JOURNAL OF THE BOARD OF ARTS AND MANUFACTURES FOR U.C

Useful Receipts.

Antidote for Poison.

Doctor J. Edmonds, a prominent London physician, writes as follows to the London Times :--- " I inclose a simple, sufe and accessible prescription for the whole range of acid corrusive puisons, which, if promptly used, will almost invariably save life. Mix two ounces of powdered chalk or magnesia, or one ounce of washing soda, with a pint of milk, and swallow it at one draught : then tickle the back of the throat with a feather or finger so as to produce vomiting. Afterward drink freely of milk and water, and repeat the vomiting so as to thoroughly wash out the stomach. Any quantity of chalk or magnesia may be taken with safety, but soda in large quantities is injurious. T may add, that the narcotics are excepted. Milk is an antidote for almost all the poisons, and especially if followed by vomiting.'

Recipe for Curing Meat.

To one gallon of water, take 11 lbs. of salt, 1 lb. of sugar, ½ oz. of saltpeter, ½ oz. of potash. In this ratio the pickle to be increased to any quantity desired. Let these be boiled together until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when cold, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface blood, &c., leaving the meat fresh and clean. Some omit boiling the pickle, and find it to answer well, though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. If this recipe is properly tried, it will never be abandoned. There is none that surpasses it, if any so good.

Gold Varnish for Brass.

This varnish used to be made of various resins colored with curcuma, safflower, or alcanna. All of these colors are not staple enough to make a well-looking, durable coating upon the metal. Better results are obtained by employing an alcoholic solution of bleached, golden-colored shellac, tinged with aniline yellow, which gives a brightcolored, durable varnish that may also be employed for tin.

A Fire-proof Wash for Shingles.

The following simple application will no doubt prove of great value :—A wash composed of lime, salt, and fine sand or wood ashes, put on in the ordinary way of whitewashing, renders the roof fifty per cent. more secure against taking fire from falling einders or otherwise, in case of fire in the vicinity. It pays the expenses a hundred-fold in its preserving influence against the effects of the weather. The older and more weather-beaten the shingles, the more benefit derived. Such shingles generally become more or less warped, rough, and cracked; the application of the wash, by wetting the upper surface, restores them at once to their original or first form, thereby closing up the space between the shingles; and the lime and sand, by filling up the cracks and pores in the shingle itself, prevent it from warping.—*Mirror & Farmer, Manchester. N. H.*

Fruit Stains.

To remove fruit stains from napkins, &c., let the spotted part of the cloth imbibe a little water without dipping, and hold the part over a lighted common brimstone match at a proper distance. The sulphurous acid gas which is discharged, soon causes the spots to disappear. Or, wet the spot with chlorine water.—Jour. of App'd Chemistry.

Copper in Pickles.

To detect copper in pickles, put some of the pickle, cut small, into a vial with 2 or 3 drs. of liquid ammonia, diluted with one-half the quantity of water. Shake the vial; when, if the most minute portion of copper be present, the liquid will assume a fine blue color. Or immerse a polished knife blade; the copper will deposit upon it.—*Ibid*.

Practical Memoranda.

Notes on Steam Bollers.

A small steam-boiler, insulated upon a glass plate, was for some time exhibited at the Polytechnic Institution. Under a pressure of steam, continuous electric flashes were discharged from the boiler.

According to Professor Rankine, Mr. Morris Pollok, of Govan, near Glasgow, introduced air through tubes perforated with small holes, and placed near the bridge of steam-boiler furnaces, as long ago as 1818, or twenty one years before Mr. C. W. Williams' patent.

Boiler explosions are always reported; but simple ruptures, which often occur from over pressure, and with no further consequences than the loss of steam and local injury to the boiler, are seldom publicly reported, and there are many who are not aware that such casualties ever happen.

In a boiler explosion that occurred at Wharton Colliery, near Chesterfield, in June, 1856, a portion of the boiler weighing 3 cwt. was thrown to a distance of 1,200 feet.

The current testimony of those who have employed fans or blowing engines, for promoting combustion in steam engine furnaces, is, that the forced draft causes a considerable waste of coal.

The boilers of the West India Royal Mail steamships, according to the authority of Mr. Pitcher, of Northfleet, last on an average but six years.

The old notion that the three-legged tea kettle boiled soonest, was correct, because the legs conducted heat more rapidly than the plane surface.

Boiler flues 6 feet in diameter were occasionally made many years ago. A boiler made in 1838, with 6 feet flues of $\frac{1}{2}$ inch Lowmoor iron, collapsed twice under a pressure of 10 lbs. per square inch of steam and 3 lbs. of water, equal to 13 lbs. in all.

Many boilers have been made with "conducting pins," which are simple screw-bolts, tapped anywhere through the plates, forming the flue-heating surface, and projecting, say, $1\frac{1}{2}$ inches into the