THE LEADING AGRICULTURAL JOURNAL IN MANITOBA AND N.-W. T.

> PUBLISHED SEMI-MONTHLY BY THE WILLIAM WELD COMPANY (LIMITED).

WESTERN OFFICE: McIntyre Block, Main Street, Winnipeg, Man. EASTERN OFFICE: CARLING STREET, LONDON, ONT. LONDON (ENGLAND) OFFICE: W. W. CHAPMAN, Agent, Fitzalan House, Strand, London, W. C., England.

1. THE FARMER'S ADVOCATE is published on the fifth and

twentieth 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 subscriptions, 6s. 2d., or \$1.50. New subscriptions can commence with any month. 3. ADVERTISING RATES—Single insertion, 10 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 arrearages must

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8. ANONYMOUS communications will receive no attention. 9. LETTERS intended for publication should be written on one side

of the paper only.

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.

ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any indi-vidual connected with the paper.

Address-THE FARMER'S ADVOCATE, or THE WILLIAM WELD COMPANY (LIMITED), WINNIPEG, MANITOBA.

Soil Cultivation.

THE PACKER AND WEEDER USEFUL.

To the Editor "Farmer's Advocate": Your enquiry regarding the use of soil packer, roller and weeder duly to hand. I only got the packer last spring, and have as yet hardly had time to judge it properly. So far, I am well pleased with it, and think it fills an important place on my farm. I think it is generally conceded that the wheat plant thrives best on a pretty firm seed-bed, with as mellow a surface for an inch or two as is safe to risk, on account of windstorms. The same applies to the other grains, only probably to a less extent. The packer helps greatly to this end, and does not powder the surface up so much as a roller, while making the bottom closer than that implement. It is also a great help in seeding and working afterwards, making it easier travelling over athe ground, and also materially assists in getting turned-in stubble and rubbish rotted, so that the ground is not full of unrotted stubble, etc. I also find that land upon which the packer has been used plows better afterwards.

The weeder is useful for killing weeds as they are coming up in the grain after sowing, also for keeping the land mellow on top, but sometimes care has to be taken not to stir too much in case of windstorms while the grain is tender. The weeder also works much better on land that has

been packed. My usual system now is to pack directly after plowing, in either spring or fall. If the land is ready, I put the drill right on without further work, and with a light six-section harrow, harrow once across the drilling. This leaves the land in good shape for the weeder if required afterward. Of course, I sometimes give more work than that, as the particular piece of land

requires My fallow wheat last year was good, and not badly hurt with the rust: while lodged, some turned out well. The land was firm and clean and well worked down the previous season. I had some very nice wheat cover 30 bushels to the acre) on spring-plowed stubble treated with packer, and as above described.

Soil cultivation with us is as yet little understood, and we have much to learn as to how to handle our land to the best advantage with the time and help at our disposal.

H. NICHOL.

Growing.

To the Editor "Farmer's Advocate":

Most farmers in south-western Manitoba, and also in some other parts, have come to the conclusion that the native slough grass cannot any longer be depended on for the hay supply.

The question is: What can we get to take its place? There are a number of grasses that have been tried with varying success

The writer has been growing timothy for the last 19 years with a certain amount of success, some years having over one hundred tons. It has not been all that I desired, but I was satisfied with it till something better turned up. I have found the greatest drawback in growing timothy was that we are subject to droughts almost every year, and timothy, being a very short-rooted grass, is very susceptible to the same.

During all the time that I have been growing timothy, I have not had a failure, except the year before last, when it was nearly so, but some years I have got three tons per acre to make up for that. I prefer timothy hay to any other, if

properly cured, for horse feeding.

My experience with native rye grass has not been so long as with timothy. It is a good hardy grass, and will resist drought better than timothy, and for that reason it is a little easier to get a good catch. Perhaps, too, in a dry year you can get a little heavier crop than with timothy, but don't like the hay as well. One of the greatest mistakes that is made with rye-grass hay is in letting it get too ripe. It should be cut about the end of June.

Brome is a grass that has been greatly boomed of late years, and perhaps in some respects justly so. In my experience it is the coming pasture grass, and also for light land that is liable to blow it has its place. On low, damp land it might be as well not to try it, for fear that it might be a fixture. It is a grass that does not deteriorate so much as other grasses by being left to ripen seed, as it is of a more leafy, succulent nature than most grasses

My experience with clovers has not been very great, but I have grown the common red, also alsike and white Dutch. I think the latter should have a place on all lands seeded for pasture, as it is perfectly hardy. My land is not very uniform in character, varying from the heaviest clay to sandy loam, and might be called a little on the dry side.

With reference to the amount of grass seed to sow per acre, I have found that from four to five pounds of timothy is sufficient. I usually sow it with a grass-seed attachment to the grain drill. My practice has been to sow on fallow with wheat as early in spring as possible, and any person that will follow this rule will rarely miss

With rye grass I do not follow exactly the same course, as I use ten pounds of seed per acre, and sow as early as possible on fallowed land. My practice has been to sow the wheat and then sow the grass seed crossways; that is, across the drills of wheat. I have found out that this way gives the best stand, as when the seed is mixed with the grain, the grain seems to rob it of most of the moisture.

The way to sow is this: I take a grain seeder and set it at about half a bushel of wheat, then buchel of seed by measure, which ought to sow about one acre, and then I put in two tomato cans of dry plastering sand and mix some. After that, every time seed is added sand is added also. Do not put the seed more than an inch deep with the drill. The sand gives the weight to the seed, and with a little adjusting to get the amount right, you will soon be able to make a good job.

In seeding Brome it is safer to fallow the land to be seeded about as follows: Plow as early as possible in spring and harrow, then about the end of June, or early in July, plow again and harrow, If it is showery at the time, so much the better. Then sow the same amount as of rye grass and the same way, only add another can of sand to each half bushel, as the seed is lighter.

I have no experience with spelt. Some of the people in this part grew some the past year, and the yield was not as good as my barley by nearly twenty bushels to the acre. I have come to the conclusion that barley is good enough for feeding for me, and I will let the other fellows do W. SAUNDERSON the experimenting.

Glenwood Municapility.

Chicago Horse Market.

The following averages furnish food for thought to many a farmer-breeder, and doubtless will be used as a text from which to construct an occasional sermon on the breeding of horses. The figures presented are for the entire year of the Chicago horse market, in the twelve months of which a large number pass under the hammer at this big horse market: Drafters averaged \$157; carriage teams \$400; drivers, \$137; general purpose horses, \$102; chunks, \$52, saddlers, \$147; bus and tram herses, \$121.

Some Notes re Grasses and Grass "No Surrender" by the Doddie Cham-

To the Editor "Farmer's Advocate":

In your issue of the 5th Feb., I notice a reply" from Mr. McKellar to my defence of the Aberdeen-Angus breed of cattle.

It will be noticed that he does not attempt to controvert my statements, for, in the language of the manager of a famous herd of pure-bred cattle (not Angus) written to a third party, and now lying before me, it "was all true," but his letter takes the form of an apology for his missiatements, doubtless made in ignorance, his experience with the various breeds being apparently confined to a view from the top-rail of the Winnipeg stock-yards. In all probability, had he occupied a similar elevated position in Chicago on the same dates, he would have had a different tale to tell, and his isolated case of a highpriced sale of Shorthorns "cuts but a small figure" when compared with the sales of carload lots of Angus cattle (as reported in the Provers' Journal") after the Chicago show last December, when 488 head sold at an average price of over \$8.20 per 100 lbs., and with the fact that Angus cattle or crosses have sold for the highest price in the entire year for the past twelve consecutive years in the greatest cattle markets of the United States.

With regard to his other "few figures." it will be noticed that Mr. McKellar has lost sight of the point at issue, viz., the form of the most valuable beef-producing animal, and refers to a report of pure-bred cattle sales in which the Shorthorns, notwithstanding the fact that their number included a few extremely high-priced animals, only averaged \$3.48 per head more than the Angus

As I stated before, I consider the Shorthorn breeders have done incalculable service to the world's cattle industry, but "there are others, and from the showing of recent years, the products of the genius of Watson and McCombie compare most favorably with those of that of Bates and Cruickshank, and I think, with the breeder quoted above, that it is not "fair that the Shorthorns should get it all their own way and think either of the muley blacks or the whitefaces are better cattle for this country than the much-pampered Shorthorns.

With the latter part of Mr. McKellar's penultimate clause I am heartily in accord, and an adequate prize-list at the leading shows, together with the vastly-increasing demand for the breed, will doubtless induce the breeders to bring out more of their stock, and those in better condi-

Mr. McKellar is welcome to all that he can get out of his "extra," but the sale of "Prince Ito for \$9,100 will have a tendency to depreciate its value in the eyes of some of his readers F. J. COLLYER.

Churchbridge Creamery Association.

Probably since its organization, a few years ago, no dairying company in the same length of time has made greater progress or enviable a reputation as has the "Churchbridge Creamery Association." The company was formed four years ago. During the first season the factory turned out 20,000 pounds of butter, the second year 32,000 pounds, the third year 65,000 pounds, and last year, which was by far the most successful season in its history. the amount disposed of was something over 122,000 pounds. Most of this was shipped to British Columbia, but a quantity was exported to the British Isles. Mr. Wm. Roland, of Riversdale, Assa., is the president. The head buttermaker is J. M. Smith, who is a native of Nova Scotia. Cream is collected for the factory from a seventymile radius. The shareholders and patrons are well pleased with the returns received in the past, and consequently are making arrangements to go more strongly into the business in the future. From the above facts it would seem that the Churchbridge district is destined to become one of the foremost dairying parts of the West.

The Result of Good Management Plus Good Stock.

At the 7th annual meeting of the Caradian Land & Ranch Co., Ltd., held at Winchester House, E. C., on January 25th, 1902, a dividend of 10 per cent, was declared, also a bonus of 10 per cent, upon the subscribed capital of the company for the year ending Oct. 31st, 1901. It addition. £2,000 (\$10,000) was placed to the re-The headquarters of this ranch are at Crane Lake, Assa. Mr. D. H. Andrews well known to many of our Western stockmen. 's the manager for the company in Canada.

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