

phor is carried on throughout the year, the best results being obtained in the winter. There are at the present time, under the care of the Japanese Forestry Department, large plantations of young trees, so that it is estimated that the supply of camphor is assured for the next twenty-five years. The distilling process is simple, but very much in advance of that used in Formosa. The article produced is never quite pure; it generally needs purifying after its arrival in Europe. A few years ago the annual imports into the United Kingdom were—unrefined, 12,368 cwt.; refined, 2,361 cwt.

This refining was for some time almost exclusively carried on in Venice, but it is now done in Great Britain, Holland, Hamburg, and Paris, the process being a most interesting one. The methods used vary in the several countries. Besides what is known as camphor, there are many varieties of the drug, differing somewhat from this article of Eastern commerce, such as Borneo and Malayan camphor, Borneole, Camphyl alcohol or Kapur Barus, Blumea or Ngai camphor, and others more or less known in perfumery and pharmacy, obtained from the leaves, flowers, fruit, and roots of various trees and shrubs, such as the bergamot tree, the bitter orange, orris root, thyme, tobacco leaves, and many other sources.—*G. D., in British and Colonial Druggist.*

Antidotes for Poisons.

In cases where other articles to be used as antidotes are not in the house, give two tablespoonfuls made mustard in a pint of warm water. Also give large draughts of warm milk or water mixed with oil, butter, or lard. If possible, give as follows:

For Bed-bug poison, Corrosive sublimate, Blue vitriol, Lead water, Saltpeire, Sugar of lead, Sulphate of zinc, Red precipitate, Vermilion.	Give milk or white of eggs, in large quantities.
For Fowler's solution, White precipitate, Arsenic.	Give prompt emetic of mustard and salt, tablespoonful of each; follow with sweet oil, butter, or milk.
For Antimonial wine, Tartar emetic.	Drink warm water to encourage vomiting. If vomiting does not stop, give a grain of opium in water.
For Oil of vitriol, Aqua fortis, Bicarbonate potassa, Muratic acid, Oxalic acid.	Magnesia or soap dissolved in water, every two minutes.
For Caustic soda, Caustic potash, Volatile alkali.	Drink freely of water with vinegar or lemon juice in it.
For Carbolic acid.	Give flour and water or glutinous drinks.
For Chloral hydrate, Chloroform.	Pour cold water over the head and face, with artificial respiration, galvanic battery.
For Carbonate of soda, Copperas, Cobalt.	Prompt emetics: soap, or mucilaginous drinks.
For Laudanum, Morphine, Opium.	Strong coffee followed by ground mustard or grease in warm water to produce vomiting. Keep in motion.
For Nitrate of silver.	Give common salt in water.
For Strychnine, Tincture nuxvomica.	Emetic of mustard or sulphate of zinc, aided by warm water.

—*Medical and Surgical Reporter.*

Thermometers and Thermometer Testing.

The *Zeitschrift für Instrumentenkunde* takes from a bulletin of the Physikalisch-technischen Reichsanstalt, at Charlottenburg, the following interesting points concerning thermometers and their testing:—

After a thermometer has been "proved," a stamp is placed on it. This consists of the figure of an eagle, a number, and the current year. The stamp is filled with metallic bismuth, which many tests have demonstrated to be the most durable, even with the most severe handling.

All thermometers destined for scientific and technical use are marked with double lines, to avoid any incompetent tampering with the scale. Since recently a concern in Thuringen has been testing thermometers and giving certificates of accuracy which resemble in form and general appearance those of the institute, in future all of the latter will be headed and marked *Amtliche* (official).

The liquid amalgam of sodium and potassium (introduced, some five years ago, by Hempel, of Berlin) would seem to be applicable for high-grade thermometers without the use of compressed gases, as its boiling point is very high (between 680° and 700° C. = 1264°—1292° F.). Experiments, however, have demonstrated that even at 300° C. the glass begins to be attacked by it, and the effect is rapidly progressive with temperature rising above this point, until at 480° the entire filling becomes black (probably through the separation of silicon).

For filling thermometers for the measurement of very low temperatures (like Six's) cresote is used. The blue-colored liquids used in ordinary thermometers, cuproammonium acetate and cupropyrindine acetate, are used.

The borosilicate glass recently recommended for thermometer tubes has proven itself very effective up to 300° C., and is therefore much used in the manufacture of high-grade instruments. The blue striped glass, the so-called resistance glass, introduced by Grenier & Friedrichs,* of Stuetzerbach, is also much used in high-class instruments.

In proving thermometers for ordinary temperatures, olive oil is used for the highest point, and a solution of a mixture of potassium and sodium salts are used as baths.—*National Druggist.*

Explosive Mixtures.

We are so frequently in receipt of complaints from our readers relating to explosions of mixtures that we think a few notes on some of the more frequently prescribed dangerous compounds may be of service.

POTASSIUM CHLORATE.—This is probably more often the cause of explosion than any other chemical which is handled by pharmacists. It should never be mixed in the powdered state with *organic substances*; even in very small traces in "saline," it is apt, after a time, if all the in-

gredients and the containing bottle is not absolutely dry, to burst the bottle and violently scatter the contents. It should, should never be mixed dry with *tannin*. Occasionally a gargle is ordered containing these ingredients; they should always be dissolved separately. *Hypophosphites* and chlorate similarly explode when mixed in the dry state. Chlorate of potassium and *glycerine* alone should never be dispensed, nor should it be combined with *sulphur* or the metallic sulphides.

PERMANGANATE OF POTASSIUM is another source of danger, for the same reason as chlorate, it so readily gives up its oxygen; consequently, it should not be mixed with any organic bodies, such as *sugar* or *glycerine*, nor with *spirit of wine* or spirituous preparations. When ordered in the form of pills, it should be massed with kaolin and petrolatum.

GLYCERINE, in addition to the cases above mentioned, should not be combined with chromic acid; nor with *borax* together with *alkaline carbonates*.

TURPENTINES AND VOLATILE OILS CONTAINING TERPENES should not be combined with *strong mineral acids*, nor with *iodine* or *bromine*.

IODINE should never be mixed in the free state with any preparations containing free ammonia, especially when combined with *fatty matter*.

OXIDE OF SILVER, sometimes ordered in the pilular form, should be massed with kaolin and petrolatum, and, no *chloride* combined with it.

SPIRIT OF NITROUS ETHER frequently becomes very acid in keeping; in this state, when mixed with carbonates or bicarbonates, it liberates carbonic anhydride, and, if tightly corked, the bottle is frequently burst. Such a mixture should not be corked immediately after mixing. Excess of acid in the nitre may be removed by keeping a large crystal of sodium bicarbonate in the stock bottle, occasionally easing the stopper.—*British and Colonial Druggist.*

Salubrine.

Under this name a remedy has been patented in France, and the proprietors claim for it marvellous properties. It is composed of two parts of acetic acid, twenty-five parts of acetic ether, fifty parts of alcohol, and twenty-three parts of water.

This mixture, diluted with varying quantities of water (from two to six parts water to one part of salubrine), possesses antiseptic and hæmostatic properties; it is used for contusions, certain skin diseases, corns, dental disease, insect stings, rheumatism, etc., and, in fact, the extraordinary virtues must be accepted with a very large grain of salt.—*Manufacturing Chemist.*

Only 906 persons in 1,000,000 die of old age.