

repelling the same way as before; or in urgent cases a hook may be fixed in the lower jaw, or if the head is considerably doubled back, within the orbits.

A blunt hook should be used if there is a chance of delivery alive.

A *repeller* is a crotch shaped instrument made of an iron rod, five-eighths of an inch in diameter. It should be about four feet long with a hand piece, and a crotch shaped end, as depicted in Fig. 1.



FIG. 1.

5. Deviation of the Head towards the Side.

Secure the feet and head with a rope round the former and the lower jaw of the latter, draw on the rope of the lower jaw and press the body back. If this fail a blunt hook may be placed in the orbit and traction used. In the foal it is occasionally possible to extract the foetus without changing its position, by just putting a cord round the neck and feet and drawing, but with the calf this is seldom possible, but it is easier to rectify the position of the head in that animal. Removing one or both of the fore extremities at the chest will aid very much in accomplishing this.

6. Twin Foetus in Different Presentations.

Disengage the interlocked limbs, then return one foetus—the lower and most backward—into the womb during the extraction of the other.

7. Hind Legs Presented. Traction without alteration.

8. Hock Presentation. Hock Corded.

Repel the foetus into the womb to a sufficient extent to reach the limbs. Pass a cord round the hocks and draw them forward; then pass the cord down below the fetlocks. Now press the body and hocks back, while traction is applied to the feet, taking care to bend the toes well forward, especially as they are passing over the brim of the pelvis, as they are liable to bruise or tear the womb.

There is seldom much difficulty in accomplishing this with the calf, but owing to the greater length of leg in the foal it is sometimes impossible; then the limb must be separated at the hock.

9. Thigh and Croup Presentation.

Press the foetus well forward, then pass a cord round the thigh, shoving it down as low as possible, so as to get the hock pulled back; then proceed as in hock presentation.

It is sometimes very difficult to accomplish this, and cases are recorded in which it was found necessary to cord both thighs, and draw the foetus away without rectifying its position.

Cutting through the cords above the point of the hocks facilitates its extraction. Cases sometimes occur in which the foetus lies crosswise in the womb, either with the back or belly and legs presented. Judgment must be used to determine whether it is better to convert such presentations into anterior or posterior ones. If the head can readily be reached, it is as a rule better to convert into an anterior presentation; but otherwise, and if the hind legs can be reached, it is better to make a breech presentation of it.

The cases described are the commonest causes of *difficult birth*, but there are a number of others of a more complicated character, that it would be impossible to make very clear in a short treatise of this kind.

Cases of difficult birth are much more frequently met with in the cow than in the mare. Fortunately, however, it is much easier to afford relief in the cow, for the following reasons: She is less active and violent than the mare, and the foal's legs and neck being

longer than those of the calf there is greater difficulty in turning them, if their position requires rectifying.

Rubbing the Tail.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—An accident occurred to one of our driving horses. In going along the road, he kicked and struck the rig, cutting his leg between the gamble joint and the fetlock, which caused his leg to swell up, and in healing, it left a callous on the left side of the leg. (1.) I would like to know what would take it off. Also, he rubs his tail, although it is kept clean. (2.) What could be got to prevent this, and make the hair grow. Sutherland's Corners. P. M.

ANSWERED BY F. C. GRENSIDE, V.S., GUELPH, ONT.

1. Rub in a little Iodine Ointment once daily, for several weeks. If the skin gets sore and roughened, withhold the ointment for a few days, until the soreness disappears, then reapply.

2. To stop rubbing the tail, keep him in a stall, so arranged that he cannot succeed. If he is kept in a box stall, put in a wainscoting two feet and a half high, and slanting out at the bottom about a foot and a half. This prevents the animal from getting close enough to the wall to be able to rub. *Very small* quantities of blue ointment rubbed in the root of the tail, at the part rubbed, occasionally, is often beneficial.

If the digestive organs are not in good order, or if the presence of worms is suspected, a dose of purgative medicine may afford relief.

The Farm.

Our New Premium.

We question whether there is another Canadian crop that has attached to it more importance than the oat. Recognizing this, we think we have made a happy selection in choosing that grain, and especially the Banner variety, to offer as a premium. We feel sure our offer will meet with a generous response, and that no one may overlook this splendid opportunity to secure some of this variety for seed grain, we would direct their attention to another department of our journal where full particulars are given.

The Growth and Uses of Rape.

The growing of rape is most extensively practised in the more immediate vicinity of Guelph. At present the area devoted to its growth is considerably circumscribed. That it should be so is not a necessity, for there are many sections in the Province where it will grow quite as well, and indeed better, than in the neighborhood already referred to.

Any soil that will grow good turnips will grow good rape, as its habits and requirements of growth are almost identical with those of the turnip. It will also give fair crops on humus soils in valleys where turnips would grow largely to leaves. Like the turnip it takes very kindly to large quantities of manure, and will bear well almost any amount of forcing.

As one of the first objects in growing it is that of cleaning the land, fields that are foul should be chosen for the purpose. It is well when they can be given autumn cultivation with a view to destroy weeds. In the spring the cultivation may be exactly the same as that given to a summer-fallow, or to a field intended for roots, up to the middle of June. The ground should then be drilled about the same distance as in the case of turnips, say twenty-six to thirty inches, and then be sown at the rate of not more than one pound of seed to the acre. It has been found that the best results are usually obtained when the seed is sown about the first of July.

It is then cultivated with the horse-hoe as often and as long as it is possible to do this work, the hand-hoe-

ing being similar to that given to turnips, with the difference that the rape requires no thinning. At least so it is supposed, but it may yet turn out that moderate thinning will far more than repay the labor. Sometimes rape is sown in the autumn and pastured in the spring time, and the ground is then sown to rape. This is an excellent practice, as the rape may be sown as early as August, and then it affords an excellent bite both fall and spring.

The uses of rape are two-fold. It serves to clean the land without the necessity of resorting to bare fallow, and it is found to be unequalled for fattening sheep and lambs and cattle in the fall of the year, particularly the two classes first mentioned.

The time of turning on will depend largely upon the time of sowing. Usually the rape is ready about the 1st of September, and it serves for pasturage on to the time of snow. Sometimes it is sown broadcast, but this does not serve to clean the land so well.

The stock should never be turned into the field unless after a full meal, lest they should become bloated or scouring should be induced through over-eating.

After being turned on they should not be removed, but if a pasture field at hand is accessible, it affords a fine place for them to lie in, especially in damp weather. They should be visited twice a day or oftener, as sheep are inclined to lie down between the ridges and get on their backs and so die.

Rape has wonderful fattening properties. Lambs feeding upon it soon become plump and solid and heavy. In common phrase they are said to turn into "lead." It is a kind of lead, however, that is much coveted by the butcher.

When the work is properly done the land is thoroughly cleansed, and may be followed by barley sown to grass as in the case of roots. Cleaning land in this way is much to be preferred to the method of doing this by means of a summer-fallow only, as in the latter instance there is no crop for the whole season. Rape-growing may be said to be supplementary to a bare fallow, as where the preparatory work has been well done prior to the sowing of the rape the labor of keeping the rape clean will not be grievous.

We fail to see why there should not be a magnificent future for this crop in the Province of Ontario. Large and fertile sections may be devoted to its growth. Lambs fattened upon it last fall brought readily from five to six cents per pound, live weight, which ran the price fully up to an average of six dollars each for good lambs.

Another important use of rape-culture is to lessen labor in handling the crop grown. The whole of the crop is fed in the field without an hour spent in the harvesting. Even though rape could be cured ever so perfectly in a silo, it will not pay to do this, owing to the labor of harvesting it.

It also tends greatly to enrich the land. It draws its food largely from the air, and being fed on the land it becomes manured in a most effective way, and at a minimum of cost.

Why should not the farmers of our Province prepare thousands of lambs in this way for the winter markets, since by so doing they would nearly double the returns they get for their lambs? There need be but little doubt as to the demand for long years to come. Buffalo eagerly catches up our lambs thousand after thousand. No doubt Boston is ready to do the same, and other great American cities in New England, and our own towns, many of them rapidly increasing in population, will want an ever-increasing number. Fallow-farmers, cease growing so much barley at forty cents a bushel, and try the experiment of growing lambs and fattening them on rape.