The History of Fife Wheat.

They wore no coat of armor, the boys in twilight days—
They sang no classic music, but the old "Come all ye" lays;
For armed with axe and handspike, each giant tree their foe,
They rallied to the battle-cry of "Gee!" "G'lang!" and "Whoa!"

And so they smote the forest down, and rolled the logs in heaps,
And brought our country to the front in mighty strides and leaps;
And left upon the altar of each home wherein you go,
Some fragrance of the flowers that bloom through "Gee!" "G'lang!" and "Whoa!"

—Dr. O'Hagan.

Following upon the agitation to commemorate the work of Prof. Bell, of telephone fame, by a suitable memorial in the City of Brantford, Ont., comes another asking for a memorial to David Fife, the Peterborough, Ont., farmer whose name has been perpetuated in that of the famous "Fife" wheat—the cereal that has made Western Canada famous.

Just as the movement looking to the Bell monument aroused interest as to "how" the invention was accomplished, so in this case people are asking just "how" Fife wheat, that wheat which, more than any other, overflows the elevators and streams out in a golden avalanche over the great railways of the West, originated; and the following facts, compiled from information kindly supplied us by a niece of the late Mr. Fife, will be read with much interest, especially by those to whom, as to Dr. O'Hagan, the poet of the pioneer, the good old days of corduroy and logging-bees still bear the flavor of romance, or are invested with the halo of memory.

Considerably over half a century ago, Mr. David Fife came from Glasgow to Canada, and settled on the farm in Otonabee Township, Peterborough County, which is still occupied by his son, Sylvester Fife. Like other pioneers, he set out valiantly to "smite the forest down, and roll the logs in heaps," and, with others, found that, however many the compensations afforded, living in a new country is not all sunshine. One of the worst annoyances was the continual rusting of the wheat, of which, in the small areas possible to forest clearings, a good crop was necessary. While this trouble was at its worst, Mr. Wm. Struthers arrived from Scotland, and, during his stay at the Fife homestead, heard much of the fatal "rust." On his return to Scotland, when looking on, one day, at the unloading of wheat from a Russian vessel at the Glasgow dock, he thought of his friend in Canada, and put into his cap a couple of handfuls of this wheat, which he afterward gave to Mr. Fife.

In the Fife garden there was, in the fashion of those early times, a great pile of logs. These were burned and the ground prepared, and, in the plot so provided, Mrs. Fife carefully planted the wheat, raking it in with a garden rake. It grew, but all was rusted badly except five heads from one root, probably a "freak" in the plant world, unlike any wheat that had ever been.

The observant Fifes noticed these five heads, and great was the consternation when, one day, the oxen were found, not only in the wheat plot, but "at" the very bunch of unrusted heads. Three of the latter were, however, rescued, and during the following winter occupied a place of honor hanging to one of the kitchen beams. In the spring Mr. Fife carefully rubbed out the grains on a plate, and these were again planted. In the little crop so gained, non-rusting properties were again in evidence, and now, indeed, the Russian wheat promised to be a goose with golden eggs. Year after year the best kernels were picked out by the farmer and his family in the big kitchen, and in time Mr. Fife had enough to sow a small field.

By this time the fame of the discovery had spread abroad through Otonabee Township, and one by one the farmers applied to Mr. Fife for samples. With characteristic generosity he turned none away empty-handed, giving to some, and selling to others at the same rate as for ordinary wheat. Before long the rust-proof wheat was growing everywhere, and was found to flourish well, except on sandy land.

Then, as the county became older, and there was less new land to sow it on, it was observed that "Fife" wheat seemed to be "running out." It would not grow so well, and the character of the grain itself appeared to be changing. In the meantime, however, small quantities had been sent to Minnesota. In the rich prairie land it had found a new field to conquer. Year by year it was spreading north and west, overflowing into what is now known as the vast Canadian wheat belt, until it had finally won the position it holds to-day, a veritable mint to the Dominion and to a great part of the United States, a source of the bread supply to no small extent of the modern world.

Just one little incident, and we will close. Some years ago, Mr. Fife, when visiting an old neighbor, spoke of the change in the Ontario-grown grain above referred to, and regretted that he had not saved some of the original seed, in order that he might satisfy himself as to whether the grain or the land had most deteriorated. The neighbor's wife then remembered that, many years before, in the early days, she had plaited a little "quern," or handmill, from some of the ripe wheat, and had decorated it with ribbons, intending to present it to Mr. Fife as a souvenir. She had, however, neglected to present the little gift, which had, in consequence, hung on the walls of her house for many a year. A search in the garret brought the little quern to light again. A few grains were still found in it, and with these, in his old age, Mr. Fife repeated the experiment of his youth. The grain from these proved to be of very fine quality, but through mismanagement of those to whom Mr. Fife entrusted the seed, the product was lost track of.

Such was the history of Fife wheat.

From the above account it may be judged that, in all probability, Fife wheat may, as the prairies become exhausted, refuse to grow as it does to-day. However that may be, the fact is not altered that, by his keen observation and care, the late Mr. Fife rendered a tremendous service to his country. With his example before them, farmers must get some inkling of what it may mean to neglect the apparent "freak" in farm or garden; and perhaps the great results which he accomplished may inspire some other farmer to render an equal service to his age.

What is the Farmer's Best Power?

Editor "The Farmer's Advocate":

What is the best farm power? is an important question to many farmers. I do not think there is a power suitable and cheap enough for an average-sized farm. Now, let us look at the windmill: For grinding, for which it is mostly used, it is far from being good; the plates must be set so that they scarcely touch, or they wear out shortly, and if they are not close they grind very coarse. To my knowledge, farmers owning windmills take over 50 per cent. of grain to be ground. Few with windmill cut turnips with it, because the wind is not blowing when wanted, and turnips cannot be cut up days ahead. Windmills, also, are very dangerous, and very expensive to keep up, some farmers not using them—that have them—for fear of them running away and causing fire. A windmill is all right, set on a tower, for pumping water, but for anything else I do not consider it is.

A gasoline engine, in my opinion, is the only general-purpose power that should be used as a farm power. But will they pay? Most farmers can get their grain ground, straw cut and wood sawed by their thresher for from $15 to $30 a year. Is it going to pay a farmer to put in a gasoline engine, paying $300 or $400 for same, when the work may be done for the above-named amount. The work is also done much more quickly and better, thereby saving much time and giving more satisfaction. It also enables the thresher to make more use of his engine in the slack season. In conclusion, let me say, I fail to see where any man can see a profit in owning an expensive farm power. FARMER.

Ontario Co., Ont.

Serious Timber Problem Ahead.

Editor "The Farmer's Advocate":

We very much appreciate the position you have taken in the very important matter, the care of wood-lots. It is now evident to most people that there has been a wanton destruction of much valuable timber in our timber limits, by not leaving the smaller timber to develop after cutting the larger timber.

We use in our manufacture chiefly hickory, rock elm, white ash, whitewood and basswood. All of our hickory and whitewood, for some years, we have imported from the United States. Lately we find that Canadian white ash is about exhausted, and our chief supply is now from the United States. We find that during the last two years we have had to import about half our supply of rock elm from across the border. We are still able to get our basswood in Canada.

We use about 1,000,060 feet of all kinds of lumber per year (crating included). The prices of these kinds of lumber have advanced from 60 to 100 per cent in the last fifteen or twenty years. Unless there are large timber limits not yet opened up, it appears to us that the timber problem will soon be a very serious one for Canada, and the sooner our timber is saved from unnecessary waste, the better.

McLAUGHLIN CARRIAGE CO., Ltd.

Oshawa, Ont.

Getting a Perfect Stand of Corn.

It very seldom happens, says the Minnesots Agricultural Experimental Station, that a perfect stand of corn is secured. The intention is to plant three or four or five kernels per hill, but if the number of stalks per hill be counted and averaged for the whole field, only two or three stalks per hill would be found. The reasons for this imperfect stand may be summed up under three heads, viz.: (1) Lack of germination tests; (2) using tip and butt kernels; (3) using seed that is not uniform in size. Since the stand is the basis of yield per acre, it is essential that a full stand be obtained. Therefore, the value of the above three points cannot be overestimated.

RESULTS OF SEED TEST WITH CORN.

100 kernels planted.	Butt Kernels.	Middle Kernels.	Tip Kernels.
Per cent. germinated.....	88	89	68
Total growth in 20 days.....	177 in.	196.6 in.	151 in.
Average growth per plant.....	2.0 in.	2.2+in.	2.2+ in.

One hundred seeds were used in each case. Planted at same time and same depth. Measurements made each day until plants died. Seeds were planted in sterile sand; therefore, what growth took place must result from the stored-up food in the seeds.

DISCARD TIPS AND BUTTS.

Many people think that the tip and butt kernels must be planted to ensure the filling out of the ears, but such is not the case. Each kernel planted from any part of the ear will grow an ear with a tip and a butt. The kernels from the two ends of the ear should be discarded, as they do not produce such good plants or ears of corn as those from the center of the ear; neither is their germinating power so good.

USE UNIFORM SEED.

As corn is usually planted with a hand or a horse planter, and these machines are not made so as to adjust themselves to various sizes of seed, it is apparent that best results will be obtained by using seed of uniform size and shape. If, for instance, the small tip kernels and the coarse, thick, butt kernels or other irregular and uneven kernels are used, the hole in the disk plate will plant but one or two of the large seeds and five or six of the smaller ones, or, perchance, two kernels get wedged into the mouth of the disk and no seeds are planted. Thus, an uneven and imperfect stand is obtained.

Therefore, in selecting ears for seed, take those (other things being equal) that have the most uniform kernels, and discard all butts and tips. Grading the seed corn by running it through the fanning mill will help to give uniform kernels for planting and to secure an even stand of corn.

Seeding with Clover.

Editor "The Farmer's Advocate":

I have been very much interested lately in reading the different items on the growing of clover, but the most of them seem to finish up when they have secured the catch of young seeds, and fail to give anything as so the growing of the seed itself. Well, I think the growing of the seed is a kind of lottery business, but we can lay down a few facts as to securing the catch of young seeds, and as it is rather expensive to fail in, especially when clover seed is high (as it is this year), we should have everything laid out properly so as not to miss the crop. As to the best nurse crops to seed down with, I think that wheat (spring or fall) and barley are a great deal surer than oats, and although it comes out all right sometimes with oats, we never calculate to risk seeding on oats if we are sowing enough wheat or barley to fill out the required number of acres to be seeded down. Of course, there is a great deal of difference in seasons as to the risk a person runs in securing the catch of seeds, as in wet seasons they hardly ever fail, while last season we had a good growth of young seeds on clover sod that was plowed down late the fall before, and got by sowing about 3 pounds to the acre. But that does not always happen, although, if a person will top-dress the land to be seeded down with a very light coat of farmyard manure, he can almost always depend on a sure catch of seeds, although it will probably take the soil a little longer to dry in the spring. As to the number of pounds of seed to be sown to the acre, 2 pounds might do in a damp season, while 10 would be none too much in a dry one, and I think, for the safety of keeping up the rotation, it would be better to sow nearer 10 pounds than 2, because if the season were dry, by having the little plants thick, they would be more likely to hold the moisture and protect themselves from being scorched by the sun after the crop of grain has been taken away. If there is also a good long stubble left it will hold the snow and let air down into the plants, if the surface becomes coated over with ice during the winter. Now, when we have the young seeds securely caught, we have the finest crop on the farm for improving the soil, both enriching and keeping down weeds, as all weed seeds that shell out from the