

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S 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 us, either by Money Order, Postal Note, Express 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. In every case the "Full Name and Post-office Address Must be Given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. 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 Farmer's Advocate and Home Magazine," 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.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. 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.

The Farmer's Advocate Christmas Box.

Our readers have a treat in store for them next week in the form of the annual Christmas Number of "The Farmer's Advocate and Home Magazine," the outstanding feature of agricultural journalism for the year. Special efforts have been successful in securing a large number of articles and illustrations which will make this issue stand out in bold relief among the best efforts of 1914. This great issue goes free to all our subscribers, no extra charge being made by the publishers. All new subscribers will also be favored with this "Christmas Box," as well as the remaining regular issues for this year.

To further fill the stocking of our regular subscribers whose subscriptions are paid to the end of 1914, we will accept \$2.25 any time from now until Dec. 31st, 1914, in payment of their own renewal and one new subscription to the end of 1915. Give your friends and neighbors an opportunity to enjoy one whole year's wholesome and profitable reading and two special Christmas numbers, the like of which are not even attempted by other farm papers. Right now is the time to make sure of this great offer, which holds good only to Dec. 31st. After that date the regular rate will obtain. The sooner the new subscriber is added the more issues he will get. The names sent as new subscribers must be bona fide new subscribers. Here is an opportunity to do your friend a good turn. Agricultural information is going to be more valuable in 1915 than ever before. "The Farmer's Advocate" is alive to the needs of farmers generally, it is a farmer itself. Get in on this Christmas offer early.

Worthy of Patronage.

Next week there will be held in the city of Guelph the annual Ontario Provincial Winter Fair, better known to most readers as the Guelph Fat Stock Show. This exhibition has, under more or less adverse circumstances, grown to be one of the biggest and best shows of its kind in America. As the years have rolled on it has out-grown itself many times over. Additions have been made to the housing capacity, and still it finds itself crowded. This year promises to be the biggest exhibition, as far as entries and quality of exhibits are concerned, that has ever been put on by the management of this great exhibition. We feel like commending those in charge of the enterprise for, in the face of world-wide panicky feeling, going ahead with the Show. It is undoubtedly the right thing to do. Other shows have been cancelled, and everything of this kind which is allowed to transpire only adds to the disaster of the present situation.

The management have gone ahead and provided a show at Guelph, and it now remains for the people to attend that show and demonstrate their faith in the Exhibition and in the stock-breeding enterprise of this country. At no other show in Canada are the lessons of good stock breeding brought home to the visitors so vividly as at the Guelph Winter Fair. Lecturers are given by the best men available on subjects that interest all farmers; judging competitions are carried on for the benefit of the younger men, and the entire show is worthy of the undivided support of farmers and stockmen. Don't fail to attend. The Fair needs you this year, and you need the Exhibition. Every man, woman and child that goes to the Guelph Fair to learn something will not go away disappointed.

Our Annual Feature Issue.

Every year readers of "The Farmer's Advocate" look forward with a great deal of interest to the annual Christmas number, and each year they expect something just a little better than what has gone before. This makes it necessary for the best-known and most widely circulated farm journal in Canada to excel itself early in December of each succeeding year. As soon as one Christmas number is off the press plans are commenced for the next year's issue. It is one of the most difficult tasks which confront a publication, to keep improving a Christmas number which many readers have already expressed time and time again as being almost perfection. Next week our subscribers will get the results of our 1914 efforts, and we feel sure that one and all will agree that it is the outstanding feature in agricultural journalism in 1914, as it has been in years gone by.

The front cover is one which will bring back pleasant memories to thousands of readers who connect Christmas with home gatherings. It is essentially a Christmas scene, and the different expressions on the several faces convey a Christmas spirit through different characters. The front cover, itself, is worth a year's subscription to the paper.

To go with this and to impress upon the readers the necessity for making the 1914 Christmas a real Christmas notwithstanding the world crisis which is now hanging like a black storm cloud over all, is a leading article by our well-known regular correspondent, Peter McArthur. We hope every subscriber will read this carefully.

Horsemen will be interested in the article by G. T. Burrows, on "The War and the Horse," in which is depicted in graphic terms the place which the farmer's friend is taking in the conflict now raging. Another very interesting horse article, and one which will appeal to our older readers more particularly, is "The Horse of Forty Years Ago and Now," written by our well-known contributor, "Whip." Livestock men, generally, will find several interesting articles covering this department of the paper. "The Feeder Lamb From Pith to Block" is a subject dealt with by R. H. Harding, and one from which sheep feeders may gain some profitable hints. Shoethorn breeders will read and digest the article on "The Danger Point in Milking Short-horns." This should set some of them thinking. Most of our readers know the process of making pork as far as the farmer is concerned, but very few have ever seen the inside of a large pig-pen plant. This is described in an article entitled, "The Pig, From Pen to Plate," and every feeder and eater of pork should read this and know exactly what happens to the pig after he leaves the farmer's pen.

Horticulturists and apple growers have something good in store for them in the article, "The Future of the Canadian Apple."

The poultry end of this great issue is upheld by Prof. W. R. Graham in an article on "Breeding Stations in Europe and Ontario."

Articles of a more general character but of unusual interest are contributed by Ernest H. Godfrey, who discusses "The World's Most Famous Experiment Station," at Rothamsted; by S. B. Sinclair, who has a very interesting article on "The Little Landers," discussing the opportunity for making profits off small holdings. Prof. Cumming outlines the development of the Maritime Provinces, and Valter M. Wright the effects of the war on British Columbia's agriculture.

Every farmer will read C. F. Bailey's views on "Ontario Farmers and Finance."

Then there is the dairy department which is capably looked after by Prof. H. H. Dean in an article entitled, "The Outlook for the Canadian Dairy Farmer." Will H. Ogilvie, a man who has been through the Australian bush country and who is now residing in Scotland, gives us a story on "Some Camp Fires of the Bush," which depicts life in that faraway land.

Besides several other articles which we cannot mention here the Christmas number will contain a number of reproductions of paintings together with notes on their painters. This will appeal to all lovers of art.

The Home Magazine section, always the most interesting of all, contains an article from Miss Orvis, graphically describing the method of carrying agricultural school and college work to the country districts in Wisconsin. This should be read in every home. Rev. P. W. Norwood, a well-known London Divine, will have an article of unusual interest to all those in the home. Belgium, and all she has passed through recently, will be the subject of another article which all sympathizing people should read. All told this will be one of the greatest issues ever published by any paper in this country.

Nature's Diary.

A. B. Klugh, M.A.

A fish which has played an important part in the history of Canada is the Cod. The Cod fisheries of the Banks of Newfoundland was one of the principal inducements which led the English to establish colonies in America, and to-day this fishery is one of the great sources of revenue in the Maritime Provinces. The Cod is omnivorous and feeds on various kinds of animals, including crustaceans, mollusks, and small fishes, also upon some marine Algae.

The Cod go in schools, but not in such dense bodies as the Herring and Mackerel. Their movements on and off shore, and from bank to bank are chiefly due to temperature influences, the presence and absence of food, and the search for proper spawning conditions. It is essentially a deep-water fish, and is usually taken in from twenty to seventy fathoms. It has been taken in three hundred fathoms. The principal spawning time of the Cod is in winter, the season beginning in November and continuing until April. The Cod is one of the most prolific fishes, a twenty-one pound female laying about 2,700,000 eggs, and a seventy-five pound female about 9,100,000 eggs. The eggs are very small, being from one-twelfth to one-seventeenth of an inch in diameter.

When it is remembered that under natural conditions, in order to maintain the normal number of Codfish it is only necessary for two out of the several million eggs laid by a single female to hatch and grow to maturity, it is easily seen that the destruction of eggs must be very great. If all the eggs were to hatch and the young come to maturity, the ocean would soon become packed solid with Codfish. Vast numbers of eggs are eaten by fishes, birds and other sea animals, vast numbers are thrown up on the shore by the waves, and probably still more are never fertilized.

Cod are taken by hand-lining and trawling. A trawl is a long, fairly stout line, to which are hung, by short lines, from three hundred to nine hundred hooks. The trawl line has a buoy at each end. It is usually set a little before slack water, that is, just before full high tide or dead low tide, and left out above an hour before it is hauled.

The average weight of Cod is from twelve to thirty-five pounds, though many from one hundred to one hundred and seventy-five pounds in weight have been taken. The largest Cod ever taken off the North American Coast weighed two hundred and eleven and a half pounds.

A close ally of the Cod, the Haddock, is another of our most important Atlantic Coast food-fishes. It ranges, in North America, from the Strait of Belle Isle to Cape Hatteras. Haddock go in large compact schools, and their abundance in any particular locality varies greatly from year to year. The Haddock is a bottom feeder, and feeds mainly on Mollusks, (shell-fish). Its spawning season is from April to June. The eggs are about one-nineteenth of an inch in diameter, and a nine-pound fish produces about 1,800,000 eggs. The average weight of