

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 BAYVIEW 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.

1. THE FARMER'S ADVOCATE is published every Thursday
(52 issues per year).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.2. TERMS OF SUBSCRIPTION.—In Canada, United States,
England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00
when not paid in advance. All other countries, 12s.3. ADVERTISING RATES.—Single insertion, 50 cents per line,
agate. Contract rates furnished on application.4. THE ADVOCATE is sent to subscribers until an explicit order is
received for its discontinuance. All payments of arrears must
be made as required by law.5. THE LAW IS, that all subscribers to newspapers are held responsible
until all arrears are paid and their paper ordered to be
discontinued.6. REMITTANCES should be made direct to this office, either by
Money Order or Registered Letter, which will be at our risk.
When made otherwise we will not be responsible.7. THE DATE ON YOUR LABEL shows to what time your
subscription is paid.

8. ANONYMOUS communications will receive no attention.

9. LETTERS intended for publication should be written on one
side of the paper only.10. CHANGE OF ADDRESS.—Subscribers when ordering a change
of address should give the old as well as the new P. O. address.11. WE INVITE FARMERS to write us on any agricultural topic.
We are always pleased to receive practical articles. For such as
we consider valuable we will pay ten cents per inch printed
matter. Criticisms of Articles, Suggestions How to Improve the
Advocate, Descriptions of New Grains, Roots or Vegetables not
generally known, Particulars of Experiments Tried, or Improved
Methods of Cultivation, are each and all welcome. Contributions
sent us must not be furnished other papers until after they have
appeared in our columns. Rejected matter will be returned on
receipt of postage.12. ALL COMMUNICATIONS in reference to any matter connected
with this paper should be addressed as below, and not to any
individual connected with the paper.Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA.

How to Cover the Continent.

To the Editor "Farmer's Advocate":

Sir,—As a result of the description of the Chilliwack Valley, B. C., which appeared in the "Advocate" of the issue of the 6th of January, 1904, and in consequence of an advertisement of my own, which was in the same issue, of farms and farm lands for sale in this section, I have received over six hundred letters of enquiry from the farmers of Ontario, Quebec, Manitoba, N.-W. T., P. E. I., N. S., N. B., and many states in the Union, which proves clearly to me that the "Farmer's Advocate and Home Magazine" is the proper channel through which to reach the farmers of this broad Dominion, and, for that matter, the whole continent. A good many of the writers of these numerous letters have already paid this section of B. C. a visit of inspection, and with very few exceptions have expressed themselves well satisfied with the country and its prospects. I succeeded the other day in locating Mr. W. S. Hawkshaw, of Glanworth, near London, Ont., on what is generally considered one of the best dairy and grass farms in this municipality, and the residents of Chilliwack should congratulate themselves on having farmers of Mr. Hawkshaw's stamp come and settle in our midst. Being one of the leading pure-bred importers of the Dominion, he should, and no doubt will, do much towards the improvement of the stock in this section. Mr. Hawkshaw has left here for his home in Glanworth well satisfied with his purchase, and will be pleased to give intending settlers any information in his possession.

Quite a number of properties here have already changed hands, and it is very evident that the value of the farm lands here will rise, from the fact that they are of a very limited quantity, in comparison to the whole area of the Province, and when the mineral, lumbering and fishing industries of the Province become fully developed it must of necessity give the farmer one of if not the best market in the whole Dominion. This, coupled with our very mild and invigorating climate, will keep the price of farm lands at the very top notch.

Chilliwack, B. C.

S. A. CAWLEY.

Congenital Scrotal Hernia in Colts.

Congenital scrotal hernia is quite a common, and, fortunately, not often a serious condition in foals. At the posterior portion of the floor of the abdominal cavity, or, more correctly speaking, on the floor of the pelvic cavity, there are two openings, one on either side, passing through the tissues that form the floor. The superior orifice of each opening is called the internal inguinal ring; the inferior, the external inguinal ring, and the cavity between the two is called the inguinal canal. In the female, the mammary vessels pass through these canals to reach the mammae, and in the male the testicles pass through to reach the scrotum, and the spermatic cords in the entire animal continue to occupy them, hence the canals remain patent until the animal is castrated, when, in most cases, they become partially obliterated, and while scrotal hernia may occur at any time, even in a gelding, it is not often seen except in stallions. However, it is of the congenital form we wish to speak at present. It is not at all uncommon for this form of hernia to exist at birth, or appear within a few days. The scrotum will be noticed fuller than normal; usually only one side contains intestine, but in some cases both. If the tumor be not very large, there is no occasion for alarm. It will be noticed, if the colt be held upon his back, that the contents of the sac can be readily returned to the pelvic cavity, but in most cases quickly returns to the scrotal sac when he regains his feet. It does not interfere with the health of the animal, and if closely watched will, in most cases, be noticed to vary in size. This is accounted for by a spontaneous return of the intestines for a time. As in umbilical hernia, the mesentery which suspends this intestine is proportionately longer and looser in the foal than in the animal a few months or even a few weeks old, and as age advances it gradually contracts, and thereby draws the hernia up into the abdomen, and a spontaneous cure results. In most cases, this cure results by the time the foal is weaned, but in rare cases not until a year or a year and a half old. The application of bandages, trusses or liniments should not be resorted to, as the anatomy of the parts is such that they can do no good, and if persisted in do harm, by causing irritation. Extraneous interference is seldom called for. Nature should be allowed to have its course, and will generally succeed in affecting a cure. However, there are cases in which treatment is necessary. All cases should be carefully watched, and if the tumor is not becoming larger, even though it may not be noticed to be growing smaller, or even to be less noticeable at times, leave it alone, but if a gradual or sudden increase in volume be noticed, which will interfere with the little animal's action, causing him to walk with a straddling gait, which becomes more marked, more or less quickly, according to the rapidity with which the intestine gains entrance to the sac, then treatment becomes a necessity. In cases of this kind, the services of a skillful veterinarian should be procured without delay, as an operation is necessary. The patient must be placed upon his back and held there, the scrotum and surrounding parts thoroughly washed with a disinfectant, as a 5-per-cent. solution of carbolic acid, the hands of the operator and assistant also, instruments also disinfected. Then the scrotum is carefully cut through, and the intestine exposed and carefully returned through the canal into the abdominal cavity. If the testicle be present, it should be removed (and, of course, its fellow also), and a clam, enclosing the abdominal coverings, along with the spermatic cord, applied, the animal allowed to rise, and the clam left on until it sloughs off. In some cases the testicle has not yet descended and cannot be found. Where this condition exists, after the intestine has been returned, the edges of the external ring must be drawn together with carbolized catgut or silk sutures, which will become absorbed, and in the meantime the opening will become so contracted that a recurrence of the hernia is not probable, although the testicle will, in most cases, descend into the scrotum. This, of course, is an operation that should not be attempted by any except an expert, where the services of such can be secured.

Percheron Horse Registration.

It should be noticed that the Dominion Fair authorities will only recognize as pure-bred Percherons, horses whose owners produce the pedigree certificate from the new Percheron Association, of which Secretary Stubblefield has charge. This is in line with the regulation of the U. S. Bureau of Animal Industry, which recognizes only the record mentioned by the Winnipeg people.

Enclosed find \$1.50, being subscription for another new name for the paper that a farmer cannot very well do without. WM. FIEGHEN, Jr.
Grey Co., Ont.

STOCK.

Some Phases of Cattle Feeding.

The person not familiar with experimental work in feeding animals, can form no idea regarding the difficulties which have to be overcome, and the long time it takes to procure anything like satisfactory results. We have now been working from seven to eight years with experiments in fattening steers, and the work accomplished looks very small indeed. Experiments must be repeated over and over again in order to make sure that differences in results are due to the methods of feeding, and not to the individuality of the animals under experiment, or to other causes which are not under the feeder's control. There are so many problems facing the man who feeds cattle, that it is difficult to decide upon which of these are the most important and should, therefore, be given precedence in our experiments. This paper will deal with only two of the problems in cattle feeding which we have attempted to investigate up to the present time.

In selecting steers for feeding the farmer has a choice between two well defined classes. The first class is what is known as short-keep cattle. This comprises steers that are in good fleshy condition and weigh, roughly speaking, anywhere from 1,100 to 1,300 pounds. Such steers can be finished for market by increasing their live weight from 150 to 200 pounds, and, therefore, it is necessary to feed them for a comparatively short period. Of course, in some cases, they have to be fed longer than in others, but, in any case, they should be in sufficiently good condition that they can be finished in from three to four months feeding. The second-class comprises lighter and thinner steers, weighing, say from 950 to 1,150 pounds. Owing to their thin condition, it is necessary to increase their live weight very considerably in order to have them properly finished for the export trade. Possibly, 300 pounds is a fair estimate of the average amount of increase in weight which it would be necessary to put upon these steers. Owing to the greater length of feeding period, this class is frequently called long-keep cattle.

The first problem which we set out to investigate was the best method of feeding long-keep steers; that is to say, whether it is better to feed them a heavy meal ration and finish them in the shortest possible time, or whether it is better to feed a lighter meal ration and carry them on for a somewhat longer period. The results of our experiments along this line seem to be very conclusive. In every case where we attempted to force the cattle by feeding a heavy meal ration, we found that it cost considerably more to produce a pound of gain than where we fed a lighter meal ration. It would take too long to go into all the details of our experiments, and, therefore, we shall concern ourselves only with what we found to be the most economical method of feeding this class of cattle. When the steers were first put in the stables, they were fed mainly bulky food, such as hay or chaff, with roots or silage, and they were given little or no meal during the first month of the feeding period. In this way, the animals gradually became accustomed to eating meal, and the quantity of meal was very gradually increased from month to month. The rate of increase in the meal was not the same in all our experiments, because we had to adapt our methods to circumstances, and increase sufficiently to have the steers finished by a certain time. Some years the steers required rather less meal than others in order to bring about the desired result, and in this matter, as in all other matters pertaining to feeding live stock, the feeder must use his judgment. On an average, the steers would receive about one-quarter of a pound of meal per day per 100 pounds of their live weight during the first month of feeding. The next month the quantity was gradually increased until, as a rule, it reached about one-third of a pound of meal per day per 100 pounds live weight. After this time, the increase in the amount of meal was usually somewhat more rapid, and during the last month of feeding they were usually as high as from two-thirds to four-fifths of a pound of meal per day per 100 pounds of their live weight. On an average they usually received about $\frac{1}{2}$ of a pound of meal per day per 100 pounds of their live weight for the whole feeding period. With this method of feeding, and with good average long-keep steers, it usually required about six months to make the steers ready for export.

This method of feeding is not in accordance with the accepted feeding standards for fattening cattle, and yet it seems to me to be in accord with common sense, and is certainly in accord with the practice of many of our most successful and shrewdest feeders of cattle. Before being put in the stable, the steer is used to eating bulky, succulent food. If he is placed in the stable and required to consume a large amount of concentrated food in the form of meal, we would naturally expect that digestive troubles would be the result. By commencing according to the other method, and feeding the steer bulky food, his digestive organs gradually become accustomed to changed conditions, and, as time goes on, he is able to make use of a large amount of meal without suffering any inconvenience therefrom. One of the great troubles in feeding cattle is the so-called "burning up" of the cattle with meal. This simply means that their digestive organs have been called upon to do more work than they were able to perform, and the result is disaster. Where cattle are handled judiciously, and the change from one kind of