

# THE FARMER'S ADVOCATE

## AND HOME MAGAZINE.

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horticulture. It would seem that the central council should be established as an annual or biennial event, and that it should be looked to as a representative parliament of the fruit interests of the country. We believe that more general adoption of this conference idea would conduce to the better direction and value of departmental effort.

### The National Records Officer.

All the leading pure-bred live stock breeders' associations of Canada having decided to nationalize their records and locate their respective headquarters and registrars at the Capital City, Ottawa, the "Farmer's Advocate" begs leave to commend the proposed choice as Chief Officer of Records, of Mr. W. A. Clemons, for a couple of years past the efficient Publication Clerk in the Dominion Department of Agriculture. Mr. Clemons, as record-keeper for the Canadian Holstein-Friesian Association, demonstrated his capacity for that class of work. Careful, faithful and methodical, he will command the respect and confidence of the breed organizations as the officer who is to affix the national seal or stamp upon the certificates of registry and transfer as received from the various breed registrars.

### Work for the Railway Commission.

The sub-committee of the Parliamentary Agricultural Committee at Ottawa, appointed to investigate the question of discrimination in freight rates on agricultural products and live stock on the part of the railways, has made its report. The committee reported, after taking considerable evidence, that there was discrimination between different points, and recommended that the Railway Commission should investigate the matter. It was pointed out that the freight rates of the Canadian railways were considerably higher in some cases than those of the American lines, and also that the Canadian roads charged higher rates in some parts of the Province of Ontario than in others.

## HORSES.

### A Great Day for the Hackney.

Elsewhere in this issue we chronicle with pleasure the successful sale of Mr. Beith's Hackney horses, at his Waverley stables, Bowmanville, Ont. At an early date Mr. Beith pinned his faith to the Hackney as an ideal harness horse, either pure-bred or when crossed on properly-selected roadster mares. In actual practise they have justified themselves. Hackney-bred drivers sell at good prices, and how well they are able to command popular favor can readily be inferred from the Beith sale last week, when thirty-nine head sold for over \$25,000, or on an average of \$655 each. This is encouraging, right in the midst of the horseless age, and many of the best of them went to the United States, where the automobile craze is at its height.

### Sterility in Mares.

Sterility, infecundity, or failure to breed, depends on numerous causes, some of which are removable, many, unfortunately, are not.

It is difficult to ascertain the extent to which it prevails. In the studbook it is shown that among Thoroughbred mares the percentage of those which produce is 73.36, and those which abort and are infecund, 26.64. In the studs of France the fruitful mares are 59.57, and the unfruitful 40.43. Sterility may depend upon organic or physical causes, and may amount to permanent impotence, particularly when congenital and located in the generative organs. Hermaphrodites (animals which, strictly speaking, are not of either sex; in which neither the male nor the female genital organs are fully developed, but in which there is a partial development of both) are always sterile. Monstrosities are generally permanently sterile, as also are hybrids (the produce of a male and female of different species), but there are exceptions to the latter, as there are several well-authenticated instances of the mule and other hybrids reproducing. Prolonged continence and old age is a frequent cause of infecundity, as is noticed in mares that have been used for work or pleasure until their usefulness has ceased, and then been retired for breeding purposes.

Change of climate has often a marked influence on fecundity, sometimes checking it permanently, and at others rendering the animals infecund for a longer or shorter period. It may also be impaired or suspended temporarily or permanently by ill usage, bad hygiene, etc.

Sterility may be due, though temporarily, to premature or to tardy coition when the generative organs are not in a physiological condition for conception, or when they are in an irritable, abnormal state. Underfed or overfed animals generally do not breed as readily as those in moderate condition. These causes can, of course, be removed by careful feeding and attention. Excitable or vicious mares are less likely to procreate than those of an even, gentle disposition. It has been observed that with mares accustomed to work, active exercise, even to produce fatigue, before being bred, is favorable to conception. Various diseased conditions (which in many cases may only be suspected) of the generative or other organs, as well as general derangements of the system, may prove antagonistic to conception. There may be disease or alterations in the ovaries, fallopian tubes (the tubes which convey the ovum from the ovaries to the uterus), uterus or vagina, which will prevent conception; and if any material obstacle to the contact of the spermatic fluid with the ovum be present in these parts, conception cannot take place. Tumors of various kinds in these organs is not infrequently the cause of sterility.

In all these cases a careful manual examination should be made, as it is not infrequent that the removal of the obstacle to generation is quite within the scope of surgical or medical measures.

Probably the most common cause of sterility is an abnormal condition of the neck of the uterus. Occlusion of the os uteri (the canal leading through the neck to the body of the uterus) is more common than is generally supposed. This occlusion may occur during copulation only, and be due to a spasmodic contraction of the muscles of the os, occurring in nervous, excitable mares, and passing off when sexual excitement ceases, but is fatal to conception all the same; or the occlusion may be permanent, due to a chronic enlargement and thickening of the parts, to false membranes, or to a growth of tough, fibrous tissue. In all cases but the latter the obstruction to conception can generally be removed by an operation. The operator must, of course, have an intelligent idea of the anatomy of the parts;

he must be conversant with the normal condition, in order that he may be able to determine and appreciate the deviation from the same. The hand and arm should be thoroughly washed and then coated with sweet oil, and introduced through the vulva into the vagina, then pressed forward until the os is reached. In a normal case one or two fingers can with little pressure be introduced through the os into the uterus. If this can be readily done and the mare is of a nervous and excitable nature, we may suspect spasmodic contraction of the muscles, as stated. When this cause is suspected, the neck of the womb should be smeared with the solid extract of belladonna, which relaxes the muscles and prevents contraction. The mare should be bred in about two hours after the belladonna has been applied. If, on the other hand, occlusion is found to be permanent, a passage should be forced. Various instruments are manufactured for this purpose, but when an entrance can be forced with the fingers no instruments should be employed. By inserting the point of the forefinger into the center of the os, and pressing forward with a sort of rotary or screwing motion, it, in many cases, can be forced through, then two fingers can be used in the same manner. When the fingers have not sufficient power to force an opening, a blunt sound about the size of an ordinary catheter, or a piece of hard wood made perfectly smooth and about two feet long, so that it can be guided by the hand in the vagina, and force applied with the other hand, can be used (of course the instrument should be well oiled). Considerable force may be applied with an instrument of this kind, and when once a passage has been forced it can usually be enlarged with the fingers. When the occlusion is due to growth of fibrous tissue, or where fibrous rings surrounded the os, an entrance cannot be effected except by the use of a cutting instrument, and I do not consider it wise to operate, as, though a successful operation may be performed by a skillful operator and conception take place as a result, there is usually a reformation of the fibrous tissues during gestation, which prevents delivery and often results in the death of the dam. Hence, when cutting is necessary for conception, it is wise to forego all hopes of reproduction. When the operation with fingers or sound is successful, the mare should be bred in an hour or two after the operation. Diseases of the lining membranes of the uterus or vagina, which cause a more or less constant discharge, will prevent conception, and must be treated before breeding operations are attempted. WHIP.

### Thoroughbreds and Hunters at the London Horse Show.

The third week of the London Horse Shows was occupied by the Thoroughbreds, the Hunter Improvement Society, and by the Polo and Riding Pony Society's Exhibition.

To those who are non-resident in England, probably these shows have less interest than those that took place in the two preceding weeks, namely, the Shire and Hackney Horse Societies Shows, but to any that may be in England at the period when these annual shows take place, who has any predilection for horses of the type of the Thoroughbred, Hunter or Polo, no better or more interesting exhibition could be imagined than that which is held by these societies in the second week of March in each year.

The Thoroughbred stallions which were exhibited on the first day of the show numbered ninety-four. These comprised many race horses, which have been in training for a considerable number of years. They competed for twenty-eight premiums, each of the value of £150, which are provided by the Government as a retaining fee for their services for the ensuing year, in the particular districts in which they are stationed.

The good work that has been accomplished by reason of these sound sires being stationed in the districts of the country is most fully seen in the classes for their stock, included in the exhibition of the Hunters' Show, which took place on the following two days. The entries this year for this class numbered two hundred and fifty-four, and were all of very superior merit and quality.

Efforts are being made by the Hunter Improvement Society to establish a studbook for hunter breeding. Whether or not this will eventually be successful is a question open to much discussion. A reference, however, to the present year's catalogue shows that such a record is not likely to become general for many years, if ever; for the larger proportion of the winning produce was sired by the Thoroughbred from the cross-bred mare. Weight, bone and substance are as essential in the hunter as quality and go, and, therefore, it is hard to see how all these combined can be secured by direct breeding. It may be that such will be the case when it does come; it will then be of value to other countries, because if through the efforts of the home society to establish a studbook, such becomes an accomplished fact, it will then be possible for both the colonial and the foreign buyer to purchase stud stock, and continue to breed what is at the present time a most valuable commodity in the horse market, i.e., hunters that combine size, weight, quality and character. W. W. C.