

mass is poured into moulds or on a marble slab. This mixture is for stamps, printers rollers, &c. The sweet glue for ready use by moistening with the tongue, is made in the same way, substituting treacle for glycerine.

THE VORACITY OF THE PICKEREL.—According to the Massachusetts Fishery report, the pickerel is pre-eminently voracious. Two young pickerel, ate in 3 days 410 minnows about an inch long.

SHRINKING WOOD.—A writer in an English journal says that small pieces of non-resinous wood can be perfectly seasoned by boiling them 4 or 5 hours, the wood shrinking one-tenth in the operation. Trees felled in full leaf, in June or July, and allowed to lie till their leaves are all fallen, will be almost dry, the leaves not dropping off till they have exhausted the sap of the tree. The time required is a month or 6 weeks, according to the weather.

PAPER CAR WHEELS.—This manufacture is just now exciting much interest. The paper is cut into discs the diameter of the wheel, and subjected to a pressure of a ton and a half to the square inch, and then secured by iron flanges, held by bolts passing through them and the paper, an iron flanged or steel tire is put on. It is claimed that these wheels are noiseless, do not shrink with the weather, afford a stay to the tire and lateral support in turning curves, and are stronger than any other material of the same weight.

HYDRO-CHLORAL.—No little harm may result from the free use of this new narcotic. It has valuable medicinal properties, and is an admirable sedative, but its habitual use is said to be attended with more danger than that of almost any other drug commonly used. It aggravates rheumatism and skin diseases, causes irritation of mucous membrane of the nose and throat, and a dimness of sight. A case is mentioned of an overdose resulting in paralysis.

RAILWAY TUNNEL.—An Engineer employed by the Turkish Government has planned a railway Tunnel to be made in sections and submerged 34 feet below the surface of the Bosphorus. It is to be moored to the bottom by chain cables, and thus connect Europe and Asia by railway.

DANGER OF USING ZINC.—The increasing use of zinc is developing its poisonous character. In paint, many painters dare not touch it. The galvanized iron pipes so generally substituted for lead for water pipes, are iron coated with zinc. These in contact with water, afford the most favorable conditions for corrosion of the zinc, and the salts of zinc thus dissolved in the water, causes sickness in many families.

SPONTANEOUS GENERATION. Dr Frankland, who furnished Dr. Bastian with the sealed tubes, with which he claimed to have proved spontaneous generation, has been making further experiments. He took 4 tubes, put in them a solution of carbonate of ammonia and phosphate of soda in distilled water, exhausted the air, and sealing them, exposed them to a temperature of 155° C. for 4 hours. The hardest glass having sometimes invisible cracks, the tubes were plunged in baths of sulphuric or carbolic acid to prevent germs being conveyed through these. They were then subjected to a continuous temperature of from 60 to 75° F. in daylight and sunlight for 5 months. The liquid became turbid, and corroded the inner walls of the tubes. A most searching microscopical examination showed appearances like those described by Dr. Bastian, but with no evidence of life. What he took for animal organisms were shown to be

splinters and globules of glass corroded from the surface by the liquid.

MENDING WATER PIPES.—A British scientific publication gives the following ingenious method. The two ends of the pipe were plugged and a small pile of broken ice and salt placed around them, in five minutes the water in the pipe was frozen, the plugs removed, a short piece of pipe incerted and soldered, and in 5 minutes more the ice was thawed and the water flowing through.

THE RINGS OF SATURN.—Prof. Struve of Pultowa, has been for years watching the rings of Saturn; the inner one of the 3 rings, an obscure, partly transparent mass of what appeared to be vapor, has been seen to approach the body of the planet, and widen its distance from the other rings. During several months past it has fallen more rapidly, and finally has closed upon the body of the planet, forming a belt gradually diffused over the surface, until now there is no sign of the ring left.

EXPERIMENT WITH IRON.—*Galvanic Iron.*—Mr. Jacobi of St. Petersburg, noticing that iron, obtained by galvanic deposit is very hard and very brittle, but when heated loses these qualities, was led to believe that as at first deposited, it must contain gas, and on heating a small quantity carefully, nearly 13 volumes of gas, chiefly hydrogen were driven off and collected.

STEEL PRINTING TYPE.—M. Banes of Paris, has taken out a patent for the manufacture of steel printing types. He employs a machine similar to those for making pins or nails; a roll of wire is placed on a reel, the machine nips off a piece of a given length and forces one end in the steel dye. After leaving the machine, the types are trimmed by hand, placed in metal boxes with the material for cementation, and heated to a proper temperature in a furnace. The inventor says, that with a single machine and steam of only one-horse power, he can manufacture 35,000 types in 12 hours, and that while these are more perfect and durable, they are also cheaper than ordinary type.

DISINFECTANTS.—The French Savans have lately been discussing this question. The first rank was given to phenic acid. Experiments made in England show that where phenic acid was used certain epidemics disappeared.

NEW METHOD OF LAYING DUST.—A Mr. Cooper, who undertook the watering of Marylebone parish, London, has devised a new system of "laying the dust" in streets. He utilizes the moisture suspended in the atmosphere, by saturating the roads with a solution of deliquescent salts. A sort of concrete is formed of the detritus of the road surface and the chemicals and the dust is concreted in masses too large to be blown about by the winds.

FEVER AND AGUE.—The Cleveland (Ohio) 'Herald' gives the following very simple remedy for this disease: "A teaspoonful of common salt taken in water, and a teaspoonful put inside each stocking next the foot just as the chill is coming in. The editor of the paper vouches for the efficacy of this treatment.

POISON.—If a person has swallowed poison and no antidote is at hand, give warm or cold water as fast as possible. Tepid water is the best, but if not at hand, give cold water till a physician arrives.

IRON AND STEEL NOT AFFECTED BY FROST.—At a recent discussion in Manchester, Dr. Toule, Sir W. Fairbairn, and Mr. Spencer, described experiments which show that the effect of very low temperatures, when noticeable at all, is rather to strengthen the texture