

Useful Receipts.

Citric Acid in Cancer.

The cooling and tonic effects of lemon juice are well known. Citric acid is to all intents and purposes crystalized lemon juice, and is often used as a substitute for lemons in making lemonade, etc. An Italian physician, Dr. Brandini, finding that a patient, with a cancer of the tongue, received great relief in eating lemons, was induced to try the effect of citric acid on other cancer patients, which he did much to their relief. In a case of hopelessly incurable cancer, under our own observation, it has been used with the happiest results, and afforded a greater relief from pain than any other application that has been tried. We found that this use of citric acid was not known to the physicians of our acquaintance, and we give it for the benefit of our medical readers. The crystalized acid is used one part by weight, to 90 parts of soft water. The weight of a common nickel cent to a pint of water comes sufficiently near. The solution is applied by moistening a piece of lint, and renewed when the pain returns.

Protection of Iron.

It has been ascertained that sheet iron may be protected from oxidation by coating it with a thin fused layer of magnetic oxide. For this purpose it is embedded in native oxide of iron in a state of powder, and kept at a red heat some hours.

Process for Silvering.

An employee of the Bavarian Mint has published an improved process for silvering copper, brass, and other alloys by means of a solution of silver in cyanide of potassium; the difference from the usual method consists in the zinc-filings, with which the objects are coated; when the solution is applied, an immediate deposition of a much more durable character taking place. The filings are easily removed by rinsing in water, and may be used repeatedly for the same purpose. Metallic iron may be coated with copper in the same manner, by substituting for the silver, a solution of copper in cyanide; and over this copper deposit a coating of silver may be applied.

To Remove Paint from Clothes.

It is suggested in the London *Chemist and Druggist* that chloroform is an excellent medium for the removal of stains of paint from clothes, etc. It is found that portions of dry white paint, which resisted the action of ether, benzole, and bisulphide of carbon, are at once dissolved by chloroform.

Destruction of Vermin.

A correspondent in the *Builder* says that chloride of lime placed in rat or mice holes will drive away these pests, as well as other description of vermin. Too much should not be used at a time, as its smell is, to some people—very unpleasant; nor should it be placed where there is china, or polished iron or steel goods, as it will injure the one and rust the other. [We have tried it, and noticed the

entire absence of rats until the peculiar pungent smell of the lime had ceased.—Ed.]

Artificial Stone.

A hard factitious stone, which in some respects may take the place of Turkey or Arkansas oil-stones, can be made by mixing 24 parts lithographic stone pounded into coarse powder, 4 borax, 1 saltpeter, and 4 very fine emery. This is placed in a mold, subjected to a heavy pressure—twenty tons to the square inch—and then heated to a white heat. Cutting or polishing wheels may be made in this way cheaper than they can be cut out of the hard stone.

Black Walnut Polish.

Take asphaltum, pulverize it, place it in a jar or bottle, pour over it about twice its bulk of turpentine or benzole, put it in a warm place, and shake it from time to time. When dissolved strain it and apply it to the wood with a cloth or stiff brush. If it should make too dark a stain, thin it with turpentine or benzole. This will dry in a few hours.

If it is desired to bring out the grain still more, apply a mixture of boiled oil and turpentine; this is better than oil alone. Put no oil with the asphaltum mixture, as it will dry very slowly. When the oil is dry the wood can be polished with the following:—Shellac varnish, of the usual consistency, two parts; boiled oil, one part. Shake it well before using. Apply it to the wood by putting a few drops on a cloth and rubbing briskly on the wood for a few moments. This polish works well on old varnished furniture.

Bell Metal.

Melt together, under powdered charcoal, 100 parts of pure copper, with 20 parts of tin, and unite the two metals by frequently stirring the mass. Product very fine. Another method is to take of copper 3 parts; tin 1 part, as above. Some of the finest church bells in the world have this composition.

Cure for Bugs.

With a small brush or feather apply oil of tar to the parts where insects are known to be, or are likely to secrete themselves, and it will immediately destroy them, and effectually prevent their location in that place. Too much tar should not be applied, as it is decidedly odoriferous—the smell, however, is of a healthy and purifying nature, and no inconvenience will arise if used in small quantities. Thorough ventilation and cleanliness of bedrooms is, no doubt, a sure preventive and is better than a cure.

Fusible Metal.

The "fusible metal" *par excellence* has hitherto been composed of bismuth 2 parts, lead 1, and tin 1, and its melting point is about 169° F. But an alloy, composed of 4 cadmium and 5 each bismuth, lead, and tin, fuses at about 118° F.

To keep Milk sweet.

Milk may be kept sweet by having it constantly in the presence of fresh water. In a milk-room