk more or less impaired; and the exposed portion of the placenta giving evidence, by its change of color and smell, that decomposition has commenced, its removal should then no longer be delayed. In removing the placenta the operator should make bare both his arms to the shoulder, wash his hands and arms in a solution of creolin (one part to fifty parts of water), and afterwards smear them with a lubricant made by mixing one part of creolin with fifteen parts of vaseline or lard. The washing and smearing of the hands and arms should be frequently done during the operation. This antiseptic measure should be strictly observed, especially when decomposition has made considerable advancement. When all is ready an assistant will grasp the tail and hold it to one side, and if the cow is nervous or restless another assistant will take her by the nose until the operator inserts his hand into the vagina, after which the animal will usually stand sufficiently quiet. The hand is then advanced to the mouth of the womb, which is sometimes so much contracted that the hand cannot enter. When such is the case the opening must be carefully dilated, with the fingers in the shape of a cone, until it is wide enough for the hand to pass through. When one hand has entered the womb the part of the placenta exterior to the vulva should be grasped by the other hand, and steady, firm, but not violent, tension applied to it, which will serve to guide the hand within the womb to the adhering parts. The membranes have now to be carefully separated from the cotyledons before mentioned. This is done by persistent and skilful manipulation with the two first fingers and thumb. The operation in performing it properly (which is the manner in which it should always be done) is often a very tiresome and tedious one, and requires the exercise of a good deal of patience and perseverance on the part of the operator. I may say that in performing the work there is much advantage in relieving one hand with the other. On the removal of the placenta, if it is decomposed, and a sanious, fetid discharge is being ejected, the womb should be thoroughly washed out with warm soft water, using an enema pump or large syringe for the purpose, after which it should be plentifully injected with a two-per-cent. solution of creolin—creolin, one ounce; water, fifty ounces.

2. Your Jersey cow's ailment is leucorrhœa (whites), caused, no doubt, by the non-expulsion of the fetal membranes. The case being one of long standing, the successful treatment will necessarily be somewhat difficult. The womb and vagina should be thoroughly washed out once a day with warm soft water. This should be done with a large syringe, and the injections should be continued each time until the water flows out quite clear. After each washing the parts should be injected with a four-per-cent. solution of permanganate of potass.—permanganate of potass., two ounces; water, fifty ounces. Give internally in mash twice daily for two weeks, iodide of iron, one dram. As the discharge disappears the local treatment should be gradually discontinued. W. A. DUNBAR, V. S.]

SPRAINED HOCK.

SUBSCRIBER, Prescott Co., Ont.:—"A Clyde mare coming seven this spring, after an upset eight days ago, ran about three-quarters of a mile and around the barn, where she smashed the sleigh and broke loose from it. This was seen next morning by the tracks, as no one saw her for at least an hour after she reached home, it being at night.

Next afternoon we drove her easily for about ten miles. She perspired a great deal, but showed no other sign of weakness. Next morning she held one hind foot from the floor. It was slightly swollen below and around the hock, and she refused to eat. It was discovered after the accident that the spur from this leg had been knocked off, but without any cut. Swelling has increased. Yesterday kept hot bran poultice with turpentine to it all day, with no apparent effect. The mare has worked hard, and was well fed on oats and timothy. Since the accident have tried bran or anything else to tempt her. She seems to eat better at night, but drinks very little. She was expected to foal about end of June."

[From your description of the mare we are of the opinion that she has sprained her hock joint, which is rather a serious accident, as this is probably the most complicated joint in the body. Continue the hot poultices, and three times a day give the entire joint a good rubbing with the following liniment: Sugar of lead, saltpeter, spirits turpentine, and strong ammonia, of each half an ounce; spirits camphor, 4 ounces; water, 1½ pints. Shake well before applying. And give the mare a small teaspoonful of saltpeter in her bran mash twice a day for a week. Keep her perfectly still, and if necessary put a sling under her for support. As soon as you get the inflammation reduced in the hock, it may be necessary to apply a blister to remove any lameness that might be remaining, but before you apply any treatment be sure of the exact location, and have the foot very thoroughly examined by a competent blacksmith, as she may have picked up a nail in her foot.]

LAME SHOULDER.

SUBSCRIBER, Ottawa Co., Ont.:—"I have a valuable Clydesdale mare, nine years old, carrying first foal; due to foal last week of May. She has been very lame in right front leg since 1st February last—too lame to go out to water. She gets no better. Mare worked in a team in the city until she got lame. When she walks she drags or scrapes the toe along the ground. She steps off sideways from the sore leg; keeps the elbow out from the body as much as possible. No heat nor swelling now. When standing, she keeps the foot flat on the floor, but a little ahead of the other. When she took lame, first she often stood with sore foot a little behind the other foot, with toe turned in. At first there was swelling around and above the fetlock joint, and sometimes a little swelling inside the arm of leg up near body, and sometimes swelling on the outside of the arm. Those swellings were painful to the touch. Was also swollen half way along the ridge of the neck from the point of shoulder to the throat. I never felt any heat. What is the trouble, and what should I do for her? Some people say her lameness is due to being with foal, and that she will be lame until she foals; after that she will be all right. Is this so? Can all medicines usually given to a horse be given to a mare with foal without injury to the foal?"

[The mare's trouble is high up—probably in the deep-seated muscles of the shoulder. It would not be wise to pursue any heroic treatment until she foals, and in the meantime give the entire shoulder a good rubbing, twice daily, with the following liniment: Nitrate of potash, acetate of lead, oil turpentine, liq. ammonia fort., of each six drams; tr. cantharides, 2 ounces; oil origanum, 1 ounce, and spirits camphor, 4 ounces; all dissolved in a quart soft water. After she foals we would insert a seton as near the seat of lameness as possible. In foal mares should have very little drugs, and in no case should they be purged, especially with aloes.]

INVERSION OF THE WOMB.

J. H. B., Megantic Co., Que.:—"What is to be done in the case of a cow prematurely calving and forcing out the "calf-bed" or womb with the afterbirth? Within this week there have been two such cases in my immediate neighborhood. In one instance the cow was at night, when fed and watered, apparently all right; but in the morning the calf-bed was hanging with the afterbirth, and the cow dying from loss of blood. Being too far gone for recovery, nothing was done for her, and she died. In the case of the second one, she threw her calf at eight months, the calf-bed immediately following with the afterbirth. An attempt was made to replace the womb, but it was an impossibility. The cord was therefore tied and severed, the cow dying immediately afterwards. In this case, the womb seemed to be decayed and spongy. What should have been done in these cases? Is this common amongst cows, or of rare occurrence? Can a cow live after removal of womb in any manner?"

[The cases described are not at all uncommon during calving season, although in the second case the abortion signifies a matter of more importance, as we believe contagious abortion is becoming alarmingly prevalent in some sections in Quebec, and all means should be adopted to prevent its spread, by thorough disinfection of the cow stables and keeping things clean generally.

Regarding the treatment for inversion of the womb, first place a clean sheet beneath and around it (to protect it from straw, dirt, etc.), then carefully remove the adhered afterbirth and cleanse the organ thoroughly in clean warm water in which is dissolved a little carbolic acid (four drams to a gallon of water), after which it must be returned to its proper location by steady, persistent yet careful pressure when the cow is on her feet. This requires a strong, careful man. Place the fist

as near the center of the organ as possible, and with firm and steady pressure return it, then make the following solution and inject: Powdered alum, ½ oz.; tannic acid, 1 dram; fluid extract belladonna, 2 drams; carbolic acid, 1 dram; clean soft water, at 98 degrees or as near the animal temperature as possible, 1 quart; and inject the entire amount, remaining with the cow for some time, to prevent straining and throwing it out again. Repeat injection two following days.

Both the cases referred to died from shock. We have heard it recommended to insert a beer bottle into the vagina, bottom first, and secure there by tying a strong string to the neck and fastening the ends to a surcingle placed around the cow just before the udder. Leave the bottle in this position for a day or so, or until the cow has ceased to strain.]

LAME MARE.

C. D., St. Pierre, Man.:—"I have a heavy mare, lame in front feet. She is naturally flat-footed. She has been lame for three months. I put some oil around the coronet and some electric oil on corn inside of shoe. The horn looks burned and is very dry. Could you tell me any remedy?"

[Poultice the feet for three or four days with equal parts of bran and linseed meal mixed with hot water, changing the poultice morning and evening. After this, take the mare to a good shoeing smith and have her shod with properly-fitting bar shoes, applying at the same time leather soles with tar and tow stopping.

W. A. DUNBAR, V. S., Winnipeg.]

ACTINOMYCOSIS.

SUBSCRIBER, Simcoe Co., Ont.:—"I have a steer that I have been feeding. He took something in his mouth and tongue about two months ago. There are spots on his tongue, the glands are swollen on both sides. He seems short of breath, and quite frequently coughs. I should be glad if you are able to give any information in regard to treatment."

[It is difficult to give any reason why animals put up for feeding should contract this disease. The membrane may become inflamed from eating some irritating substance, or it may be the result of the disease known as actinomycosis. The first symptoms are saliva dribbling from the mouth. On examination, small red elevations will be observed on the tongue. These spots are succeeded by ulcerated patches, which are exposed by the shedding of the mucous membrane. Treatment, if from actinomycosis: Give repeated dram doses of iodide of potassium twice daily in bran mash. If from stomatitis, a disease which shows itself in pimples about the mouth, give a dose of purgative medicine and apply the following: Molasses, 4 ozs.; boracic acid, 2 ozs.; nitrate of potash, 1 oz. Give a tablespoonful by rubbing on the back teeth with a piece of stick covered with cotton rag. This the animal will chew and so obtain a dose. Apply twice a day. DR. W. MOLE, M. R. C. V. S.]

COW FAILING TO BREED.

M. B., B. C.:—"We would like your advice on a young cow. She was due to calve on Sept. 23rd, 1898; lost her calf on June 27th; we bred her on Nov. 29th, Dec. 21st, 1898, and on Jan. 15th; she came in season to-day, 9th Feb.; did not breed her this time. Two days before breeding, Nov. 29th, gave her a dose of Epsom salts; washed her well with West's disinfectant fluid, also washed bull. What do you think we should do with her? We intend to let her rest for a few months."

[We cannot recommend any better course than the one you have followed, and can only counsel patience. From observation, we are satisfied it is not wise to breed a cow within three months after abortion. As a rule, cows having had this mishap will breed again, but there are a considerable number of exceptions. It is well to give her the rest you propose.]

HEIFER STRAINING.

SUBSCRIBER, Simcoe Co., Ont.:—"I have a valuable heifer rising three years old. In June she jumped out of the pasture field and was away for two days. I suppose she was in heat, but do not know whether she was with a bull or not. After returning she started to strain as if in pain, and kept this up till fall, failing greatly in flesh. She gradually got better, mended in flesh, and came in season. I have had her served twice, and after service she discharges a little blood and after an hour strains some. What is the trouble, is she likely to breed, and what treatment should I adopt? (2) My yearling heifers which have been in heat several times I notice a day or two afterwards discharge some blood. Do you think there is anything wrong in this case, and should I give any treatment? (3) Can you give any remedy for large tapeworms, about eight inches long, in pigs? Pigs are five months old and have been fed turnips and mangels, with oat chop."

[(1) The cause was probably excessive service by a strong and vigorous animal, causing inflammation of the womb. Time may bring about a healthy condition of the parts, and we would advise the use of a young bull and one service only. Heifers are liable to be injured by strong bulls. It is doubtful if any treatment would be helpful, but if the heifer gets into a healthy, natural condition she may breed. (2) This is not uncommon, and is no indication of anything wrong. (3) Give a handful of hardwood ashes for each pig in the food twice a week; also give a teaspoonful of sulphur for each pig twice a day in their food, which generally kills the worms.]