

Formalin for Calf Scours.

A correspondent of the Breeders' Gazette reports a case where treatment with formalin saved the life of a calf that had a bad case of white scours. He procured half an ounce of formalin and diluted it with 15½ ounces of water. As the calf was so far gone it would not drink from a pail, he took a pint bottle with nipple and fed one pint new milk three or four times a day, adding a tablespoonful of the solution to each pint of milk. On the third day after giving the treatment the bowels seemed to be working in a normal condition, and the calf has continued to thrive. He adds that he had previously had considerable trouble with white scours, and nearly every case proved fatal. For the information of "The Farmer's Advocate" readers, we may say that American experiment stations have reported very favorably upon the internal formalin treatment for a certain form of calf scours. The washing of the navel cord of the new-born calf is also recognized as the best-known preventive of joint-ill in colts, and of white scours in calves. Formalin is a wonderful disinfectant and antiseptic. When administered to calves suffering from scours of bacterial origin, the results are claimed to be most satisfactory, but in a case of scours arising from mechanical irritation, the feeding of cold milk, or irregularity in time and quantity of feeding, formalin could not be expected to have any good effect. In such cases a mild non-irritant purgative, such as raw linseed oil or castor oil, is indicated to clean out the bowels. For stubborn cases of scours, however, which will not yield to ordinary treatment, formalin is worth a trial. Will any who have tried it kindly report results?

Water in a Trough in Sheltered Shed.

Editor "The Farmer's Advocate":

In reply to the question under the heading, "How are Your Stock Watered?" in your issue of February 7th, I give my system very briefly: The well is 600 feet from the buildings. A wind-power pump forces the water through inch piping to a supply tank (capacity, 30 barrels) placed in cellar of kitchen in house. This supplies an abundance of fresh water for the house. From the supply tank it runs to the barn, there being plenty of fall, into a float box placed in the passage in front of the horses, entirely free from frost. The water runs from the float box to a large trough placed against the front wall of the barn and near the center of a 16 x 84-ft. shed. The shed is sheltered on the south end by a stone wall, on the north and north-east by a hogpen, and open to the east a space of 70 feet. The trough is made of pine planks, matched, with lids of one-inch lumber, matched. A case of matched lumber, with a six-inch spaced filled with sawdust, around the trough, makes it frostproof. The system cost \$180 to instal, and has been in use 12 years.

The one great advantage is in having an abundance of fresh, pure water always on hand. Another important advantage is that the stock drink freely in the shelter during the most stormy weather. Other advantages are that weaning calves take to drinking more readily; fresh water is palatable, and the stock drink regularly, thus avoiding excessive gorging of ice-cold water; by having the float box arranged for dipping a pail, etc. Great care should be exercised, in installing the system, to prevent leakage, by using galvanized piping, proper fittings, floats, tanks, etc.; also to have piping sufficiently deep to avoid freezing.

There are places where a hydraulic ram can be used more profitably than the wind pump.

I arranged my system for installing water cups in the stable, but after investigating concluded that water cups in the stable are not profitable, as stock require considerable exercise. Without sufficient exercise stock will degenerate, thus defeating the object of stockmen.

Waterloo Co., Ont.

A. S. FORBES.

Onerous Customs Regulations.

At the recent meetings of the Dominion Cattle-breeders' and Dominion Sheep-breeders' Associations, in Toronto, there were several complaints from Canadian exhibitors at the International Live-stock Exposition, of Chicago, regarding the American customs regulations under which our stock is admitted duty free to compete at the show. One breeder said it cost him last year about \$12.00 in brokerage to get his stock in and out of Chicago. Representations will be made to the Manager of the International to intercede in our behalf, and Dr. Rutherford, Canadian Live-stock Commissioner, also promised to take the matter up unofficially with Dr. Melvin.

Paper Worth Four Times as Much as Any Other.

I received the premium knife all right, and it is dandy. It is well worth \$1.00. The new subscriber likes "The Farmer's Advocate" all right. He says it is better worth \$2 to the Canadian farmer than any other paper is worth 50 cents.

Bruce Co., Ont.

LATCHFORD THACKER.

THE FARM.

Quality in Wheat.

The third annual report of the Canadian Seed-growers' Association, just to hand, contains some very interesting papers and addresses on the question of seed grain, etc. The most interesting, perhaps, is that treating of "Quality in Wheat," by Chas. E. Saunders, Ottawa, and "Wheat-growing in the Canadian West," by Hon. W. R. Motherwell, Minister of Agriculture for Saskatchewan. From these we find some facts of far-reaching importance to this country pretty well established, among which are that Canada has become world-famous as a producer of the best hard wheat in the world, and that this supremacy is owing to the ability of our West to grow to perfection the famous old Red Fife wheat. And the question that naturally arises is, Should the Fife wheat fail, will not our reputation as a producer of hard wheat go with it; have we any other to take its place—any that will at all compare with it?

Why does this particular variety stand pre-eminent? The answer is not far to seek, viz., because of its superior milling qualities. It is rich in gluten, and that of a high quality. This gives it its superior bread-making quality. It has the thinnest bran of any wheat, and gives a larger yield of flour per bushel than any other variety. It will make much more bread per 100 pounds of flour than any other, and that of a higher quality. In short, it gives the strongest and best flour for bakers' use of any wheat ever grown in this country. Where did it come from, and how did it originate? Just here I would refer to the history of this wheat, given in "The Farmer's Advocate" of May 3rd, 1906, where a very interesting account of its origin is given. It tells how Wm. Struthers, a Scotchman, took a handful of wheat from a Russian vessel which was unloading its cargo in the port of Glasgow. This he gave to the late David Fife, of Otonabee Township, in Peterborough County, Ontario; how Mrs. Fife planted this wheat in the garden where a log-heap had been burnt. How five heads grew from one grain which were different from the rest, in that while all the rest were stricken with rust (which, by the way, was the greatest obstacle to the growing of spring wheat at that time), these were entirely free; how nearly these came to being all devoured by the oxen which had broken into the garden (but three of the heads were rescued)—all reads like a romance. But from these three heads of wheat have come results greater than most people are aware of, probably without a parallel in the whole history of agriculture. It is interesting just here to note that Mr. Fife, in propagating this wheat, selected each year the best kernels, in which he was assisted by his family, until enough was raised to sow a small

field. Thus we find that David Fife and his family were doing over half a century ago what the Seed-growers' Association are doing to-day—pedigreeing the seed on the principle of the survival of the fittest.

The fact that David Fife never sought to make any financial gain out of his discovery, as he might well have done, but gave it to his neighbors at the current price of ordinary wheat—all gives added interest to the story of Fife wheat.

The value of this new wheat, in the eyes of the farmers of those days, was its rust-proof quality. While other varieties were stricken with rust, this new wheat seemed to be proof against it. But when it was brought to the mill to be ground, it was condemned by the millers. Those were the days of the stone mill, when the grinding was done with burr-stones, and the new wheat presented a problem to the millers they had never encountered before. It was so hard that they could not soften it in the process of grinding, and they said that most of it went to middlings and shorts. The skill of the miller, apart from his ability to keep his burrs in perfect balance and the grinding surface perfect and true, lay in his fingers. The feel of the meal as it came from the stones told him when he had his burrs set just right. In the process of grinding, the top burr, or runner stone, was gradually lowered by means of a lighter-screw, bringing the grinding surfaces closer together, until the miller, by regulating the feed, feeling the meal, and turning the lighter-screw, knew when he had it just right. This was indicated by the meal having a soft, silky feel, his object being to get all the flour out of the wheat and have the bran clean and light, and at the same time make a good flour that would rise well in the process of baking. It was well known by the miller that if he set his stones too close on any ordinary variety of wheat, there was danger of killing the flour; that is, the gluten cells of the wheat were broken down to such an extent that the flour would not rise, and its usefulness for breadmaking was destroyed. To strike the happy medium—to grind close enough to clean the bran and get the fullest possible yield of flour, and at the same time avoid killing it by too close grinding—was the object of the miller, and that called for the exercise of his skill and judgment. But this new wheat was a surprise to him; he could not soften it. He might turn the lighter-screw until he had the whole weight of the runner-stone on it, and yet the meal had a hard, gritty feel. He soon found, also, that he could not kill it by close grinding, like other kinds; and to-day it still retains the same quality, and in the large modern mills it is found necessary to subject this wheat to the action of steam in order to get the best results in the process of grinding. But gradually the prejudice of the millers wore away, and they found that in this founding of David Fife's they had the best milling wheat that Canada, or perhaps the world,



Diadem (12550).

Four-year-old Clydesdale stallion; sire MacRaith, dam Hecuba, by Baron's Pride. Imported August, 1906, by B. Rothwell, Hillside Farm, Ottawa, Ont.