Formulary.

ACID PHOSPHATE SOLUTION.

The following formula is said to yield a good article :

Phosphoric acid (50 per cent.)....	64 parts.
Precipitated chalk.....	12 parts.
Calcined magnesia.....	1 part.
Potassium carbonate.....	1 part.
Distilled water..... .....178 parts.	

Add the chalk to the acid gradually, and then add the magnesia and stir well. Dissolve the potassium carbonate in 9 fl. oz. of the water, add the solution gradually to the acid liquor, admix the remainder of the water, set aside for one or two hours, and filter.

TO FLAVOR COD LIVER OIL.

Oil of eucalyptus, 1 per cent., is added to cod-liver oil by Duquesnel (*Jour. de Pharm.*), and is said to hide its odor and taste. A more elaborate process is recommended by Paresi (*Presse Médicale*), who mixes cod-liver oil, 400 gm., freshly roasted and ground coffee, 20 gm., and animal black in powder, 10 gm., in a stoppered vessel, and warms it on a water bath at a temperature of 60° for a quarter of an hour. The mixture is then left for two or three days, except that it is shaken from time to time, and, finally, filtered through paper. The product is described as amber-colored, and as having a distinct odor and taste of coffee.—*Pharmaceutical Journal.*

WINE OF CREOSOTE.

E. Dietrich gives the following formula for creosote wine :

Creosote.....	12 parts.
Tincture of gentian.....	30 "
Alcohol....	250 "
Red wine(claret)sufficient to make	1000 "

—*National Druggist.*

BORO-SALICYLIC GLYCEROLE.

Boric and salicylic acids, when heated with glycerine, are dissolved in large quantities. On cooling, however, a thick and granular pasty mass results. If the solution is now heated almost to boiling and a trace of calcined magnesia is added, it remains perfectly limpid on cooling. The product is also quite soluble in water, and it is easy to prepare extemporaneously a solution containing equal quantities of the two acids in a state of concentration not otherwise obtainable. Nor are the antiseptic properties of either body in any way impaired. The proportions are :

Boric acid.....	10
Salicylic acid.....	10
Distilled water.....	10
Glycerine.....	40
Mag. oxid.....	1

—*Repertoire.*

LICORICE LOZENGES.

1.—Extract licorice.....	2 parts.
Starch	1 part.
Powd. orris root.....	1 part.
Powdered saffron.....	1 "
Sugar..... .....32 parts.	

Mix and make into lozenges of the usual shape and size.

2.—Powd. stick licorice.....70 parts.	
Powd. orris root.....	1 part.
Powd. star anise.....	4 parts.
Powdered sugar.....70 parts.	
Mucilage acacia....a sufficient quantity.	

Form into lozenges weighing 8 grains (50 etg.).

3.—Stick licorice.....	2 parts.
Acacia.....	1 part.

Dissolve the licorice in warm water, strain, and in the solution dissolve the acacia. Place over a gentle fire, in a broad pan, and let boil gradually, stirring continually until reduced to a paste. Roll into cylinders of the usual size, and polish by rolling them together in a box ; or cut the mass into lozenges of the desired size.—*Merck's Report.*

CLEANING ELASTIC STOCKINGS

Soap in powder .....av. oz. 32	
Ammonia (10 p.c.).....fl. oz. 7	
Cologne water (or dilute alcohol) ..	" 33
Water.....	" 60

Dissolve the soap in the water, and, when solution is complete, allow to stand for two days; then add the ammonia water and cologne. For use : Dissolve one-half ounce of this soap in a quart of cold water, in which let the stockings steep for 24 hours, then remove and wash well in cold water by shaking.—*Chemist and Druggist.*

COPYING INK FOR TYPEWRITERS.

	Parts.
Soap.....	30
Glycerin.	125
Alcohol.....	721
Water.....	360
Anilin, q. s. to color.	

If the ink is too penetrating, add more soap ; if not sufficiently so, decrease the quantity.—*Bayerische Industrie-und-Gewerbe Blatter.*

COLD LIQUID GLUE.

To make glue liquid in the cold, nitric acid is generally added ; thus we may take

Glue.....	8 parts.
Water ..	8 "
Nitric acid	2½ "

The nitric acid may be replaced by acetic acid. Thus an excellent liquid gum is made by dissolving one part of glue in two parts of vinegar.

Another process consists in dissolving by the aid of heat :

30 parts of glue in
80 " " water,

and immediately adding

5 parts of hydrochloric acid and
7 " " zinc sulphate.

A very strong liquid glue is obtained by the action of caustic soda upon glue. The following proportions are used :

Glue .....1000 parts.	
Water.....1500 "	
Commercial caustic soda, 40 "	

—*Manufacturing Chemist.*

SOLUBLE PYROXYLIN.

By treating nitro cellulose with caustic potash in presence of carbon bisulphide, Cross, Bevan, and Beadle find that it is converted into a gelatinous mass which is soluble in boiling water.

To Color Small Articles of Iron and Steel a Lasting Black.—George Buchner gives the following in the *Paper. Ind. u. Gew. Bl.:* Dissolve 70 parts of copper nitrate in 30 parts of alcohol, and with this solution pencil over the article, having first slightly warmed the latter. Lay the article upon a bit of tinned iron (sheet tin) and heat. The nitrate is decomposed with the formation of copper oxide in exceedingly minute particles, which attaches itself to the iron. Upon cooling, brush off, and the iron will be found a fine steel gray. Upon repeating the operation several times, the iron becomes covered with a beautiful dead-black coating, which is very durable. The addition of an alcoholic solution of manganese nitrate to the copper solution produces a fine bronze color.—*National Druggist.*

Sulphides of Zinc.

A. Villiers shows that precipitated zinc sulphide may be obtained in two varieties possessing the same composition. Each of them may exist in different degrees of hydration, but they are completely distinct, and cannot be directly transformed into each other between zero and 100°. The acid sulphide is obtained in an amorphous form by the action of hydrogen sulphide upon an alkaline solution of sodium zincate. By the action of heat the precipitate appears to assume a crystalline form, but this point is not quite clear, though there is, undoubtedly, some modification effected. The solubility of both forms of the acid sulphide in aqueous hydrogen sulphide solution distinguishes it from the basic sulphide, which may exist in both amorphous and crystalline conditions, and is precipitated from an acid solution of a zinc salt by hydrogen sulphide. The crystalline variety, which is completely insoluble in aqueous hydrogen sulphide solution, is usually precipitated from a solution of zinc sulphate, and the amorphous, which is but slightly soluble, from the acetate. This second form can be transformed into the crystalline variety by the action of heat.—*Comp. rend.*—*Pharmaceutical Journal.*

The sneer of the dead-beat is a high compliment to the merchant.

A hustling employer turns out successful business men.

Don't try to be charitable at the expense of your creditors.

A surly employer spoils all the good work of polite clerks.