

Commission to send Sub-Commissioners to the United States and Canada, Belgium, Holland, France, Russia, Australia, and other lands from which our grain markets are stored in overflowing abundance. This will obviously lead to an investigation of the methods of farming in those countries, and the facilities of transportation, and from the facts thus accumulated on the spot some crumbs of advice may be deduced for the benefit of our own agriculturists. As Mr. Gladstone lately pointed out, they pay much less attention in America to beauty than to utility and rapidity of result, and he might have added that this is true in general of all new countries. But in the matter of food there is something for our land-owners and farmers to ponder over in the fact that grain can be transported 4,000 miles from Chicago to Liverpool—one thousand of these being by rail—at the rate of 35 cents per 100 lbs. Yet all is dearer in a new country than in an old, except land and food.

POISONING BY STRYCHNINE.

A recent case of poisoning by strychnine in San Francisco where the patient was well and rational for a long time after the reception of the deadly drug, and conversed pleasantly with his physician, recalls a remedy which is said to be so well known and successful that where life remains the effect of the strychnine may be entirely obliterated and its deadly action destroyed. We allude to chloroform. The effect of strychnine on the system is to produce a contraction of the great nerve centers, or ganglia, and bring about paralysis. Aiming directly for these points, it reaches the brain and destroys its vitality by its enormous contractile power upon the system. In case of poisoning by so doing, the contraction is made manifest by the "twitching" of the muscles, the mouth is drawn in different shapes, and the patient then has generally been said to be so effectually under the influence of the drug that he cannot be saved. It is agreed, however, that there need never be a fatal case of poisoning by this death-producing element, and that as long as any signs of life remain a cure can be effected.

Chloroform is administered in sufficient quantities to keep the patient under its influence. This anesthetic attacks the nerve centers with the same vim as strychnine, but produces a contrary effect, in that it causes a relaxation, and fights the strychnine on its own ground. By allowing the patient to recover from the effects of the chloroform, the "twitchings" of the muscles will be resumed if the strychnine has not been effectually counteracted. In this case, chloroform must be applied again without delay, and kept up as long as the nervous or spasmodic contractions appear. The remarkable effect of the chloroform is apparent as soon as administered. The contractions and twitchings of the mouth, etc., immediately cease, and do not return as long as the patient is under its influence.

THE DECLINE IN PRICES.

As indicative of the remarkable general falling off in prices during the past decade, the following incident may be cited: A prominent drug and paint firm of this city, says the *Boston Commercial Bulletin*, were recently called upon to duplicate an order for white lead and linseed oil, filled in 1868, and upon examination of their old accounts, found that the charge for the former article was \$14.25 per hundred, and for the latter \$1.20 per gallon. To-day they are selling at \$9.50 and 65 cents respectively. At the time above referred to, alcohol sold at \$3 per gallon; to-day it is quoted at \$2.02. Spirits of turpentine brought 75 cents per gallon; to-day it sells at 27½ cents. Naptha was held at 48 cents; to-day it is 7 cents. Other articles sold as follows: Salt soda at \$3, oxalic acid at 35 cents, camphor at \$1.10, brimstone at 4 cents, sulphur at 5½ cents, and Venetian red at 3 cents.

SOUNDING NIAGARA RIVER.

The United States Corps of Engineers has recently had the Niagara river sounded, a task never before accomplished, owing to the bungling and unscientific means employed by those who attempted it. Bars of railroad iron, pails of stones, and all unreasonable bulky and awkward instruments had been attached to long lines, and cast off the railway bridge and elsewhere, but positively refused to sink. The very bulk of the instruments was sufficient, no matter what their weight, to give the powerful

under-current a way to buoy them up upon the surface, or near it. By means of a small lead weighing twelve pounds, however, and a slender cord, the depths from the falls to the lower bridge were easily obtained. One of the sounding party says that the approach to the falls in a small boat was made with great difficulty. Great jets of water were thrown out from the falls far into the stream, and the roar was so terrible that no other sound could be heard. The leadman cast the line, which passed rapidly down and told off 83 feet. This was quite near the shore. Passing out of the friendly eddy which had aided them in approaching the falls, they shot rapidly down stream. The next cast of the lead told off 100 feet, deepening to 192 feet at the inclined railway. The average depth to the Swift Drift, where the river suddenly becomes narrow, with a velocity too great to be measured, was 153 feet. Just under the lower bridge the whirlpool rapids set in, and so violently are the waters moved that they rise like ocean waves to the height of twenty feet. Here the depth was computed to be 210 feet.

THE END OF THE WORLD.—Camille Flammarion, the well-known French scientist, thus beautifully expresses himself in *La Correspondance Scientifique*, regarding the ultimate fate of our globe:

"We all of us admire to-day the beauties of terrestrial nature, the verdant hills, the perfumed meadows, the purling brooks, the mysterious shades, the groves animate with singing birds, the mountains crowned with glaciers, the immensity of the seas, the warm settings of the sun in clouds edged with scarlet and gold, and the sublime glimmering of the sun on the mountain tops when the first rays of the morning shiver in the gray mists of the plain. We admire the human works which to-day crown those of nature; the bold viaducts thrown from one mountain to another, and over which speeds steam; the ships, marvelous structures traversing the ocean; the brilliant and animated cities; the palaces and temples; the libraries, museums of the mind; the arts of sculpture and painting, which idealize the real; the musical inspirations which make us forget the vulgarity of things; the works of the intellectual genius who explores the mysteries of the world and transports us into infinity; and we live in happiness in the midst of this life so radiant, making ourselves an integral part of it. But all this beauty, all these flowers and these fruits will pass away. The earth was born; she will die. She will die either of old age, when her vital elements shall have been used up, or through the extinction of the sun, to whose rays her life is suspended. She might also die by accident, through collision with some celestial body meeting her on her route; but this end of the world is the most improbable of all.

"She may, we repeat, die a natural death through the slow absorption of her vital elements. In fact, it is probable that the air and water are diminishing. The ocean, like the atmosphere, appears to have been formerly much more considerable than it is in our day. The terrestrial crust is penetrated by waters which combine chemically with the rocks. It is almost certain that the temperature of the interior of the globe reaches that of boiling water at a depth of about six miles, and prevents the water from descending any lower; but the absorption will continue with the cooling of the globe. The oxygen, nitrogen, and carbonic acid which compose our atmosphere, also appear to undergo absorption, but slower. The thinker may foresee, through the mist of ages to come, the epoch, yet afar off, in which the earth, deprived of the atmospheric aqueous vapor which protects her from the glacial cold of space by preserving the solar rays around her, will become chilled in the sleep of death. As Henri Vivarez says: 'From the summit of the mountains a winding sheet of snow will descend upon the high plateaus and the valleys, driving before it life and civilization, and masking for ever the cities and nations that it meets on its passage.' Life and human activity will press insensibly toward the intertropical zone. St. Petersburg, Berlin, London, Paris, Vienna, Constantinople, and Rome will fall asleep in succession under their eternal shroud. During very many ages equatorial humanity will in vain undertake arctic expeditions to find again under the ice the place of Paris, Lyons, Bordeaux, and Marseilles. The sea coasts will have changed, and the geographical map of the earth will have been transformed. No one will live and breathe any more except in the equatorial zone up to the day when the last family, nearly dead with cold and hunger, will sit on the shore of the last sea, in the rays of the sun which will thereafter shine here below on an ambient tomb revolving aimlessly around a useless light and a barren heat."