

Scientific and Useful.

THE "Scientific American" contains an account of an experimental test of Liebig's theory for the cure of habitual drunkenness. The experiment consisted of a simple change of diet, and was tried upon twenty-seven persons, with satisfactory results. The diet proposed is farinaceous, and in the cases reported was composed of macaroni, haricot beans, dried peas and lentils. The dishes were made palatable by being thoroughly boiled, and seasoned with butter or olive oil. Breads of a highly glutinous quality were used, care being taken to prevent their being soured in course of preparation. In his explanation of the theory, Liebig remarks that the disinclination for alcoholic stimulants, after partaking of such food, is due to the carbonaceous starch contained therein, which renders unnecessary and distasteful the carbons of the liquors.

WELL DRAINAGE.—Every one knows (says "The Herald Reformer") that a hole sunk in a boggy place, or in the wet sand by the seaside, soon fills with water by draining the surrounding earth or sand, in soil about it. Careful experiments have shown that for every foot of depth a well drains a radius of three feet. According to this law, a hole one foot in depth would drain a circle six feet in diameter. A well twenty feet deep would drain an area one hundred and twenty feet in diameter; and a well three times that depth would collect the water from an area of about one hundred thousand feet in diameter. By way of experiment, some creosote was poured into a trench situated two hundred yards from a well. In a short time, so much of the poison had found its way into the well so to be very readily perceptible to smell and taste.

PLOUGHING BY ELECTRICITY.—At a recent meeting of the Paris Academy of Sciences, M. Tresca gave an account of some experiments in ploughing by electricity which he witnessed at Sermaise, in the Marne. A Gramme machine, making 1,200 revolutions per minute, and driven by a steam engine, was connected to a second Gramme at a distance of 440 yards, and caused the latter to revolve at the rate of 1,140 revolutions to the minute, the electricity produced by the first machine being thus converted into work. The second machine was connected to a third at a distance of 219 yards, and these two worked cables attached to a double Brabant plough. According to M. Tresca, the experiment was very successful, the work accomplished representing the equivalent of three horse-power, while one-half of the motive power was really transferred to the distance of more than 1,000 yards from the furnace.

PLACE a piece of unslacked lime (size immaterial, as the water will only take up a certain quantity,) in a perfectly clean bottle and fill with cold water; keep corked in a cellar or in a cool, dark place; it is ready for use in a few minutes, and the clear lime-water may be used whenever it is needed. When the water is poured off add more; this may be done three or four times, after which some new lime must be used, as at first. A teaspoonful in a cup of milk is a remedy for children's summer complaint; also for acidity of the stomach; when added to milk it has no unpleasant taste; and when put into milk that would otherwise curdle when heated, it prevents its curdling, so that it can then be used for puddings and pies. A small quantity of it will prevent the "turning" of cream and milk. It also sweetens and purifies bottles which have contained milk. Some add a cupful to a sponge of bread to keep it from souring.

A GOOD egg will sink in water. A boiled egg which is done will dry quickly on the shell when taken from the kettle. The boiled eggs which adhere to the shell are fresh laid. After an egg has lain a day or more, the shell comes off easily when boiled. A fresh egg has a lime-like surface to its shell. Stale eggs are glassy and smooth of shell. Eggs which have been packed in lime look stained and show the action of the lime on the surface. Eggs packed in bran for a long time smell and taste musty. With the aid of the hands or a piece of paper rolled in funnel shape and held towards the light, the human eye can look through an egg, shell and all. If the egg is clear and golden in appearance when held up to the light it is good; if dark or spotted, it is bad. The badness of an egg can sometimes be told by shaking it near the holder's ear, but the test is a dangerous one. Thin shells are caused by a lack of gravel, etc., among the hens laying the eggs. Many devices have been tested to keep eggs fresh, but the less time an egg is kept the better for the egg and the one who eats it.



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