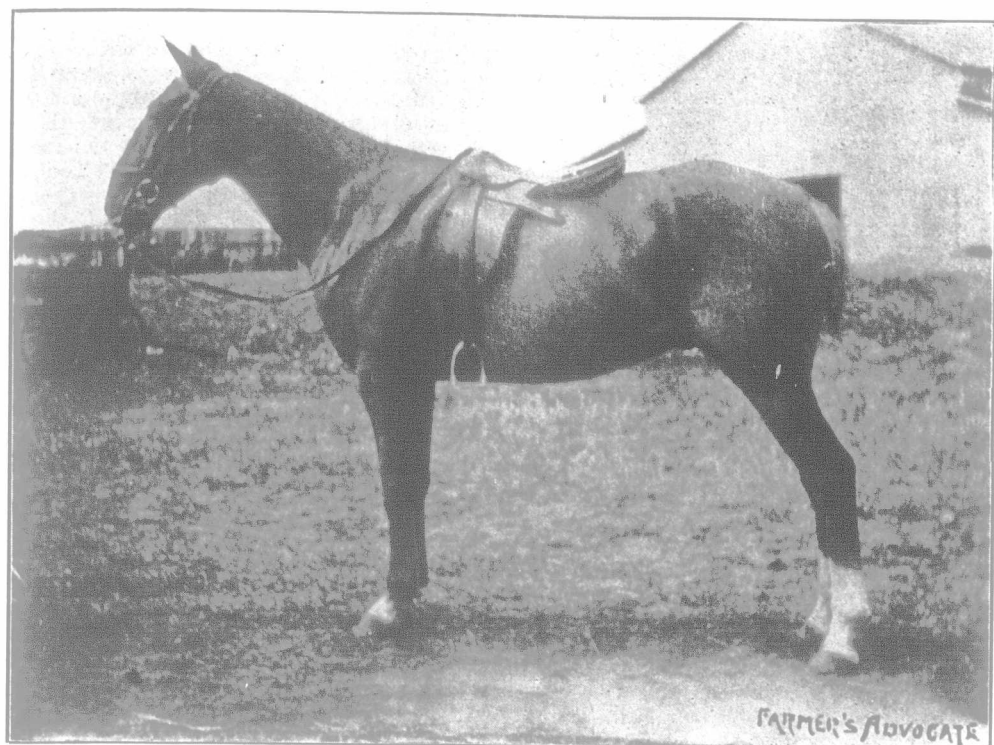




A WESTERN BRED SADDLER
From the Bow River Horse Ranch.

FEED VALUE.

"Either as hay or green forage, alfalfa is eaten greedily by all kinds of live stock, including poultry. It contains a high percentage of protein, which so many of our farm feeds lack in sufficient amount to meet the demands of the animal system in nutrition. Hence alfalfa is a very valuable feed to use to balance up the ration of corn, Kafir corn, etc. In steer feeding experiments at this Station, in which alfalfa was fed in connection with the above feeds in comparison with corn meal and Kafir stover, about one-fourth less grain was required to produce a pound of grain with the steers receiving the alfalfa hay in their rations than was required by the steers not receiving any alfalfa. Hogs fed alfalfa hay with corn have produced three or four more pounds of gain from a bushel of corn than was produced by hogs getting straight corn. Reports are on record of butter fat being produced at a cost of seven cents per pound from common scrub cows fed on alfalfa hay and Kafir meal, reckoning the feeds at ordinary prices. The food nutrients contained in a ton of alfalfa hay are little below those in a ton of bran, either in amount or kind and on the farm, for practically all purposes, alfalfa can be used instead of bran. Every farmer knows the cost of a ton of bran and its high feeding value.

STAYING QUALITIES.

"On suitable soil the roots of alfalfa grow down into the soil ten to twenty feet, enabling them to use the supply of underflow water, and to draw upon soil for plant food that is out of the reach of roots of ordinary plants. Alfalfa is a perennial and the longer it grows the better it flourishes if it is on suitable soil. Fields of alfalfa twenty-five years old are in existence and are still producing maximum yields.

"The plant is one of the first to show green in the spring and turns brown in the fall only when subjected to a hard freeze. Alfalfa is the greatest drought-resisting crop grown on the farm.

MONEY VALUE OF THE CROP.

"During the season of 1905, some Oklahoma alfalfa raisers marketed their alfalfa at ten dollars per ton, baled, on board cars at their stations. One reports that the first crop of 1906 from seventy-five acres has been sold at the above figure and that he had a demand for ten times as much as he had to sell. These farmers report net returns per year of forty to fifty dollars per acre. Very few if any other farm crops give such net profit. The above reports are from fields of alfalfa on ideal soils but remunerative returns are obtained under less favorable conditions.

"These few facts about the value of alfalfa are given to encourage more Oklahoma farmers to grow the crop and it is believed that if they will investigate the possibility of the crop in this section, a few acres at least will be grown on almost every farm in Oklahoma. While in many cases, the returns will fall far short of the above records, the grower will usually find it well worth growing when compared with the returns of other crops grown on the same soil."

A Foe of the Potato Beetle.

EDITOR FARMER'S ADVOCATE:

I have received from my esteemed correspondent, Mr. Richard Gibson, of Middlesex Co., Ont., a specimen of a kind of ground beetle which he had found upon his potatoes when he was spraying them. This beetle was devouring the grubs of the potato beetle, and was very actively engaged in this work. Mr. Gibson found several other specimens in the same field, and thinking that an account of the beetle would be of interest to your readers, he asked me to write a short account of it for publication.

This useful beetle belongs to a group of the predaceous ground beetles which have their bodies very much flattened, and, as a rule, frequent flowers, feeding upon the insects which are attracted to them by their nectar. These insects are frequently red and blue, or even brilliant metallic green in color, with the wing-covers squarely cut off behind so as to expose the tip of the body. Among these we find Mr. Gibson's good friend, whose name is *Lebia grandis*. It is a moderate-sized species for the group to which it belongs, has a yellowish-red head and thorax, and dark-blue wing-covers. This insect is a well-known depredator upon the eggs and grubs of the Colorado Potato Beetle, and seems to be rather more abundant in the London district than elsewhere in Canada. Dr. William Saunders, in his annual address for 1878, before the Entomological Society of Ontario, and again in 1881, spoke of its frequent occurrence near Hamilton and in potato fields near London. Mr. Moffat also spoke of its frequent occurrence near Hamilton in the latter year. Unfortunately, this active and elegant little beetle, which is a little less than

half an inch in length, is not common enough to affect the abundance of the Colorado Potato Beetle, which it preys upon. There are, besides, several other insects which prey upon the Colorado Potato Beetle, such as the Spined Soldier-bug, the Belted Soldier-bug, the Many-banded Robber-bug, several kinds of Ladybird beetles, and many members of the Carabidae, or Ground Beetles, besides the *Lebia* above mentioned. One particular enemy of this troublesome enemy of the farmer should be mentioned. It is a kind of fly somewhat resembling the house fly, named *Lydella doryphoræ*, which lays its eggs on the grubs, and of which the maggots destroy many before they become beetles. Anyone spraying their potatoes with the poisoned Bordeaux mixture to prevent the injuries of the potato beetle and the fungous disease, potato rot, need have no fear of destroying these friends at the same time, because they would not eat the Paris green nor would they devour the dead grubs after they had been killed by the poison. The maggot of the fly, which is a parasite inside the grubs of the Colorado Potato Beetle, would, of course, die with the grub, but, unfortunately, these friends are too few in numbers to make it worth while to give up spraying on their account.

J. FLETCHER.

Central Experimental Farm, Ottawa.

Three Provinces Unite to Investigate Beef Combine.

Press despatches announce that a joint commission is to be appointed by the provinces of Manitoba, Saskatchewan and Alberta to investigate the causes for the unsatisfactory state of the live stock markets and to determine the extent of the meat combine.

Rust Resistant Plants.

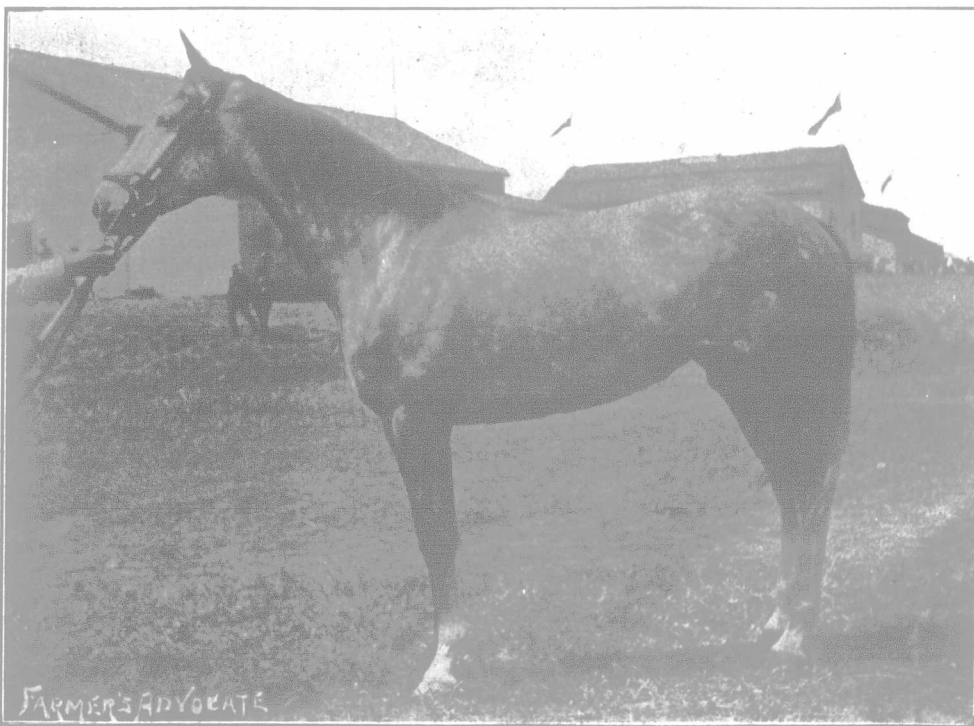
EDITOR FARMER'S ADVOCATE:

Enclosed is a clipping from the *Farmer's Tribune* of Minnesota of June 5th. I should like your comments on the marked sentence. Has not the reporter confused rust with smut or has a rust preventive been discovered?

G. H. B.

"This is directly different to wheat rust, which is transmitted by the seed and can be cured by proper treatment of the grain before sowing."

Ans. The above sentence is taken from a report of the work Prof. Bolley is doing at Fargo, N. D., in his efforts to develop a flax plant that will be wilt resistant. In the course of his work the professor found that a variety of flax he had hoped to be able to offer the public as wilt proof had become affected with rust and as a consequence he had to begin over again. The reporter has evidently sounded a truth in biological science as there is a strong suspicion among close observers that the treatment of wheat for smut by formaldehyde tends to insure it against rust, but as yet we cannot reconcile the circumstance with our knowledge of the rust fungus.



A WESTERN BRED JUMPER
Winner at Calgary 1906,—property of G. E. Goddard