

Pharmaceutical Notes.

ANESTHYLE.—The above name has been given to a mixture of five parts of ethyl chloride with one part of methyl chloride, the use of which has been suggested by Dr. Bengué, a French physician, for producing local anaesthesia.

SILVER SULPHIDE.—A Ditté (*comptes rendus, Pharmaceutical Journal*) describes how silver sulphide, kept cool and in the dark, changes in a short time in the presence of a saturated solution of potassium sulphide. From black it turns red, forming small crystals, which are but little soluble in the solution, and have, when dried in an atmosphere of carbon dioxide, a composition which may be represented by the formula— $4Ag_2S, KS_2, 2H_2O$. The same compound is formed on boiling together silver and potassium sulphides. It is altered by light and decomposed by water, the latter reaction allowing the silver sulphide to be obtained in the form of grayish-black crystals. A double silver and sodium sulphide can also be prepared, though not in the cold, the red crystals having the composition— $3Ag_2S, Na_2S, 2H_2O$, and being at once decomposed by water.—*National Druggist*.

PERUVIAN-BALSAM TESTS.—Recent work in Germany on the nitric-acid test for Peruvian balsam, which is performed by treating the residue from petroleum spirit, shaken with the balsam and filtered with nitric acid, shows that, as directed by the German Pharmacopoeia, it is misleading so far as the detection of copaiba and storax is concerned. A spirit less than specific gravity 0.688 should not be used. It has taken German chemists a long time to arrive at this conclusion. The misleading character of the test was clearly pointed out by MacEwan in 1884 (*Chemist and Druggist*, xxvi., 395), who also observed that the German nitric acid is too weak to ensure the reactions, and that a petroleum spirit, specific gravity 0.710 or thereabouts, is most suitable.

NEW PROCESS FILTERING PAPER.—A German by the name of Craemer has introduced a new method for making filter paper for chemical purposes. It is said that he works in a greater or less proportion of nitrocellulose with the cellulose or cotton-wool stuff usually employed, the effect of which is that the filtration is more rapid, since the nitrocellulose has no tendency to felting, and that the paper is only slightly hygroscopic, and that when the filter is burned the combustion is more rapid in proportion to the amount of nitrocellulose present. When the proportion of cellulose is large it is said to be almost instantaneous.—*Monthly Magazine*.

SALIGENIN AS A SUCCEDANEUM OF SALICIN.—Lederer, basing his opinion on

the ground that saligenin is probably the active principle of salicin, in which it occurs to the extent of 42 per cent., suggests that it be used in medicine in place of that substance. Saligenin is derived from salicin by the agency of a ferment, which splits the glucoside into saligenin and glucose. By using saligenin in those cases where salicin is indicated, the organism would be spared the labor of the zymotic process. The *Medizinische Wochenschrift*, from which this notice is taken, says that the physiological action of saligenin has not yet been established.—*National Druggist*.

TO RENDER CREASOTE SOLUBLE.—Creasote may be made soluble in water by making a mixture of 80 grains of tincture of soap-bark, 60 grains of water, and 10 grains of creasote. The liquid thus formed is soluble in any quantity of cold or warm water.

MYRONIN, A NEW OINTMENT VEHICLE.—Under the name of myronin a German firm are introducing a mixture of vegetable wax and doegling oil as a nonrancidifying ointment vehicle. In their printed matter they say that if the free fatty acids, which wax of copernicia cerifera always contains, are neutralized by alkalies, the wax is in such a condition that it will easily mix with considerable quantities of other fats or water. In fact, a preparation in which the wax and water are in proportions of one to five is of the consistence of soft paraffin. After the wax and the doegling oil have been freed from all albuminoids, and have been purified by filtering and washing, the free acids of the wax are neutralized with weak hot alkaline carbonate solution, in the calculated quantity. Doegling oil is then added in sufficient quantity to give the required consistence: as found by experience, and the whole is mixed to a homogeneous mass by mechanical means. The normal product contains 12.5 per cent. of water, but this can be raised or lowered at will.—*Western Druggist*.

MAGNESIUM SULPHOPHENATE.—This is one of the series of sulphophenates, of which aluminum sulphophenate (sozal) was the first example. It is prepared by the double decomposition of baryta sulphophenate by magnesium sulphate. It appears as white crystalline needles, almost inodorous and of not unpleasant taste. It is soluble in two parts of water, or five parts of alcohol.

THE PRODUCTION OF OZONE.—As our readers are no doubt aware, the value and importance of ozone, from a medical and sanitary point of view, have led to the invention of several methods—electrical and chemical—of producing it for use as a deodorizing and purifying agent. The most recent system is that of Lieutenant Poulsen, a Danish officer, whose appa-

ratus is of a simple and efficient character. It consists of a wide-necked glass jar, with a double cover of porcelain plates, finely perforated. The upper plate closes in the mouth of the jar, whilst the lower one is inserted in the neck of the jar, about two inches below the other. Through the centre of each of these covers a glass rod passes, terminating at the lower end (which is curved upwards) in a small cup for holding a piece of phosphorus. In the jar is placed a given quantity of acidulated water, the level of which is just above the cup containing the phosphorus, which, when the apparatus is not in action, is always submerged. A small quantity of permanganate of potash is added to the acid solution, and to produce ozone the phosphorus is raised, by means of the glass rod, just to the surface of the water. The chemical action of the system is as follows: Phosphorous acid in the form of fumes is produced by the contact of the phosphorus with the air, and the fumes are seen to rise to a certain height, when they are deflected down upon the solution, into which they are absorbed, and converted into phosphoric acid by being oxidized by the permanganate of potash. In the meantime ozonified oxygen is produced, and, passing out through the perforations in the covers, is distributed in the atmosphere. The first cost of the apparatus is small, and the acid bath only requires renewing about once in three months. The system has been in satisfactory use for some time past in hospitals in Denmark and France. It is employed in the Pasteur Institute, Paris, and in carrying out his experiments on the antiseptic properties of ozone Dr. J. de Christmas, of that institute, used the Poulsen apparatus, and reports very highly of its efficiency. The ozone produced is pure, as is certified by Professor P. Stein, of the Analytical Chemical Laboratory, Copenhagen.—*Foreign and Colonial Importer*.

Boro-Salicylate of Soda.

By M. F. ADAMS.

The author finds that by boiling together boric acid and salicylate of soda with water under an inverted condenser a syrupy liquid is obtained which does not become solid on cooling, and which, when evaporated on plates, leaves a transparent amorphous residue, which, on more complete desiccation, is transformed into an opaque mass. This boro-salicylate of soda dissolves in four parts of cold water, and in its own weight of water at 40° C. The body is a true compound and not a mechanical mixture, for it does not act upon litmus nor with the ordinary reagents for boric or salicylic acids.

The acid corresponding to the soda compound does not exist in the free state, for when the salt is treated with an acid a mixture of boric and salicylic acids is obtained.—*Manufacturing Chemist*.