

hardens the ground, sometimes injuring the plant more than if it had received no water at all.

I also saw in another garden another method, equally good, in practical operation. A barrel with both heads out was set in the ground half-way, and partly filled with manure. Around the outside of the barrel the cucumbers were planted. All watering was done through the barrel and the manure. The water reaches the roots from beneath, and kept the soil moist and rich. In both methods the plants were more thrifty than those treated in the common way.

Remarks.—We thank our correspondent for keeping his eyes open and giving others the benefit of what he sees. The first mode is new to us; the second is not.—*Rural New Yorker.*

Stiffened Pasteboard.

Stiffened pasteboard, or papier mache, is now being used in France, with success and economy, in the manufacture of sugar moulds, vessels for the chemical laboratory, photographic basins and funnels, and cells for electric piles. It is made smooth and impermeable by application of paint and lacquer; and in the case of sugar moulds, the sugar cannot be injured by rust as is the case with iron moulds in spots where the paint or enamel may by chance break off.

Animal Electricity.

Professor Beckenstein, of Lyons, in investigating the origin of the electrical power exhibited by the torpedo, gymnotus, etc., was struck by the analogy of the cells of electric fishes, with certain minute vessels, united by nerves and moistened by mucus, which exist in nearly all kinds of animals, and are found developed in man at the period of the greatest strength, but collapsed and dried up in old age. He began a series of experiments, and after three years' investigation has lately published the following results:—When the temperature is below 32°, the wind north and the sky clear, expose a cat to the cold until his fur lies close to the skin and appears greasy; expose your hands to make them equally cold; then take the animal on your knees apply the fingers of your left hand on its breast, and pass your right hand down its back, pressing moderately; at the fifth or sixth pass you will receive a slight electric shock. At first the cat will appear pleased, but as soon as it feels the shock it jumps away, and will not stand a repetition of the experiment during the same day. After the experiment the animal looks tired; some days after it loses its appetite, seeks solitude, drinks water at rare intervals, and dies in a fortnight. The same experiment has succeeded with rabbits—they die the second day. It is unsuccessful with dogs. Once only it was made on a cow; she was tied to an iron ring, the ground was frozen, one hand was placed on the breast and the other passed down the back, when such an electric shock occurred that the professor was thrown to the ground. The cow appeared very much irritated, but it was impossible to know if she suffered from it, since she was killed by a butcher three days afterward.—*Telegraphic Review.*

SUMMARY.

It is estimated that from the breeding grounds of three provinces of France, no less than 400,000 common snails are sent to the Paris markets daily, where they enter into competition with oysters, than which they are said to be infinitely richer in nutritive matter.—100 barrels of crude petroleum will yield from 70 to 80 of refined oil, according to the skill of the refiner, and the perfection of the machinery.—A stamping plate for stamping addresses is made out of blocks of timber two and a half inches square and half an inch thick, on which are nailed or glued woollen cloth letters; these blocks are secured to each other to form words by means of dowels, and the cloth letters saturated with marking ink, from which impressions are taken.—The promoters of the Bombay (East Indies) International Exhibition, for 1866, have sent \$60,000 to defray the expenses of collecting and forwarding specimens of American industry. A committee has been appointed to receive the goods in New York.—A Bessemer Steel Manufactory has been established at Troy, New York, by Messrs. Winslow, Griswald & Holly, who it is said have been eminently successful in the quality of the metal produced. This firm holds the patent right in the United States.—A wharf laborer in England recently met his death by sucking at a cask of pure spirits, 66.8° over-proof, supposing it to have been wine. Another man was severely burnt internally from the same cause.—It is said, that, if the largest pip in an apple be sown, the fruit will be similar to that of the parent tree without grafting; and that the cabbage seed gathered from the middle flower stem produces plants which will be fit for use a fortnight earlier than those from the seed of the lateral flower stems.—Liebig says 40 lbs. of finely ground bone contains 22 lbs. of pure phosphate, and is the best agent to supply phosphate to the soil.—An inventor in Washington is manufacturing violins, and other musical instruments, of glue, instead of wood; the sounds from which are said to be "perfectly astounding." A violin mended with glue is said to be better toned than before being broken, he therefore concluded that glue was more sonorous than wood.—Let your hogs run in the orchard; they will eat up the wormy windfalls, destroy the worms and borers, and stir up the soil and keep it mellow round the roots of the trees.—A steam omnibus is now running between Nantes and Niort, in France, ascending and descending rather steep hills with facility and safety.—The Mersey Steel and Iron Works Co. are about to smelt their iron with gas instead of coal, and thus entirely do away with the smoke nuisance.—Correspondents of the *Maine Farmer* give several instances of horses being poisoned by eating "pine weed" or "marestail" (*equisetum arvensis*); which, it appears, grows profusely amongst clover and timothy, on wet undrained lands.

A very delicate oil, much used in Russian cookery, is expressed from the seeds of the sunflower, and is prepared by enclosing them in bags and steeping them in warm water, after which the oil is expressed. This is actually as sweet as butter.