

disposition of ashes is to put it in a bin in the cellar or vault, and have it taken away when the bin is full. With the usual amount of unburnt coal in it, it is valuable, and if it were saved in bins, it might be sold for a dollar per load. No organic matter, unburnt, should be put into an ash-bin.—*American Artisan.*

Disinfecting by Steam.

The use of steam at a high temperature as a disinfectant was tested on Thursday, July 12th, at the house of Metropolitan Engine Co. No. 1, in Center street, this city, under the superintendence of Dr. Bell, the introducer of the process. Steam was raised on one of the fire engines, and discharged into an iron chest three or four feet square, containing a coil of iron pipe. A small quantity of carbonic acid was placed in the super-heater. Under this vessel a fire was built to give the requisite degree of heat to the steam. It was found, after a trial of fifteen minutes, that, by a self-registering thermometer, the temperature of the room to be disinfected was raised to 150 deg., and oysters and eggs were thoroughly cooked.

That a sufficient degree of heat can be evolved by this process to destroy the germs of disease which may exist in the atmosphere, seems to be probable, but the one objection is in regard to its want of facility of application. In hospitals and similar institutions this objection would not have the force it would applied to private dwellings. It is probable that the usefulness of this process will be greatly limited by circumstances. Its use cannot become so general as its claimed advantages would seem to warrant.—*Scientific American.*

Dr. J. G. Webster on Cholera.

The *American Artizan* says:—"We have received from the publishers, Miller, Wood & Co., 15 Laight street, New York, a pamphlet, being the subject of two lectures delivered in the New York University, on the causes, mode of communication, and means of preventing cholera. A few extracts from it will do no harm, and may do some good. The author believes the germs of cholera to be in the discharges from infected persons; and to be taken up by the air, and carried to some miles distance at least. Persons of good health are able to resist the influences of germs; but those whose digestive organs are impaired by the use of improper food, stimulants, and irregular habits, are very liable to be affected if they inhale air that is tainted by contact with cholera patients. Air from putrid matters is a predisposing cause of cholera; hence he advises the removal of all matters that can putrefy, before they putrefy. Fire is a safe means of preventing putrescence; and should be used when not inconvenient. Lime is slow, but permanent in its effects; charcoal absorbs but not destroys atmospheric poisons, and is not so safe; chloride of lime is quick, and may be best for general use. Strong fumigations are worse than useless, as they merely render the senses unconscious of the presence of foulness in air, without destroying its poison. The best plan is to heat rooms up to 220°, which is sufficient to destroy any species of animal or vegetable poison.

The food should be plain and nutritious, and taken at regular hours, and in moderation. All

indigestible and badly-cooked food should be avoided. Healthy beef and mutton, good bread, and fresh ripe fruits are recommended; but unripe and stale fruits are deemed dangerous. Watery vegetables, such as turnips, cabbages, cucumbers, and pickles of all kinds, and onions, lettuce, horseradish, and seasoning sauces are tabooed. Pickled and smoked pork, fish, and sausages, lard, rancid butter, old cheese, gravy, pastry, sweetmeats, and candies are also condemned. Alcoholic drinks are to be avoided. Wine to be used very sparingly, by those who are constrained by habit to use it: so with tea and coffee. The general reason for these cautions is that the digestive powers should be kept in their highest efficiency, so that the system may be able to resist the effects of the poison in the air. Moderate exercise, regular sleep, personal cleanliness, and avoidance of dejection and mental excitement, are to complete the guards against cholera.

Now if these preventives were observed by all, cholera would disappear from the earth; but until there is an approximation to this state of defence, we must expect occasional visits of the scourge.

Quick Railway Travelling.

A feat of almost unrivalled travelling was recently accomplished on the Great Northern Railway. On the occasion of the late fire at Newcastle, when the safety of the high-level bridge was endangered, a telegram was sent to London requiring the attendance of Mr. Harrison, the engineer of the North Eastern Railway Company, and that gentleman was conveyed by an engine belonging to the Great Northern Company from King's Cross to York, a distance of 191 miles, in 3 hours, 43 minutes, including a stoppage of 8 minutes at Newark for water and lubricating the engine.—*Mechanics' Magazine.*

Steam Rollers for Pavements.

A SERIES of experiments has been conducted for some time past by the municipality of Paris in order to test the comparative merits of the Lemoine and Ballaison steam Locomotives, employed in crushing and consolidating the broken granite laid on the streets of that city. It has at last been decided that the Ballaison locomotive is the better of the two. It has two rollers, the engine being between them and the boiler on one of them. The motion is communicated by a chain. With fuel and water the weight of the Ballaison steam roller is 13½ tons with springs; and an iron framework, 15½ tons. Its force is 10 horse-power, and its consumption of coal about 16 lbs. per horse. It does its work in half the time and at half the cost that would be required were the work done by rollers drawn by horses; and the work is done more rapidly and completely. It may now be seen at all hours of the day crushing smooth the granite of the new boulevards of Paris; in the more crowded thoroughfares it works only at night.—*Engineering.*

Kind Words.

So that they be in season, it matters not how simple are the flowers that one gather from the wayside. A kind word, when the heart needs it, is always grateful, though the grammar is very bad of him who speaks it.