

THE FARM.

WHERE ALASKA WHEAT BELONGS.

Since Alaska wheat was first exploited, much has been done to show grain-growers the true rank of the cereal that was supposed to make farming worth while. The matter has been followed closely by Prof. C. A. Zavitz, of the Ontario Agricultural College. "As near as can be ascertained," said Prof. Zavitz to a representative of "The Farmer's Advocate," "this Alaska wheat, about which so much has been said in an advertising way, belongs to the Egyptian, the Poulard or the Turgid species, scientifically known as *Triticum Turgidum*. Two varieties of this species have been grown at the College, viz., Miracle winter wheat, and Seven-headed spring wheat. Each has a branching head, similar to Alaska. Miracle was dropped as undesirable some 15 years ago. The Seven-headed variety has been grown continuously for 13 seasons. It has, however, given decidedly lower yields than Wild Goose and Red Fife, the two varieties best known in Ontario. In no year did Seven-headed come up to Wild Goose. It has been kept as a curiosity on account of having a branching head. The average yields for 13 years are: Wild Goose, 37.0 bushels; Red Fife, 31.7 bushels; Seven-headed, 24.4 bushels. Enquiries in Idaho, and through the Washington Department of Agriculture, reveal no case in which Alaska wheat has yielded over 35 bushels to the acre this year.

"We endeavored to secure some Alaska seed for experimental purposes, but the firm advertising it would not sell less than one bushel, and for that amount they asked the handsome price of \$20. Knowing what I do of the variety, I did not feel inclined to make such purchase, even for experimental purposes."

GASOLINE ENGINES FOR THE FARM.

It certainly requires judgment, combined with a thorough knowledge of what the trade is offering, to reach an intelligent decision as to what type of gasoline engine would be best suited for farm work. It is impossible for any one type to be the best in all cases, for the reason that the requirements will likely differ in nearly every instance, and, to get the best results, special consideration should be given each installation. If an engine is to be set on a permanent foundation, and the different machines being run off a line shaft, then a good heavily-built engine, running at a medium speed, will be the best to use. With reasonable care and attention, a well-built outfit should last for years, and give good results every minute it is in operation. Such an engine should have an outside gasoline tank to hold not less than 1½ barrels of gasoline, and to be buried in the ground in a heavy box, but readily accessible for filling and examination. If it gets very cold in winter where the engine is installed, then some arrangement must be made to protect the cooling-water tank from the frost. Sometimes this is most easily overcome by placing the tank in the stable and connecting by piping to the engine. This will depend, of course, on the relative positions of the engine and stable, but a little forethought along this line may eliminate all the trouble of freezing the cooling water, which becomes a great annoyance when a run of only half an hour is wanted, and everything is found frozen up.

If you require to move your engine around the farm for different jobs, then the best selection would be a light engine, running at high speed, and of a design that eliminates any extra tanks for either water or gasoline. There are numerous engines of this type on the market, both vertical and horizontal, that are giving the best of satisfaction in every way. Regarding the gasoline, this is either carried in the base of the engine and pumped up to the mixing valve, or an elevated tank is attached to the engine at a higher level than the mixing valve, and the gasoline flows to it by gravity. The water for cooling the cylinder is handled in two different ways. One is by having a small tank, holding only a couple of pails of water, and provided with shelves or screens, which spread the warm return water from the cylinder into a very thin sheet, allowing it to cool considerably before reaching the body of water in the tank. In this style the water is circulated by means of a pump, which adds another part to the engine, that must be kept in good working order, and requires attention.

The hopper-cooling system has been in use

now for some years, and almost every firm making gasoline engines can supply small medium-sized outfits fitted in this manner for handling the cooling water. It consists merely of extending the water jacket around the cylinder, so that it will hold from three to six pails of water, according to the size of the engine, and having an opening on the upper side which serves the double purpose of affording a means of filling in the water, and also permitting the steam to escape as the jacket water is heated up when the engine is running. This hopper-cooling system does away with the use of the large water tank, and is a great convenience in winter time. When wanting to use the power for any purpose, the engine can be started and the water put into the hopper after it is running. When through using the engine there are only a couple of pails of water to drain off, and all danger from frost is done away with. The hopper adds nothing to the weight of an engine, over what a large tank would amount to, and takes up much less room. In our opinion, this cooling system is a distinct advance in the designing of the gasoline engine to adapt it to farm purposes, and cannot help but cause this means of power to receive more favorable consideration from those who, in the past, have seriously objected to the large cooling-water tank and its attendant troubles.

On a par in this respect has been the advance made in engines of the air-cooled type. The writer has seen an engine of this type run for 12 hours under a load that called for all the power it could possibly exert, and do this for some days, without apparently any serious result to itself.

There is no doubt but that the air-cooled engine would be better known to-day but for the advent of the hopper water-cooling system, and a well-made outfit of either kind fills the requirements for farm work better than anything else on the market.

E. S. C.



Jacoba Irene 146443.

Jersey cow, now under year's authenticated test, promising to make a new world's record. (See Gossip, page 1823.)

BONUSED TREE-PLANTING.

Editor "The Farmer's Advocate":

I have been thinking of asking your advice about planting trees. I have thought it would be a good plan if the Government would pay, say, 10 cents a tree to any who would plant a grove of one hundred or more, as the bush has been destroyed by fire, or a good part of it about here, and, I think, in other places as well. What do you think about it? I should like to hear what others think about it. Hoping to hear something about this, I remain a friend of "The Farmer's Advocate."

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[Note.—While a case might be made out for Government assistance in this matter, we scarcely think the proposition outlined would be entertained at Toronto, or, for that matter, at any other Canadian seat of Government. Some trees might be paid for which would do the community very little good. Exemption from municipal taxation is all right, and the Ontario Department of Agriculture, through its system of tree nurseries, has undertaken to supply seeds and seedlings for planting farm wood-lots, also directing the work under the supervision of its staff. This, however, is about as far as a Government is justified in going towards the encouragement of reforestry by private enterprise and on privately-held lands.—Editor.]

THE DAIRY.

PROBLEMS OF THE DAIRY.

By Laura Ro.e.

KEEP UP THE MILK FLOW.

As I see things in my travels over the country, I think the greatest problem in connection with the dairy is to get people to realize the importance of properly caring for the cows during cold weather. "What's the use? Dairying doesn't pay." Certainly it doesn't in many cases. We can readily believe that. But why? Because so often no special thought or systematic care is given to this branch of the farm work. Select your seed grain, plant and harvest it with the same indifference as is bestowed upon the cows, then note the results.

The cows are expected to go dry in the fall. I saw the milk from five cows brought in the other evening. It filled about two-thirds of a ten-quart pail. Only November, and those cows not to freshen till spring. On another farm, the three cows they kept were being milked once a day, and then at the most convenient hour, either in the forenoon or afternoon.

The part I think of is this: These cows have to be fed, watered and cared for in some kind of a way. To keep it up all winter means considerable time and expense. Why not, then, manage in such a way that the work will bring in some remuneration and satisfaction?

Dairying is too often looked upon as only a side issue in farming, and the matter of having profitable cows quite lost sight of. Better to keep two good cows properly housed and fed, than to keep five poor cows and indifferently care for them. The two cows will make a profit and be a pleasure to look after; the five inferior cows will be both a worry and a loss.

The aim of every dairyman should be to keep up the flow of milk. By having the majority of the cows come in in the fall, there is more of an incentive to give them extra care and food; besides, when spring comes and they are turned on the grass in good condition, the flow of milk is stimulated almost like freshening again; but if the cows have been dry four or five months and sadly neglected, the calves are not strong, the cows poor and weakly, and the best of the grass season is lost getting them in condition.

I believe half the cows do not get enough water in winter, and this seriously affects the production of milk. A lad said to me the other day: "How often should cows be watered?" I said, "Twice a day, if the water isn't before them in the stable." "I only water ours once a day." And when he told me the lake was a quarter of a mile distant, from which they hauled the water in bad weather, and where they drove the cows to drink in fair weather, I thought there would be occasional days when they did not get all they wanted once a day.

Experiments have proved that the milk flow is more increased by inducing the cows to drink plenty of water than by inducing them to over eat. If the icy chill can be taken from the water the cows will drink far more. We know that by ourselves. If we are thirsty we will take a glass of water, and sometimes two, if the water is not very cold, before we are satisfied; but if it be ice-cold water, we sip, perhaps, half a glass and feel we have had enough. Salt creates a desire for drinking, and should be kept before the cows.

Succulent food in some form is almost a necessity, in order to keep the cows milking well. Corn silage, of course, is the cheapest, best and most easily handled. Pulped roots, leaving out turnips, are excellent. Where silage or roots were not available, I saw one dairyman using a very good substitute. Clover hay was put through a cutting machine, put into a large, tight box, hot water poured over it, a tight lid put on top, and the hay left to steam and swell over night; at feeding time a little sprinkle of salt and the