

Healthy Homes.

In dealing with the subject of the sanitary condition of our country homes, I trust that I may be allowed to use not only plain, but forcible language, for I feel that the matter is of such vital importance as to require more than an ordinary degree of emphasis. The dwellers in towns are wont to quote the healthy lives of those whose lot is cast among the hills and fields and fresh pure air of the country, and to envy those who, though they may be debarred from some of the attractions of city life, enjoy the natural health-imparting gifts, fresh air and pure water, which a wise Providence has so freely bestowed upon all who care to enjoy them. Do we deserve this envied reputation which places our country homes so far ahead of the dwellings in densely populated places? I fear not. It has been stated upon good medical authority, and published by official reports, that there is originated far more diphtheria and typhoid fever among the isolated farm houses on the healthy hillside farms of Vermont and New Hampshire, than there is in any of the large cities of America, in accordance with the proportion of the population; and furthermore, that the majority of cases of these two most dreaded diseases have originated on the very farms where they have appeared, through the want of proper care and attention to the wells, the privies and the kitchen drains. Is not, then, what is true of the New England States equally true of Canada? Are we any more alive to the terrible dangers that we are allowing to lurk about our homes than our neighbors are across the border? And do we realize the awful responsibility which rests upon us when we neglect the ordinary precautions for preventing the sickness and long suffering, and perhaps death of those who are nearest and dearest to us? What profit shall we find in our farm work if ill-health reigns in the house? Are we not sometimes more successful in the sanitary arrangements even for our animals than for our own homes? Certainly, as a rule, there is less preventable sickness amongst them than there is amongst our families. Let us then go literally to the fountain head, and do all that possibly can be done to insure a liberal supply of at least untainted water. Whenever wells and springs are low, it is a noticeable fact that typhoid fever is on the increase; this would naturally go to show that some source of pollution to the wells existed, and which in time of plenty was simply diluted to a less dangerous degree than when the supply was low. We should not lose sight of the fact that all springs and wells have been but recently rain watered, then so-called surface water, which, by its own gravitation, finds its way for greater or less distances through porous soils or fissures in rocks till meeting with some obstruction to its natural flow, it rises to a more easy discharge at or near the surface. Every precaution then should be taken to prevent any impurity from finding its way to this water supply, and where it is possible it is far preferable to bring the water supply from a spring some distance from the house and outbuildings rather than from a well in too close proximity to either. Let us then suppose that such a spring has been found, and with elevation enough to take a constant supply of water to the second story of the house. A stone well should be sunk as deeply as possible, in the crevices of which

mortar has been placed to prevent the soil from working in, and for eight feet down from the surface the stones should be laid in cement mortar to avoid the ingress of earth worms, and carried in the same manner a foot at least above ground to prevent toads, snakes, slugs, etc., from crawling in. (I found a skunk in a well a month ago!) The whole closed with a board cover sufficiently heavy to prevent its ever being lifted off by children. Iron pipes being liable to close with rust in from one to three years, balsam logs bored $1\frac{1}{2}$ inches are preferable, unless the soil is dry and sandy and the distance very great, or the strain over thirty feet head, in which case rustless iron is the cheapest in the end. The first six feet of outflow from the well should have six inches or so upgrade. This prevents sand from entering, leaves the mouth of the outflow under water, thus preventing any floating substances from getting in, and whenever the well is cleaned out the return of the water down this six feet of outflow clears it of any sediment which may have entered. A movable strainer over this outflow is always advisable. By burying the pipes at least three feet we insure cool water in summer and less danger of freezing in winter, besides preserving the wooden logs better than when nearer the action of the air. These logs or pipes should enter through the cellar wall four feet below the surface of the ground, and be closed with a movable plug to facilitate clearing them of sediment, and from the cellar where the first faucet might be, the piping can safely be of lead. The next and most important faucet of all should be over the kitchen sink, and high enough to allow an ordinary pail to stand under it. From here, if the head is sufficient, another faucet on the upper story will be a convenience for bedroom water, etc., and save many a weary step upstairs.

Taking the return waste pipe down again alongside the upflow it should pass out at the cellar wall again, but one foot above where it entered, in order to prevent the chances of the water siphoning past the faucets. Here it can be taken in logs again to a horse trough in the barnyard, and from there to the cow stable, whence it should waste either into the house sewer, a land drain, or a running stream.

Wherever it is possible I would urge putting in on the upper flat a water-closet and slop-sink combined, and if a bath tub were added the arrangements would be as comfortable as they were complete. Once the running water is in the house, and the sewer drain made, the extra cost of a water-closet and slop sink combined, and a sink and a faucet to draw water in parts for baths and bedrooms, etc., should be put in in first-class order for, say \$65, and which, at ten per cent., to cover interest and repairs, would represent \$6.50 a year. Surely a moderate charge for so great a blessing? Having provided a pure and convenient supply of the water we drink, let us now look to the air we breathe. As soon as winter sets in we are apt to hear more of typhoid fever, diphtheria and other ailments than before the frost came. In very many cases this is due to the fact that the frozen ground prevents any further evaporation of bad odors outside, and which now find their way for long distances through the soil from the privy vault, or the kitchen, drawn into the cellar there to be drawn up by the heat of the house into the rooms in which we live and sleep. Decaying vegetables, too, may add their poisonous gases to the rest, and where the cellar floor is boarded over, dead worms, toads, and rotten wood underneath often form a mass of corruption which one has no conception of. As soon as the cellar windows are closed for the winter, the only means left for the exit of these odors is through the house, and if through the house it must go, the safest means left for us is to confine it in the following manner:—A pipe of galvanized iron four inches in diameter should run from the ceiling of the cellar straight up through the house and enter the kitchen chimney near the ceiling of the first or second story. This will ensure very thorough ventilation of the cellar, both day and night, and as the kitchen chimney is supposed to be seldom cold, will draw at all seasons of the year.

[TO BE CONTINUED.]

Purchases for a Calgary Ranch.

Prominent among the fine stock breeders of the territories is the firm of R. & J. A. Turner, of Calgary, who have established a first-class Clydesdale stud in that district. This season they have purchased six exceptionally good colts from Ontario importers and breeders to add to their already choice selection. Of these four are imported and two bred in Ontario. From D. & O. Sorby, Guelph, three of the former were purchased, including Culzean, a strong and useful colt rising three that, if we are allowed to judge, will yet make his mark in the show rings of the prairie provinces. Culzean is royally bred, sired by the noted Lord Erskine (1744), his dam being Jewel, by Prince of Wales. He is, therefore, own brother to the celebrated prize winner Lord Ailsa, who carried first at Maryhill, third at Glasgow, third at the Royal at Newcastle and third at Perth in 1887, second at the same show at Glasgow, 1888, and first at H. A. S., Melrose, 1889. Number two is Barnaby Rudge, sire Barnaby, by the Darnley horse Good Hope, dam by Sir Walter (795). Barnaby carried first at Wigtown when a foal. Barnaby Rudge is a big, flashy, strongly built colt rising three, and is just the type of a Clyde to breed heavy draft horses for street traffic. Number three, Self Praise, is a brown colt, also rising three, that possesses the best of limbs and substance and capital action, and is a well-bred son of Charmer (2014), who was a noted prize-taker, as also was his sire Bonny Scotland that was sold for £900 to go to New Zealand. Brooklin Boy is a beautiful bay colt sired by the Lord Erskine horse Tannahill (4745), his dam being Kate (65), by Pride of Perth (2336). Brooklin Boy won first at the Toronto Industrial in 1891, and third in a very strong ring at the Spring Stallion Show 1892. Blythe Tom (1861) is dark brown, and is a colt that promised well. He is sired by that massive horse General Duke (1693).

By consulting our advertising columns these will be found for sale.

World's Fair Notes.

Articles intended for exhibition will be admitted to the Agricultural Building on and after November 1, 1892.

All exhibits, except those of a perishable character, must be in position on or before April 20, 1893. Vegetables and other perishable products will be admitted during their season, and may be replaced with fresh specimens when found necessary by obtaining a special permit from the Chief of the Department.

Dairy products will be received for exhibition only between the first and tenth of the following months: June, July, September and October, 1893.

Cheese, other than that mentioned above, offered for exhibit from the United States and Canada, and all cheese offered for exhibit from points outside the United States and Canada will be subject to such limitations and restrictions as may be decided upon by the Chief of the Department at the time application for space is made.

Exhibits of wool will be classified and limited, as follows:—Class 1, pure-bred fine wools; class 2, pure-bred middle wools; class 3, pure-bred long wools; class 4, all cross-bred wools.

Hayti has appropriated \$25,000 for its representation at the Exposition. Fred Douglass has been appointed commissioner to represent that country.

The Suffolk Horse Society, England, has offered two gold medals of the value \$50 each, for the best Suffolk horse and mare or filly exhibited at the World's Fair in Chicago.

Canada has been given 68,471 square feet of space in the various buildings, exclusive of space yet to be granted in the agriculture and live stock departments.

The U. S. Treasury Department has decided that machinery imported to the Exposition from foreign countries either wholly as an exhibit or to be shown in connection with the illustration of some manufacturing process, shall be admitted free of duty. Any raw material imported for use in such process must pay regular duty, however.