Tincture of Catechu.—Catechu does not readily submit to percolation. It is more easily extracted by the method for effecting the solution of resins.

Tincture of Cinchona.—The mixture composed of three parts of officinal alcohol and one of water is preferable to diluted alcohol.

Compound Tincture of Cinchona.—The red saunders should by all means be omitted. The saffron may, with equal propriety, be left out. The menstruum suggested for tincture of cinchona is equally well adapted here.

Ticture of Cubebs.—Three parts of officinal alcohol with one of water is in this case superior to diluted alcohol.

Tincture of Ferric Chloride.—Where time is not especially an object it is always advisable to derive the ferrous chloride directly from metallic iron. A reduction of the alcoholic strength so that half the volume of the tincture is officinal alcohol would also be a commendable feature. Metallic iron should be employed in the proper proportion for the strength of the tincture, and therefore, be completely dissolved. The amount necessary for four pints of the preparation is 1300 grains or 20.3 grains of metallic iron to the fluid ounce. The $17\frac{1}{2}$ troy ounces of chlorhydric should first be diluted with water to $1\frac{1}{2}$ or 2 pints before its addition to the iron. After this is perfectly dissolved 475 grains of potassium or 412 grains of sodium chlorate is added, and finally the alcohol, with sufficient water to measure four pints.

If the tincture be produced by means of ferric sulphate, and sodium chloride in connection with very little water and much alcohol, the resulting precipitate occasionally carries with it considerable iron in the condition of ferric oxychloride which is insoluble in water or chlorhydric acid. The writer, therefore, now first prepares pure ferrous chloride in alcoholic solution, and adds to this the requisite amount of chlorhydric acid and potassium or sodium chlorate. By this process 6450 grains of ferrous sulphate is heated with 2390 grains of sodium chloride, or better, when it can be conveniently had, 3465 grains of potassium chloride, and 11 pints of water, slightly acidulated with chlorhydric acid, until the ferrous sulphate has dissolved. After cooling most of the sodium or pottassium sulphate will have crystallized, either of them being but sparingly soluble in a concentrated solution of ferrous chloride: The liquid is now pressed out with a muslin strainer and the residue twice treated successively with twelve fluid ounces of strong alcohol and strained. The two alcoholic liquids are then united and slowly poured into the first solution with constant agitation. More strong alcohol is now added, until the whole measures 54 to 56 fluid After a short repose the liquid is filtered and sufficient ounces. strong alcohol added through the filter to make the resulting filtrate measure 58 fluid ounces. 61 troy ounces of chlorhydric acid is now poured in, mixed and followed by 475 grains of potassium chlorate

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