

Clover, I have not cut a crop of it yet, but I seeded some last spring and got a good patch. I only mixed a little clover with the timothy to see if it would do, and when I cut the where I sowed

Brome Grass where I sowed the grass, some of the clover was 4 to 6 inches high. I sowed about five pounds per acre with a grass seeder attachment and put the seed in front of the discs on my grain seeder.

This is all the experience I have had with tame grasses, but I know they can be grown successfully in Manitoba.

Yours truly, Thos. R. Patterson, Hayfield, Man.

## Sees no Difference With Nitro Culture.

My experience with tame grasses and clovers is limited. I have some land unsuited for grain growing, being low-lying and containing a little alkali, with sandy subsoil. I sowed ten acres of it with one bushel of barley with the seeder (drill) and afterwards sowed timothy ten pounds per acre with hand seeder, harrowing and rolling. This was sown June 8th, 1909, and although it did not all come up, still there is a good stand.

I sowed one acre of alfalfa, putting five pounds and one bushel of barley as nurse crop. Part of this seed was treated with nitroculture and part not. Up to the present I can see no difference between the treated and the untreated portions. This was sown with a hand seeder on May 20th on sandy loam soil and I think all this seed came up.

I also sowed three acres of

I also sowed three acres of brome and rye mixed without a nurse crop on a sticky soil, containing alkali, a small part of this being white with it

being white with it.

This seed came up nicely, doing better on the good parts of the field, but coming up even on the strong alkali land. It was sown by hand on June 12th, 1909,

and I cut about two tons of nice hay on September 6th. All this land was in good condition of tilth.

Yours truly, C. H. Gatley, Austin, Man.

## Timothy and Alsike a Good Mixture.

Answering your kind letter regarding my experience in the growing of tame grasses in this country let me state, first that being

a French Canadian, I am not aware of the English language and that I have no pretense as to a contributor to your valuable magazine

The land in La Salle is nearly all alike: black, hard clay, rich,

As you know there is no crop in tame grasses on the year we put in the seed. The year after the yield was a little over one ton an acre. The second crop was nearly two tons an acre. The third year was the best, in 1905,



A Dain Hay Loader in a heavy bunch.

and hard to till, especially in low parts. My field of experimentation was first a field of about 6 acres—1-3 high land, 2-3 low land, practically not drained; where water used to stand on the giving nearly three tons an acre. This was the top; the crop was decreasing in the fourth and fifth years. The small field was well fenced and no animal was allowed on at any time for pasture. The



A Frost and Wood Mower cutting a nice 5 ft. swath.

ground in the wet seasons. After a few crops of wheat and barley on the said land, I first had a good fall plowing made and in the spring, after the wheat was seeded, say about a week after, just on

cutting was done each year between the 10th and 15th of July. That mixture was fed each year to my horses and cattle; excellent for both. It is sometimes a little too dusty for horses when



An I. H. C. Mower laying a beautiful swath in heavy hay.

the eve of a good rain, I had my man in the field with a good hand grass seeder, spreading a mixture of timothy and alsike clover, about 10 to 12 pounds to the acre—half mixed in quantity. kept in the stable's garret. The mixture keeps all right in stacks when covered, say one foot, with prairie hay. It is extra good for milking cows in the winter.

After my provision was ex-

hausted, I noticed every winter that the production of milk had a drop of 40 per cent.

Though sown equally in high land and low land after two years, timothy grew nearly alone in high land and alsily

alone in high Common Red Clover land and alsike clover alone in low land. The effect on the land is not the same from this mixture. Timothy is as hard on the land as wheat is, drying out the soil too much and the value of the crop, just the same as wheat. Timothy gives extra good pastures, especially in the fall.

Alsike Clover is the most hardy. Its growth according to different kinds of years is from 15 to 30 inches. Its effect on the land is very important. If sown pretty thick it will kill all weeds and its roots—20 to 50 inches each—will deepen the soil and give nitrogen to the soil at a depth of at least 10 inches. Since I had the Alsike Clover raised in this field, we never noticed any water standing on the ground, even in the spring.

In the summer of 1908 after the grasses were cut, I had that field broken anew to the depth of 6 or 7 inches. In the fall, we disc-harrowed the same twice. Last spring, 1909, we put wheat in. The season here, around Winnipeg, was so dry that the crop was nearly a failure around here. On said field, though we lost something on account of hail in July, we threshed a little over 22 bushels of No. 1 Wheat to the acre. In the fall of 1909 I had a good fall plowing done and I expect more than 30 bushels to the acre for next crop.

Besides this small field I had two larger ones sown some years ago with the same mixture, timothy and alsike clover till the third year and decreasing after. But these two other fields have not yet been put again to grain.

I made another experiment with timothy and big red clover. The first cut of said mixture was the summer of 1909 and there was practically no clover. Big red clover would give larger crops, but is not hardy enough to

meet most of winters and springs. Be-sides this, red clover cannot be fed to horses with advantage. It is ormuch lying on the ground and a good part becomes rotten before it is cut. But the effect of all clover is the same on the soil. Where the land is heavy as in Continued on page 72



Burr Clover