

grains bread crumb, and 1 grain lycopodium.—*Resina jalapæ*. 20 grains resin require 4 drops alcohol; must be rolled out quickly.—*Scammony*. 40 grains, about 5 drops alcohol.—*Quiniæ sulphas*. For large quantities, the following from the *Druggist' Circular*, '74, p. 195, is superior to any other: Add to each ounce quinine 2 drachms tartaric acid, 1 drachm wheat flour and 5 (five) drops water (no more water!!) Beat well. An old mass worked a little over in the hands gets soft enough. For small quantities I do not know of any excipient better than plasma (glycerolate of starch).—*Aloes*. To 1 drachm aloes take 6 grains powd. marsh-mallow root and about 6 drops glycerin. A good pill excipient to keep on hand is 6 fl. drachms glycerin and 2 drachms powd. tragacanth. (Wiegand).

Volatile Liniment.—A combination of ammonia and olive oil, which not only forms a white mixture, but is expected to keep so. Nowadays, with the misnamed olive oils (in reality cottonseed oil, lard oil, etc.), it is impossible to prevent it from separating after a couple of hours. Rother, observing that a good liniment was obtained by using green olive oil (ol. olivar. commune), and noticing that said oil is always more or less rancid, bethought himself of adding a little oleic acid to liniments made with the yellow oil commonly found. By adding 4-5 drops oleic acid to every pint of liniment, it will keep as well as it used to do in olden times.

Show Colors, Freezing Prevented.—Bullock found by experiments that

½ pint glycerin in 1 gallon water freezes at 30° F.

1 pint glycerin in 1 gallon water freezes at 24° F.

1½ pints glycerin in 1 gallon water freezes at 18° F.

2 pints glycerin in 1 gallon water freezes at 10° F.

3 pints glycerin in 1 gallon water remains fluid at 3° F.

Sugar and Syrup.—The spec. grav. of sugar is 1.58. Its bulk when dissolved is $\frac{2}{3}$ (12 ozs. equal 8 fluid ozs.) One pint of syrup requires 13¾ ozs. sugar and 7¾ fl. ozs. water. One pound avoirdupois sugar requires 8½ fl. ozs. water and should measure nearly 18 fl. ozs. (Pile, jr.)

Vital Force.—(Patented England, October 3, '66, Number 2536, by C. E. Brooman.) Whenever nitrogen and carbon are brought into contact (or nitrogenized and carbonated bodies) there is disengaged an imponderable fluid. It is collected, manifested and transmitted by currents, like the electric fluid. This current can pass through conductors which are insulating for electricity.—*Apparatus*. A bladder (or porous vessel) is filled with water of ammonia and immersed up to the neck in molasses. A silk cord is attached to the neck of the porous vessel, and the end of another silk is placed in the molasses. By the union of both silks the "vital force" current is established.

A Scientific Jailer.—A visitor to a French prison, upon inquiring how the prisoners were fed, received the following information: