THE FARMER'S ADVOCATE & HOME

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY

THE WILLIAM WELD COMPANY (LIMITED). LONDON, ONT., and WINNIPEG, MAN.

JOHN WELD, Manager.

F. W. Hodson, Editor.

1. The Farmer's Advocate is published on the first and fifteenth of each month.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

2. Terms of Subscription—\$1.00 per year in advance: \$1.25 if in arrears; sample copy free. European subscription, 6s. or \$1.50. New subscriptions can commence with any month.

3. Advertising Rates—Single insertion, 30 cents per line. Contract rates furnished on application.

4. Discontinuances—Remember that the publisher must be notified by letter or post card when a subscriber wishes his paper stopped. All arrearages must be paid. Returning your paper will not enable us to discontinue it, as we cannot and wow ways are an above paper will post of the state of t find your name on our books unless your Post Office addre

The Law is, that all subscribers to newspapers are held responsible until all arrearages are paid, and their paper ordered to be discontinued.

Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

7. The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law. 8. Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless

this is done. The Date on your Label shows to what time your subscription is paid.

Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

regularly will confer a favor by reporting the fact at once.

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.

Replies to circulars and letters of enquiry sent from this
office will not be paid for as provided above.

13. No anonymous communications or enquiries will receive

14. Letters intended for publication should be written on one side of the paper only.

15. 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.

THE FARMER'S ADVOCATE, or

THE WILLIAM WELD CO. LONDON, ONTARIO, CANADA.

CONTENTS.

EDITORIAL:-

197-Our Portrait Page. 198-Editorial Notes; Canada's Columbian Victors. 199—You Should Have It; Stock Breeders at Ottawa; The Treatment of Earth Roads.

STOCK:—
200-First Prize Essay-Profitable Horse Breeding in Mar
toba and the N. W. T.; Chatty Stock Letter from the State
Erratum. 201-Our Scottish Letter; How, When, and Whe
Shall We Market Our Wool, and the Sheep Trade? FARM:

PARM:—202—Millet Growing; How to Make Better Roads; New Departures in Agriculture. 203—Popular Geology—No. 5.

QUESTIONS AND ANSWERS:—
203-Veterinary. 204-Miscellaneous.

DAIRY:—
204—Handling Saturday Night's Milk; Cleanliness in Relation to Cheesemaking. 205—Stall Fastenings for Dairy Cows; Opening Meetings of Cheese Markets.

Garden and Orchard:— 205—Strawberry Culture; A New Label; Farmer's Garden. APIARY:—
205—Seasonable Questions.

POULTRY:—
206—Poultry Raising from Another Farmer's Standpoint;
Poultry on the Farm; Poultry for Profit.

THE QUIET HOUR: -207.

MINNIE MAY:-208. UNCLE TOM: -208.

STOCK GOSSIP:-213, 214.

NOTICES:-212. ADVERTISEMENTS: -209 to 216.

"You Should Have It."

Under the above heading the Goderich Star makes the following observations :- "The FARMER'S ADVOCATE is one of those publications that, once tried, will be found indispensable to the farmer, stockman or even the gardener or horticulturist. The issue for April 15 is particularly timely and valuable in the subjects presented. The information given for the orchard is very full and from the last authorities; there are hints from the leadrepackers on the now rapidly-growing hog infastry: the dairy is well presented in a variety of ants, and poultry and bees are each noticed by eding authorities. In fact, you will be interested repaid by a perusal of this number, which is irly representative of the character of this old and able publication. Send a postal card to the Wm. eld Pub. Co., London, for a sample copy.

Stock Breeders at Ottawa.

On Tuesday evening, May 2nd, the following gentlemen left Toronto for Ottawa, as a deputation to interview the Dominion Minister of Agriculture: Messrs. Arthur Johnston, of Claremont; John I. Hobson, of Mosborough, and Henry Wade, Secretary of the Agricultural and Arts Association. At Myrtle they were joined by Robert Millar, of Brougham, and at Ottawa by Mr. J. Y. Ormsby, of the Province of Quebec, and also Joseph Featherstone, M. P.; Jas. Rowand, M. P., and W. C. Edwards, M. P. representing various live stock associations. Besides the gentlemen above named, there were appointed on the same deputation Richard Gibson, President of the Shorthorn Association and Vice-President of the Dominion Cattle Breeders' Association; F. W. Hodson, Secretary of the Dominion Sheep and Swine Breeders' Association, and D. E. Smith, Secretary of the Dominion Cattle Breeders' Association; but, unfortunately, owing to other pressing engagements they could not attend.

The object of the deputation was to urge upon the Government the importance of having certificates of registration in our various Canadian herd, stud and flock books recognized by the United States authorities at the custom lines. now stand a certificate of registration in German, English or other than Canadian herd books is allowed as sufficient evidence of purity of breeding, but in the case of stock going across the lines from Canada, unless registered in the American books, duty has to be paid.

Following is a list of the horse, cattle, sheep and swine records, which we ask the American Government to recognize, and from which to accept certificates to enable live stock to pass duty free across

Horses.—Canadian Hackney Horse Society Stud Book, Clydesdale Horse Association Stud Book and the Shire Horse Association Stud Book.

Cattle.—Dominion Shorthorn Breeders' Association Herd Book, Dominion Ayrshire Breeders' Association Herd Book, Canadian Polled-Angus Herd Book, Devon Herd Book, Canadian Holstein-Friesian Herd Book.

Swine.—Berkshire, Yorkshire, Suffolk, Poland China, Chester White, Duroc-Jersey and Tam-

Sheep.-Lincolns, Leicesters, Cotswolds, Hamp shires, Oxfords, Southdowns, Dorset Horned and Suffolks.

The other matter to be dealt with was to ask the Government for a grant for the Dominion Cattle Breeders' Association. As will be known by the readers of the ADVOCATE a year ago last December, leading representatives of all the different breeds of pure-bred cattle met at Guelph and organized the above named association, with the view of dealing with all matters of interest to stockmen properly lying within the province of such an association. A large board of directors was appointed

the aim being to give it a Dominion character. Other meetings have been held since, and while the directors have personally borne the expense so far, it was thought only right to ask the Government for a small grant, to be used for the purpose of organization, including the expenditure on print-

ing and the expenses of secretary, etc.

The Chairman of the Agricultural Committee, Dr. Sproule, having been informed of the purposed visit of the deputation, a meeting of that committee had been called for the forenoon of the day of arrival to take the questions into consideration. The subjects to be dealt with were very ably introduced by Mr. Johnston, followed by the other members of the deputation. Each question was exhaustively discussed by the members of the committee, and a resolution was passed strongly endorsing the request of the deputation, and unanimously approving a grant of \$1,000 to the Cattle Breeders' Association. We might here say that it was a very pleasing feature of this committee to see that party lines were thrown to the winds, every member, whether Grit or Tory, being desirous to give all the assistance in his power towards furthering the object the deputation had in view, believing that in aiding such measures they were working in the direction of serving the best interests of agricul-ture and of the Dominion at large.

In the afternoon at 2 p. m. the members of the deputation, supported by leading members of Parliament, had an interview with the Hon. Mr. Angers, Minister of Agriculture, who listened ment attentively to the case presented. The questions were again gone fully into and discussed at considerable length, the result being that the impression was left on the minds of the representatives of the associations that the hon, minister would recom-mend to his colleagues the granting of their requests. As regards the registration question he will open up negotiations at once with the American authorities

So far everything had gone on very satisfactorily, the programme, as the deputation supposed, had been completed. However, Mr. Cargill, the large-hearted and genial member for one of the ridings of Bruce, who, by the way, is an enthusias-tic farmer as well as an extensive business man in other ways, thought differently, the wind-up of the day being a dinner party, when a very enjoyable time was spent in company with a number of lead

ing members of the House of Commons. Altogether it was a most favorable reception.

The Treatment of Earth Roads.

The subject of the improvement of country roads has occupied a large amount of time at farmers' meetings during the past winter, and also a great deal of space in the public press; and justly so, for it is one of the most important questions affecting the welfare of a community.

Now, the greater number of our roads, and this is especially true of clay districts, are composed of earth alone, the small amount of travel not sufficing to pay for any large expenditure of time or money in drawing gravel or broken stone. But, by careful attention, even these roads may be kept in a passable condition at all seasons of the year.

DRAINAGE.

The first and most important matter to be considered is the drainage. Water is the great foe of all good roads, and it is utterly useless to expend time or money on a road until perfect drainage has been secured, for any gravel or other road material would only disappear from sight, and the road would soon be ready for a fresh coat. On this point, Mr. O. H. Sheffield, in Bulletin No. 3, Office f Road Inquiry, U. S. A., Department of Agriculture, has the following:-

"Of paramount importance is the subject of drainage Without it, no road can be a good one, and with thorough drainage, even the poorest dirt road can be made reasonably good. Water is the most aggressive of all destroying agents, and to render its work of as little effect as possible, thorough drainage must be provided, both for the purpose of taking away as much as possible of the water that falls upon the surface, and also to deprive the soil of that water which sinks into it, by providing channels for its escape underneath the surface.

See that the ditches are of a sufficient depth to arry off all the water which may fall, even in the heaviest rain-storms, and also that the culverts are all cleaned out, so that there will be no ponds be-side the road, soaking into and through the roadbed, thus allowing it to cut up and spring with every passing vehicle. It is impossible to maintain a stable road-bed where the water stands during bad weather in the ditches along the sides.

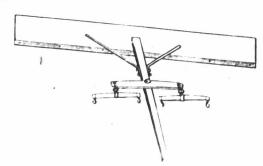
TILES.

If the subsoil is of a spongy, springy material, it will be necessary, before a good road can be obtained, to run a line of tile drain down the centre of the road-bed, or, if preferred, what is better, but more expensive, two row of tiles, one on each side of the road-bed.

Some will say that a tile drain is of no use, because the surface of a road will become so hard that a hollow will hold water, like a dish, and prevent the water finding its way down to the drain. This is quite true, but it is not such water which we wish to remove by tile drains. Such drains will draw off the subsoil water, which, if not removed, would work up to the surface by means of capillary attraction, and keep the surface soft and spongy, so that it will easily cut up into ruts by passing wagons. When rain falls, these ruts will fill with water, and thus aggravate the evil. The surface should be so graded, and kept smooth, that all rain-water will flow off into the surface ditches at the sides. How often have we seen a spongy piece of road or side-hill the terror of a whole county, when, perhaps, a couple of rods of tile would tap the spring and effectually drain the road, and render this portion as easy to travel as any part of the road.

CARE OF THE SURFACE.

The surface of the road should be carefully graded; all ruts or mud holes filled up with gravel, if possible, or, if that is not at hand, with soil similar to that of the road-bed. Ruts formed from travel, if not too deep, may be filled and leveled by harrowing and rolling as soon as the ground has dried sufficiently, or, better still, by the use of a road-leveler, like that shown in the accompanying illustration.



The main portion of the leveler is 8 feet long, and made of a single plank, 4 or 5 inches thick, and, say I foot 4 inches wide; or may be made of two planks, fastened firmly together; a piece of steel or iron, a couple of inches wide, should be laid at the bottom of the front side; two iron braces extend from the leveler proper to the pole or tongue. It is a cheap and very useful implement. Even in winter a clay road frozen into ruts can be improved by running this leveler over it when there is a slight thaw. As will be seen from the sketch, the main part of the leveler is not