

FARMER'S ADVOCATE

AND HOME MAGAZINE

* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

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No. 1 Hard.

In 1882 I could not find any wheat for seed that pleased me, and I prevailed on my friend and neighbor, Mr. Hartney, to import a carload of the best Red Fyfe that Minnesota could produce. It was bought through the Department of Agriculture, and cost \$1.40 per bushel laid down in Winnipeg. The quality was very fine, and the only weed seed in it was a little purple cockle. Out of it I received enough for my wants. In 1884 I had the finest wheat I have ever grown; the grain was very large and even, and so clear that it looked as if it was almost transparent. Mr. Hartney exhibited that year at the first Provincial exhibition, which was held at Portage la Prairie, and captured all the first prizes for Red Fyfe, amounting to \$177. The following year I exhibited at the Provincial at St. Boniface, and I got all the first prizes. One of the judges, Capt. Wm. Clarke, the Government Grain Inspector, said it was a case of "the pup beating the father." The following year I again exhibited at St. Boniface, and my wheat weighed more than 67½ pounds to the bushel. The Inspector stated it was the heaviest wheat he had weighed in the Province up till that time. The next heaviest wheat at the show weighed 64½ pounds. I did not exhibit again at the Provincial till last year, when I again won all the first prizes for Red Fyfe. In the interval I exhibited at our local shows, and I received a fair share of the honors that were going. Mr. Hartney and I have medals, cups and diplomas from the Colonial Exhibition in London, and from points on the continent of Europe, such as Antwerp, where our wheat was exhibited in competition open to the world, and it received the highest awards. At the present time the Hartney wheat is being used by the Government and the C. P. R. for emigration advertising purposes. Many prizes for Red Fyfe at the Provincial have come to Souris, Deloraine, Melita, and Virden, and I think the wheat exhibited was, almost without exception, from the produce of the original carload above referred to. For the first two years our wheat was all sold for seed, and was distributed along the Souris Valley from Plum Creek to the Oxton.

Had we been as fortunate in this district with our oats, I venture to say noxious weeds would have been almost unknown in this locality. Unfortunately, before we grew any oats our supplies were partly drawn from the Valley of the Red River, and a wolf was introduced unawares. But prosecution has been rigorous, and extermination is almost within sight. About eight years ago a carload of wheat was brought into this district from Regina, and I wish it had gone to the bottom of the sea. I am Weed Inspector. Notwithstanding these drawbacks, the wheat in this district is the purest, and the Municipality of Cameron is the cleanest, in the Province. My soil is a dark loam, neither clayey nor sandy, and is a fair sample of the district. I have never changed my seed. No other wheat for seed has ever come unto my farm. I have never at any time had any smut in it. Since bluestone was introduced I have used it. I know the value of it. I run no risks. Almost every year I have a few acres of backsetting, and I aim at taking my seed from this land. Here, as in other parts of the Province, we have suffered from frost, hail, drouth and blight. In these years I made a point to lay aside a few bushels of my best wheat for seed. I usually have a little wheat cleaned up for the show; this I keep for seed; one bushel of it to the acre, carefully put in on backsetting or summer-fallow, produces a heavy crop. I am a believer in selection. My wheat is pedigreed, and is purer and as vigorous to-day as it was sixteen years ago. Wheat can be bred pure and graded up as well as Shorthorn cattle. For a heavy and clean crop I like wheat after peas, especially if the peas have been plowed under. For grain of fine quality, smooth-skinned, clear and plump, I like wheat after timothy. I have taken good care not to spoil the texture or exhaust the fertility of the soil by too much cropping. This season the rainfall has been ample, the crop is very promising, and the soil seems as fertile as when the land was new. Notwithstanding the difference in the freight rates, it is a common occurrence for us at Hartney to receive more for our No. 1 hard than they do at Portage la Prairie.

Our friend, Mr. Elder, says it's facts, not theories, you want. In this letter I have been my own trumpeter, and blown my own horn, and the apology I offer for doing so is that I am better posted in the history of this wheat than any other man. Honor to whom honor is due. Western Manitoba rests under a big debt of gratitude to Mr. Hartney—say that thou owest.

Cameron Municipality, Man. WM. LAUGHLAND.

Mr. John Dearness.

We take pleasure in adorning this page with a lifelike engraving of Mr. John Dearness, for some years past Inspector of Public Schools for East Middlesex, in the Province of Ontario. The portrait will be appreciated by our readers everywhere, as all are familiar with the admirable contributions from his pen upon agricultural education and other subjects which have from time to time appeared in the FARMER'S ADVOCATE. He has just been appointed Vice-Principal of the new Provincial Normal School for the training of teachers, at London, Ont., which will be opened at the beginning of the coming year.

Mr. Dearness was born in Hamilton, Ont., May, 1852, of Scotch parentage, his parents being John and Jane (Linklater) Dearness. His earlier years were spent upon farms in Perth and Middlesex Counties, but having begun the acquisition of an education with marked success, he entered upon the teaching profession in 1870, first in a rural public school and subsequently as principal of the Lucan and Strathroy public schools, and still later on the staff of the Strathroy High School. In the



MR. JOHN DEARNESS.

fall of 1874 he was appointed Public School Inspector for East Middlesex, a position in which he has rendered lasting service to the cause of public school education, his general administration being also uniformly marked by discernment and good judgment, enthusiasm and industry. His addresses before teachers' institutes and associations, and the ability with which he conducted the editorship of the *Ontario Teacher*, at the time the only educational journal in the Province, further enhanced his reputation. He was one of the editors of the *Royal Canadian Reader*, and for several years on the Central Committee, under the Provincial Department of Education, for the examination of teachers. He is an honorary member of the Montreal Historical Society, has been Lecturer on Botany and Zoology in the medical department of the Western University, and twice President of the Ontario Entomological Society. In fact, for several years he devoted considerable time to the practical study of natural science, particularly botany, entomology, and mycology. He has made probably the largest collection of fungi in Canada. It contains several hundred species new to science. It was in recognition of his attainments in this department of knowledge that he was recently selected by the Ontario Government as a member of the Royal Commission to investigate the subject of the troublesome San José scale and the procedure taken to overcome its ravages upon the fruit trees of the Province. One of the most unassuming of men, the extent and variety of his attainments are a constant surprise to those who enjoy his personal acquaintance. Apart from his pre-eminent general qualifications as an educator, he is one of the few educationists of the day who

have grasped the true bearing and the importance of agricultural education. As our readers are aware, this subject is just being placed upon the curriculum of the Ontario public school course, and the Minister of Education was fortunate, in manning the new Normal School, to be able to secure the services of Mr. Dearness to be associated with those upon whom rests the responsibility of training in the art and science of teaching those who will in future be entrusted with the country's public school work, which, to our mind, outranks in importance that of high schools, collegiate institutes or universities, because in the former is laid the educational foundation of the country's youth.

Cement Concrete Structures.

BY CORRESPONDENT OF "FARMER'S ADVOCATE."

Mr. Isaac Usher, of Queenston, Ont., in his Institute talks gives a few of the essentials and methods in the following words:

"In building concrete structures, clean gravel only must be used. It must not be earthy, loamy or sandy. It must not be too fine; in fact, the gravel should run in size from a wheat grain to egg size. If gravel of this sort is used, about eight barrels of gravel are used to one of cement, and it makes a stronger wall than very fine gravel and cement, equal parts, and is also more economical. Cement is put up in jute and paper bags. The jute bags hold two cubic feet of cement. The preparation of the concrete mixture is somewhat as follows: A bottomless box, 3 ft. by 4 ft. by 1 ft. high, is used, on a large platform where the mixing is done. The box is placed and half filled with gravel, then half the cement to be used is added; then to the box is added as much more gravel, and then the balance of the cement. (The proportion here is 1 to 6—12 cubic feet of gravel and 2 cubic feet of cement.) This is mixed thoroughly dry! When thoroughly mixed, water is added gradually. About three to four pails of water is needed for the above quantity, varying a little according to amount of moisture already in the gravel. The water is thoroughly worked in until the mixture has the consistency of mortar. Only a small amount of sand in the gravel is needed, gravel about the size of eggs being most economical. Mix thoroughly, and when using ram down hard. It is better to excavate to get a good foundation. The foundations for walls are usually 18 inches thick, and on this is built a 10-inch wall, the wall being built in center of the footing (foundation). This size wall will support any weight in connection with a barn structure. Planks and studding are used to hold cement concrete while building; another method is by the use of clamps. A railroad barrow is the most useful article for carrying the concrete mixture around in. Large stones can be used in the heart of the wall, but they must be rammed down tightly. One barrel of cement will, with the necessary gravel, build a wall 35 feet long and 1 foot high. Good cisterns can be built in the ground with this material. The walls are usually 4 inches thick, with a parachute roof—18 to 24 inches of a rise. In this roof is a manhole 20 inches across. The manhole trap is of iron.

Construction of Floors. The manure trough (gutter) is put in first, then a 2x6 on the floor side and 2x8 stall side is used to hold the cement in place. There is a slight slope in the stalls, about 1/4 of an inch. The floor for a cow stable is made about 3 1/2 inches thick, 2 1/2 inches of the rough 6 to 1 concrete being used and rammed down thoroughly, then about 1/4 of an inch of the 2 to 1 concrete being used on top of the first lot. In this method one barrel will put in about 50 square feet. A floor is all the stronger and will wear better if it is 1 to 1 inch thicker with the rough concrete (6 to 1). The foundation for the floor should not be broken stones, as they let air in and the concrete will dry out too quickly. It is far better to level the earth thoroughly, then put on a layer of sand or gravel 1 to 2 inches thick on top of this the concrete. Never put the concrete right on clay. Sockets are made 6x6 and built in at the side for the stall posts. The sockets are made by using watersoaked blocks 6x6, which are left in one-half to one hour, then withdrawn, and a hole is left in which the stall post is placed. In horse stalls a 2-inch fall is given. If sharp-shod horses are stabled, the floors should be planked on top of the concrete. Floors should not be polished with an iron trowel, as it will make a slippery floor.

NOTE. The bottomless box used for mixing the concrete in has cleats nailed along each side, to be used as handles to lift it around by.