The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees.—Cattle Breeders', $1; Sheep Breeders', $1; Swine Breeders', $2.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged $1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged $1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 20,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experimental Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association. to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 20th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. Hodson, Secretary.
Parliament Buildings Toronto, Ont.

LIVE STOCK FOR THE WEST.

A car-load of pure bred live stock will leave for Manitoba and the North-west Territories about the First of April. There is room for a few more animals. Space can be procured by corresponding with F. W. Hodson, Parliament Buildings, Toronto, Ont.

Farmers' Institute Department.

Reports concerning the work of the Farmers' Institutes in Ontario will be published weekly under this head; also papers prepared for this department by Institute workers. Secretaries and officers having announcements to make are invited to send full particulars to the Superintendent.

NORTH MUSKOKA FARMERS' INSTITUTE.

I have great pleasure in forwarding the enclosed revised list of members of the above institute containing 122 names; more to follow next month. I see by your report that we lead all the institutes up north here, and are bound to keep the lead if possible. It will not be my fault it we do not, as I can see we have done a lot of good already. I was talking to one of our merchants the other day, and he told me there was great improvement in butter alone since we had the travelling dairy and our institute meetings. I know the farmers are very anxious to learn.

Wm. Goldthorpe, Secretary.

WEST BRUCE FARMERS' INSTITUTE

Enclosed you will find supplementary lists of members taken by me at our meetings held in the different places, and also the reports of the different meetings held in our district. I have to thank you on behalf of our institute for your wise choice of the speakers you sent us; they are both first-class men and thoroughly up in the subjects they speak on. For our district at the present time Mr. Gould's subjects were exactly what was earnestly desired by the people. Great interest is now taken along the line of dairying, corn-growing and the silo, and how to build a cheap silo. The fruits from the meetings held by us will no doubt be great. Major Sheppard's subjects are also very interesting, and will be the means of doing much good. I must say that we have had every encouragement, and the amount of money we have spent will bear good fruit in the near future. True, the political agitation hurt us in some localities where many meetings were being held, but one thing I can honestly say, no person heard from us outside or inside the hall one word savoring of politics.

John Douglass, Secretary.

THE EFFECT SPRAYING HAS ON BEES.

By R. F. Holtermann, Brantford.

The relation ship between the bee-keeping and fruit growing industry through the work of cross fertilization by the honey bee is at present so well recognized that it is not necessary to more than say that anything which injures the bee prevents her from doing this important work. To spray fruit trees when not in blossom does not interfere with the honey bee. To spray during fruit blossom, when the latter are secreting nectar for the purpose of attracting the insect and distributing pollen when rifling it of its nectar, is very injurious to the honey bee.

The honey bee has a very highly developed nervous system, and for that reason, considering its size, falls an easy prey to quantities of poison which could have no effect upon other insects of a similar size. And the quantity of poison which would be fatal to the honey bee would have to be multiplied many times to have upon larger animals even the effect of a mild tonic, as prescribed by physicians.

The way in which the poison reaches the bee is as follows:—Attracted by the odor of the blossom she goes long distances from the hive; as she nears the flower she locates it, depending more upon her eye as the guide, and enters it, rifling it of its nectar. The nectar through the spraying mixture has a very small percentage of the poison. This mixture is taken up by the bee and enters the honey sac—not the true stomach. I do not know if the effect upon the honey bee varies according to the percentage of poison or depends upon the question as to whether the honey bee allows a portion of the nectar to enter the true stomach for its own support. It appears to me likely that in either case the bee may perish. The result, however, is this: In many cases, bees perish at the tree, in others, on their way to the hive, and still others, lose their lives after returning to the hive. This is not all. The honey bee undergoes all the stages of a true insect, namely, the egg, the larvæ, the pupa, and lastly the imago, or perfect insect. During the larvæ stage it is fed pollen and honey by the mature insect; this food containing only a very minute percentage of the poison is much more fatal to the bee when in the larvæ or grub stage and in this way many partially developed bees are destroyed.

The loss then is two fold, or to use a well-known term, the candle is burned at both ends. The old bees are destroyed, and so are the embryo bees, which should go to take the place of those who have served their day and generation, and die a natural death, and in addition, to build up the colony for the honey flow. In this way it will be seen that a colony may be totally destroyed through spraying during fruit bloom, or as a result, be in so weak a condition numerically that it can give the bee-keeper no surplus honey when the proper season arrives. By the surplus honey season we mean the time when the bees gather more honey than they require for their own use and when that which is taken to market is reduced; this season does nor arrive until later, when clover blossoms open.

An effect of less importance to the bee-keeper, but one of greater importance to the fruit-grower, is that the bees have been decreased in numbers until unable to fully carry on the work of cross-fertilizing fruit blossoms by distributing pollen. This, and not the gathering of honey, is the primary object of the existence of the honey-bee.

Ontario Agricultural College.

Announcements concerning the College work will be published weekly under this head.

FOALING TIME.

By J. Hugo Reed, V. S., Professor of Veterinary Science.

As the season at which most mares bring forth their young is approaching, a few hints as to the proper attention and the precautions to be observed may not be out of place.

As the period of parturition approaches, the mare should have good care, food, and attention; she should have regular, but not severe or excessive exercise, either in harness or in the paddock. Exercise under the saddle should be avoided, and especially the use of spurs, as the pain caused by their use is liable to cause premature birth by causing violent contraction of the abdominal muscles. She should have a roomy, well ventilated and thoroughly clean box stall while in the stable; mangers or boxes in which she might possibly drop her foal should not be present, and she should be plentifully supplied with good clean straw for bedding. Her food should be plentiful and of the best quality and of such a nature as to keep her bowels open and cause a plentiful production of milk; such as bran, chopped oats, a little linseed meal, a few carrots, and a reasonable supply of good hay. The water should be of first-class quality. When she shows such signs as are generally observed a few hours before parturition (such as a falling down of the muscles of the hips, the abdomen becoming much more pendulous, often the accumulation of a little wax on the points of the teats, an uneasiness, etc.), she should be carefully watched by a careful man, who understands something about the phenomena of the act. There are various reasons why a mare should be carefully watched. This is one of the most critical periods in the lives of the dam and the offspring which is soon to make its appearance in the outer world, and there are many conditions which may arise which imperil the lives of one or both—conditions, the evil effects of which may be averted by prompt and intelligent interference on the part of man, while injudicious, rash or ignorant interference may complicate matters, and render a comparatively simple case beyond the possibility of successful treatment even by the most skilled obstetrist. Hence the necessity of having a careful man with some knowledge of the act in attendance. The attendant should not be too anxious to interfere or render assistance, but after the labor pains have been present for some time and have acquired considerable force and duration, if progress is not being made towards delivery, he should endeavor to ascertain as carefully as possible, without unduly exciting the mare, the cause of the delay, or in other words the nature of the obstruction. This may be a simple malpresentation of the fœtus which he will be able to rectify, but should the case be beyond successful aid on his part he should without delay secure the services of an obstetrist, which if promptly done will usually result in preserving the life of at least the dam and frequently that of the offspring also, while if the mare has not been watched, but has been left to herself in this state for some hours it is probable complications will have arisen that will, in many cases, have rendered successful delivery impossible.

Then again, it not infrequently happens that the foal is born with the foetal membranes (the after-birth) intact, and will suffocate in a few minutes if these be not ruptured. Instinct teaches the mare to tear these open with her teeth, but in many cases, in fact in most cases, unless birth has been very easy, the mare will lie resting for a few minutes after delivery, and in the meantime the offspring perishes, while if an attendant be present he can rupture the membranes with a knife and expose the offspring to the air and thereby save its life. Many foals are lost in this way. In other cases the membranes are ruptured but the navel string not broken; in this case the attendant should tie it with a soft strong string about an inch from the abdomen and cut it off with a scraping motion of the knife about an inch below the string.

(To be Continued).