THE FARMER'S ADVOCATE
AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

TWO DISTINCT PUBLICATIONS—EASTERN AND WESTERN

EASTERN OFFICE:
CARLING STREET, LONDON, ONT.

WESTERN OFFICE:
IMPERIAL BANK BLOCK, CORNER BANNATYNE AVE. AND MAIN ST., WINNIPEG, MANITOBA.

BRANCH OFFICE: CALGARY, ALBERTA, N.-W. T.

LONDON (ENGLAND) OFFICE:
W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street, London, W. C., England.

JOHN WELD, MANAGER.

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It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
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with few exceptions, reared on Canadian farms, and will most assuredly be in a position to give a good account of themselves in promoting the interest of those who entrust them with responsibilities, and, at the same time, lay the foundations for their own future.

To Assist in Controlling Weeds.

The question of weed destruction and control is the all but universal problem in Manitoba, and it helps nothing toward the mastery of the situation that grain-growing is the most popular branch of farming in this Province. Successive crops of spring-sown grains provide the most favorable opportunity for such weeds as wild oats, French weed, Canadian thistle, etc., to produce seed and to propagate themselves from year to year. The situation has become positively serious, and the public is open to any suggestion and will support any practical scheme that will assist in the war on these parasites of the grain field.

A hint as to the course to pursue comes from the State of Texas. Down there the U. S. Department of Agriculture is establishing demonstration farms, apart and distinct from experimental farms, for the purpose of demonstrating the system of farming it will pay best to pursue in that State. This idea applied to Manitoba would mean that the Government select certain farms throughout the Province to be used to illustrate what methods of cultivation and cropping would be most practical and profitable to follow, in order that the invasion of weeds might be checked and the minimum grown. These farms would not necessarily be owned by the Government, for there are plenty of such places throughout the Province where weeds are being controlled, but the detail work of each farm might be compiled by the Department, and a report issued weekly or fortnightly during spring, summer and fall.

HORSES.

Watch the Mare at Foaling Time.

(Continued.)

We, of course, assume that the mare is provided with a comfortable box stall of sufficient size. This should be thoroughly clean and well bedded, and if there be an absence of feed boxes, mangers, etc., all the better, as these are more or less in the way, and in some cases mares foal while standing, and there is a danger of the foal dropping into one of them.

If the mare show symptoms of nervousness on account of the presence of an attendant, he should remain out of sight as much as possible. If the act of parturition take place in a normal manner, he should not interfere, but if complications arise he should endeavor to correct the fault. It is not uncommon for the mare to lie down with her croop so close to the wall that delivery cannot take place. In such a case she must either be forced to rise or be shifted into a favorable position. If the labor pains have been frequent, severe and long for considerable time, and still no visible progress has been made towards delivery, the attendant should roll up his shirt sleeve, oil arm and hand well, and endeavor to ascertain the nature of the obstruction, whether it be malpresentation, nondilation of the os uteri, or other causes. If he has sufficient skill to rectify matters he should do so at once, and if not he should secure more skillful assistance as soon as possible, as ignorant or unskillful interference will, in all probability, complicate matters and render successful interference beyond reasonable hope.

In many cases, after more or less prolonged pains, an easy birth takes place, and it is not uncommon in such cases, where the membranes have not ruptured, for the fœtus to be born enclosed in them, and unless immediately liberated will perish from suffocation. So soon as the circulation of the blood from the dam to the fœtus ceases, the latter must breathe or perish,

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and in this case it cannot breathe, because it is enclosed in a complete sac. Instinct is supposed to teach the mare to liberate the fœtus, by tearing the membranes with her teeth, and this is sometimes done, but in the majority of cases she lies for a few minutes after delivery, and in the meantime the fœtus suffocates. The attendant must cut the membranes, liberate the fœtus, and attend to the umbilical (navel) cord. He should remove all mucus from the mouth, nostrils and eyes of the fœtus, and if the dam is still inactive, he should rub it well with clothes or wisps of straw until it becomes dry. This rubbing, or the licking of the dam, when she will attend to it, stimulates circulation by the friction, while if the foal be left alone the circulation remains sluggish and respiration weak. In regard to the umbilical cord, if it remain unbroken during delivery it should be promptly attended to. Here instinct is again supposed to operate, and teach the dam to bite it off; but we find that extraneous aid is often necessary. The attendant should be prepared for such emergencies, by having at hand a knife and some strong soft cord. He should tie the cord tightly around the umbilical cord, about one inch below the abdomen, and cut it off with a scraping motion of the knife about an inch below that. He should also be provided with a bottle of the solution of corrosive sublimate, 1½ grams to the ounce of water, and should dress the navel with this as soon as possible, and four or five times daily until healed, in order to prevent the entrance of the germ that causes joint ill.

SUSPENDED ANIMATION.—In some cases the fœtus, following either a rapid or prolonged birth, is apparently dead, but the activity of the circulation can be detected by placing the hand just behind the left elbow and feeling the beating of the heart. If respiration be not established quickly the little animal will perish. Respiration, under normal conditions, is established by what is called a "reflex nervous action." The young creature is more or less suddenly ushered into the external air, which is usually much cooler than its former habitation; this acting upon the skin causes a gasping, which is continued by regular respirations. When this fails to act, it can be aided by slapping the fœtus with cloths wrung out of cold water, or even throwing cold water upon the fœtus, and by spreading and closing the fore legs of the animal, and by breathing into its nostrils or forcing air into them with a small bellows. Many foals perish from this cause, and at least a reasonable percentage of them could be saved by prompt and rational attention.

WEAKNESS OF THE OFFSPRING.—Many foals are so weak and helpless when born that even a few hours' inattention will prove fatal; while if they are attended to and assisted to their feet and held up until they get nourishment from the dam, in at most an hour after birth, and every half hour or so afterwards, until they gain sufficient strength to help themselves, they will do well. It usually requires two men to do this, and if the dam be restless, a third is needed to hold her.

VICIOUS DAMS.—Some mares, and especially those with their first foals, are so vicious with them that unless interfered with they will destroy them. This viciousness usually soon passes off, but close attention is required at first. In most cases all that is required is for an attendant to hold her with a bridle, and another attendant place the foal in position to suck. In other cases it is necessary to apply a twitch to the mare, or even tie one hind foot forward, to prevent her kicking. This should be done each time the foal wants nourishment, until the mare becomes reconciled. In the majority of cases the dam requires no particular attention, except to see that she is provided with a warm drink and warm feed of bran as soon as the foal has been attended to, but of course there are liable to be many conditions in which she will require special and skilled attention.

There may also arise in the fœtus conditions not mentioned that require special attention, but we think we have shown that it is wise to keep a close watch on the mare that is about to fetch forth young.

"WHIP."

Canadian Horses for the British Army.

That Canadian horses are adapted to British military purposes we have satisfactory evidence in the decision of the British War Department to purchase five hundred horses annually from the Dominion. About four thousand new horses are required for this service every year, and, through the good offices of Mr. W. S. Spark, who toured Canada last year in the employ of the Agricultural Department at Ottawa, Canada will have an opportunity to supply one-eighth of the total number. Mr. Spark has been appointed to make the purchases and suggests the establishment by the Ontario Government of a remount station as a means of immediately securing the necessary remounts. He is also commissioned to ascertain for the British Government from what country could be secured 10,000 horses in the event of war, and Canadian horsemen will be pleased to learn that Mr. Spark considers Canada most favorably situated. After studying the conditions in the Argentine Republic last year, he declared against the horses of that country. Two classes of horses are required—one for cavalry purposes, of the stamp in use at Stanley Barracks; the other for the artillery, somewhat heavier, possessing an infusion of Shire or Clydesdale blood. Of the latter, about two hundred are now wanted.

The Functions of the Pastern.

The pastern, next in importance to the foot, should be oblique—sloping—and springy, viewed from the side. It is made up of the long or pastern bone, articulating at its upper end with the lower end of the cannon bone at the ankle or fetlock joint, the smaller pastern bone bearing on this at its upper end and below with the coffin-bone enclosed in the hoof, and should stand at an angle of 45 degrees with the ground surface of the foot. It is plain to be seen—and all experience bears unquestioned testimony—that this sloping of the pastern in conjunction with the cushion structure of the frog is the main dependence of the horse from all jars in movement and concussion of the joints of the feet and legs to prevent founder and navicular troubles. The pastern bones, as it were, are suspended in a mass of ligaments and tendons, and when placed at the proper angle greatly relieve the bones of the foot from severe concussion, irritation, and possible inflammation, as well as relieving the sensative frog from injury by reason of such suspension at that angle. Ringbones, sidebones, and joint troubles are generally associated with straight pasterns. Horses with springy pasterns have more freedom of action in their legs, are better walkers, smoother trotters and pacers, and the springy pasterns are indispensable to the easy riding horse. The pasterns should be of medium length in draft horses, but this essential springing down of the pasterns at every step, or in pulling heavy loads, is of great importance in their lasting qualities or for breeding purposes. The straight-pasterned colt will come more so as