

SELECTIONS.

ZINC GLUE FOR SURGICAL DRESSINGS AND OTHER PURPOSES.—Trentler suggests the following formula: Oxide of zinc, 10 parts; gelatin, 30 parts; glycerin, 30 parts, and water, 30 parts. This paste is thickly applied and rubbed into the maslin or gauze forming the bandage. A thinner preparation contains 20 parts of gelatin and 40 parts of water.

For preparing tincture of iodine, Vauthier recommends placing the iodine upon a glass sieve and suspending this in the alcohol contained in a colored glass bottle, in order to avoid the influence of heat, light and organic matter, whereby hydriodic acid would be formed; moreover, the tincture should not be kept on hand for a long time. *Pat. Mon. de la Phar.*

MICROCIDIN is a new antiseptic, recommended by Professor Berloiz of Grenoble. Extreme solubility, harmlessness and rapidity of action are claimed for it. It is a compound of naphthol and soda, is neither poisonous nor irritant, and has the form of a greyish-white powder. Its solution of three grammes per liter is very slightly colored, and does not stain either the hands or bandage.—*Science.*

CARBOLATE OF CAMPHOR.—This preparation is made by adding 1 part by weight of carbolic acid to 3 parts of camphor, and straining through gauze after standing for twenty-four hours. A permanent liquid results, having a specific gravity of .990. It is said to be thoroughly antiseptic and possessed of considerable germicidal powers. By mixing the liquid with oil its tendency to produce an eruption when kept in contact with the skin is prevented.—*Therapeutic Gazette.*

COMPOUND ELIXIR OF IODINE is the name suggested by Wm. Pepper, M. D., (*University Med. Magaz.*, Feb. 1892, p. 376), for a preparation made by dissolving phosphorus, $\frac{1}{10}$ grain, and iodine and bromine, each $\frac{1}{4}$ grain, in one drachm of simple elixir. It has been used with considerable satisfaction in cases of torpid circulation with subacute gastric catarrh, and of subacute bronchitis with a relaxed and atonic state of the system. An elixir of balsam or of white pine may be used as the solvent, to which the name of Compound Elixir of Pine might be appropriate.

ANTIDOTE FOR PHOSPHOROUS POISONING.—Arpad Bokai recommends, in the *Revue de Therapeutique*, a 33-per cent solution of potassium permanganate as an antidote in phosphorus poisoning. Brought into contact with phosphorus the permanganate converts it into orthophosphoric acid, manganese peroxide being formed simultaneously. The same reactions occur in the stomach, with this difference, that in the presence of the hydrochloric acid of the gastric juice the peroxide of manganese becomes the chloride, thus liberating more oxygen and rendering the transformation of the phosphorus into

orthophosphoric acid more certain. Experiments upon dogs show that solutions of the permanganate as strong as 1 per cent. do not produce any ill effect upon the coats of the stomach.

SOLUBILITY OF SULPHUR IN ALCOHOL.—One looks in vain for particulars in any pharmaceutical text-books regarding the behaviour of alcohol towards sulphur, yet it is a well-known fact that homeopathic tincture of sulphur is a reality. Dr. C. Schierholz, of Vienna, communicates a note to the *Pharmaceutische Post* in which he shows that at 17.5° C., practically the normal temperature, 3,300 parts by weight of absolute alcohol dissolve only 1 part of sulphur. The solubility increases very rapidly and steadily with the rise of temperature until one part of sulphur dissolves in 265 parts of alcohol at the boiling-point.

TEST OF HYDROGEN PEROXIDE. When a drop of a 10 per cent. solution of metaphenylene-diamine chloride is boiled with a few drops of water and a drop of hydrogen peroxide solution, a carmine red coloration is produced. This reaction will detect 0.005 mg. of hydrogen peroxide in a drop of water, but is affected by the presence of nitrites. The test is thus modified to be independent of the presence of the latter compounds: One or two drops of metaphenylene-diamine chloride are added to 1 c. cm. of ammonia solution containing a few drops of hydrogen peroxide solution. The mixture is boiled for some minutes, when the previously colorless solution becomes blue, of intensity corresponding with the peroxide present. Addition of alkali hydroxide solution changes the color to red. *G. Deniges in Bull. Soc. Chem. and Jour. Chem. Soc.*

EXAMINATION OF ESSENCES FOR TURPENTINE, &c.—A solution is prepared as follows: Twenty grammes of acid tartrate of potassium is neutralised with manganoous carbonate (about 5 or 6 grammes), and dissolved in 1 litre of water. Into a test tube is placed 3 cc. of this solution with 5 cc. of the essence to be tested, and 5 cc. of ammonia solution (specific gravity 0.925), well shaken together, and placed in a water-bath for 30 seconds, and a current of air passed through. The tube is then removed, and its contents well-shaken and allowed to separate. Most of the essential oils are only faintly tinged with yellow by this treatment (except the oil of lemons and bergamot which are colored dark brown) but if any turpentine be present, a coloration varying from brown to very deep brown-black, occurs in the upper layer.

Russian Sunflower Oil.

The sunflower has been known in Russia for many years, but only in certain districts has it been cultivated on a large scale. The first cultivation of sunflower-seed for mercantile purposes in Russia began in 1812, in the village of Alexeievka, district of Berutshinsk, government of Voronezh. That province is even now

the chief district in European Russia for the growing of the sunflower. From there the cultivation of sunflowers spread to the adjacent governments of Tambov and Saratov, where there are extensive cultures owned by the town of Saratov itself. The people of the governments of the Don, Simbirsk, and Samara, are more or less engaged in this trade. Two kinds of sunflower are known, one with small seeds used for the production of oil, and the other with large seeds consumed by the common people in enormous quantities as a dainty. In a district where the seed is cultivated on a large scale, and the plant has been continually grown on the same soil for many years in succession, the sunflower has become subject to a disease called *Puccinia dioscorearum*. Owing to this disease, the sunflower-crops have been rather poor in the government of Voronezh for the last ten years, and the cultivation has, therefore, abated somewhat in this locality. The sunflower-seed is used principally for obtaining an oil, which has superseded all other vegetable oils in many parts of Russia. In general, the cultivation of the sunflower in Russia is considered to be very profitable. At the average yield of 1,350 lbs. per acre, and at the average price of $\frac{1}{3}$ d. per lb., the farmer receives an income of £1 per acre. This income can be increased in districts where the grower himself is engaged in producing the oil from the seed. However, oil-mills are very rare in the villages, the farmers selling their seed to the oil producers. In the seed-growing district of Saratov there are only thirty-four village oil-mills producing oil worth £8,000 annually, whereas in the town of Saratov £90,000 worth of oil is manufactured annually. The substance remaining from the oil-manufacture, or the sunflower-cakes, being used as cattle-food, is also a valuable product. These cakes, however, have a comparatively small demand in Russia, and are largely exported to foreign countries, principally to Germany and England. The sunflower shells, being used for heating purposes, form an article of trade in several districts. The seed-cups are used as feed for sheep. Of the different kinds of sunflower-seed in Russia, some white or grey, some brown with white or grey stripes, some quite black, dyeing the coats a dark violet colour—the grey and white seeds are preferred, as they appear to be much cleaner and handsomer, and therefore command a higher price, especially for the purposes of raw consumption by the common people. The black seed, owing to its dark colouring matter, is generally avoided. All these seeds appear in the market divided into two sorts. The larger kind, containing less oil, is the cheaper; the smaller, producing more oil, is sold to the oil-manufacturers, and is much more expensive. The latter seeds are flat and oval, like coffee-beans, and are considered the best for this industry.—*Chemist and Druggist.*

Dyspepsia is said to be favorably affected by 5 grain doses of sulphonal.