

Some Fatty or Aromatic Alcohols.

My intention is to present, in this paper, a few facts about some aromatic and fatty alcohols, which are closely related, not so much medicinally as chemically. The first of these is methyl-alcohol.

Methyl-alcohol, wood spirits, or wood alcohol, as it is generally known, is found in several substances; among others, in combination with salicylic acid. It can be prepared from the product of wood, whence its name. It is largely used in the manufacture of organic dyes and varnishes, and in the preparation of methylated spirits. In pharmacy it is used very largely as a solvent for fats, oils, and resins. When taken into the system it intoxicates. Methyl-alcohol, under the incorrect name of naphtha, was introduced into the practice of medicine some years ago by Dr. John Hastings, of London, who proposed it as a remedy for consumption. It was afterward found to have no curative effect over the disease. The therapeutic powers of this substance as far as observation has gone are narcotic, sedative, and anti-emetic.

Closely related to methyl-alcohol is ethyl-alcohol, belonging to a series of organic hydrates of which methyl alcohol is the first. Ethyl-alcohol is also known by the names, spirits of wine, alcohol and methyl-carbinol. It was known in the earliest times, since it is combined in all wines prepared by the fermentation of grape juice. When the juice of grapes is kept for a few days at an ordinary temperature it changes into wine; the sugar dextrose and levulose, which are present in the juice, decompose into alcohol and carbon dioxide. This change is caused by small vegetable organism. The process is called fermentation. All wines, beers, spirits and the alcohols of commerce are prepared by the process of fermentation. One of the several ways by which it can be prepared scientifically is by converting ethane into ethyl-chloride and heating with dilute alkali under pressure. Its properties and uses medicinally as well as pharmaceutically need not be mentioned, as they are well known.

Amyl-alcohol also belongs to this series. There are eight of these alcohols capable of existing, all of which have the same formula. They are found in fusel oil. Commercial amyl-alcohol is prepared from fusel oil by fractional distillation. This substance was made official by the Dublin College, in the pharmacopœia of 1850, as

an artificial source of valerianic acid, to be used in forming valerianate of rodrum. Was introduced into the United States pharmacopœia for a similar purpose. At a late revision, however, valerianic acid was dismissed, and an amylic-alcohol was no longer wanted for its preparation it was also thrown out. It has a pungent, unpleasant odor, and is used as a solvent in the preparation of essences and perfumes. Taken internally it is an active an irritant poison.

Resorcin is an alcohol belonging to the benzene series. Barth first obtained this substance in 1864 from galbanum resin by fusing it with potassa. It has also been prepared from ammoniac and assafoetida. At present it is made from the benzene disulphonic acid, and purified by sublimation and crystallization. Resorcin and carbolic acid are very closely related; chemically carbolic acid contains one less hydroxyl than resorcin. Their physiological properties are about the same. It is distinctly poisonous to all lower organisms, and according to Martin Cohn a one per cent. solution of it is sufficient to arrest putrefactive changes in organic infusions, and even abnormal tissues, for a long time. But it is said to be quite inferior to carbolic acid as an antiseptic. When given internally it causes tremor, loss of consciousness, and convulsions which, with sufficiently large doses, become more violent until death. So far as known, no case of fatal poisoning has occurred from its use. The dose of the pure resorcin is from two to five grains. For use externally a solution or ointment may be made varying from five to thirty per cent.

Glycerine is a tri-acid alcohol. It is generally found in combination with the acids of the fatty acid series. The alcohol was discovered in 1789 by Scheele, who called it the sweet principle of oils. It is produced by the saponification of fats with caustic potash, which yields the free glycerine and a potassium salt of the acid. The two methods by which glycerine has been prepared are the processes of Wilson and Payne, viz., by decomposing the fats with superheated steam, and by subjecting fatty substances to the action of water at a high temperature under pressure, in which the fats are broken up into free glycerine and fatty acids, the water supplying the elements hydrogen and oxygen necessary for the change. Immense quantities of glycerine are now produced in the United States yearly. The census of 1880 reported eight million pounds as

produced that year, of which one-half was used in the manufacture of nitro-glycerine. According to the best authorities, the yearly European production is now nine thousand tons. The importation into the United States for 1887 amounted to twelve million pounds. The solvent and preservative properties as well as the agreeable taste of glycerine renders it very useful as a menstruum in pharmacy. Glycerine is now used extensively as an external remedy. It appears to have been used first by Dr. Thomas De la Rue, of London, in 1846. It was also tried in the hospital for skin diseases, where it came into extensive use.—*From a paper read by F. J. Briggs at Oklahoma Phar. Asso.*

HÆMOSTATIC ANÆSTHETIC SOLUTION.

A solution which combines the hæmostatic properties of gelatin with the anæsthetic action of cocaine and eucaine is prepared by A. Legrand as follows:—

Pure gelatin.....	2 gm.
Pure sodium chloride.....	70 centigrms.
Eucaine h-hydrochloride..	70 centigrms.
Cocaine hydrochloride. .	30 centigrms.
Pure phenol.....	10 centigrms.
Distilled water to produce..	100 c.c.

The preparation is poured while warm into sterilized tubes, when cold it sets to a jelly, which liquefies again at 20° to 25° C., and may in this state be used for injection. It has been found to give excellent results in dental practice, producing good anæsthesia and preventing hæmorrhage.—*Nouv. Rev. (Phar. Jl.)*

ELIXIR OF BOLDO.

	Parts.
Crushed boldo leaves.....	30
Alcohol (60 per cent).....	120
Madeira wine.....	500
Simple syrup.....	350
Distilled water, q. s. to produce..	1,000 il. pts.

Macerate the boldo in the alcohol for 48 hours; then add the wine and macerate for 3 days; strain and press, then add the syrup. The residue is treated with sufficient water to bring up the volume of the expressed liquid to 1,000; allowed to stand for some days, then filtered. It is given in atonic dyspepsia, as a stomachic, in doses of a tablespoonful daily, after meals.—*Rev. Med. Pharm. (Phar. Jl.)*

Doctor—"The patient requires absolute rest; I will prescribe something that will deaden his nerves, in fact, render him partially senseless."

Relative—"Why don't you send him your bill?"