A FEW ABSTRACTS OF SUBJECTS PERTAINING TO PRACTICAL PHARMACY OF THE CURRENT YEAR, EVIDENCING THE VALUE OF THE JOURNAL OF THE A. PH. A. TO THE RETAIL DRUGGIST.*

CHESTER A. DUNCAN, P. D., DALLAS.

The following abstracts have been taken from the Journal of The American Pharmaceutical Association, beginning with the issue of January, 1914:

THE MAKING OF TABLETS BY THE RETAIL DRUGGIST.

BERNARD FANTUS, M. D.

There are three influences at work destined to change the relation of the retail druggist to the tablet; they are: First, the use of solid fat as a cohesive and lubricant; second, candy medication; third, inexpensive tablet machines.

The value of cacao butter and low-melting point paraffin as cohesives and lubricants are discussed, these agents making it possible for the retail druggist to include tablets along with pills and capsules as extemporaneous products. The increasing demand for sweet tablets and the large number of drugs that can be dispensed in this manner offers a practical opportunity for extemporaneous preparation. Cheap and efficient machines for tablet making are available.

The author's conclusion being that it would pay pharmacists to equip themselves with a tablet machine, discontinue carrying in stock a large number of miscellaneous tablets and that he will be able to prepare sweet tablets as a form of candy medicine that physicians will readily take up as soon as a reliable source of supply has been secured. January, 1914.

SYRUP OF FERROUS IODIDE.

W. C. ALPERS, SC. D.

As the result of a large number of experiments the presence of a catalyzer, as a coil of bright iron wire, controls the violence of the reaction. Neither invert sugar nor glucose are preferable to granulated sugar. When made from best ingredients does not need a preservative. When dispensed in bottles that will be opened several times a day, the addition of one-half of one percent of citric acid is advisable, provided the quantity will be consumed in thirty days. The slight change in color during the prescribed time is negligible. March, 1914.

A NEW AND SATISFACTORY FORMULA FOR LIQUOR ANTISEPTICUS.

CHARLES H. LA WALL, PH. M.

The pharmacopœial preparation has been criticized and justly so for being harsh and an unpleasant preparation. A formula is presented which is the result of numerous experiments: Eucalyptol, 5.0 cc., Methyl Salicylate, 1.2 cc., Oil thyme (white) 0.3 cc., Thymol, 1.0 gm., Menthol, 1.0 gm., Sodium salicylate, 1.2 gm., Sodium benzoate, 6.0 gm., Boric acid, 25.0 gm., Fluidextract golden seal, 2.0 gm., Alcohol, 300.0 cc., Water, q. s. to make, 1000.0 cc. Make the solution according to the art of the pharmacist, reserving 60.0 cc. of the alcohol to add to the clear filtrate. Kieselguhr or talc may be used as a filtering medium. April, 1914.

A NEW AND SATISFACTORY FORMULA FOR LIQUOR ANTISEPTICUS ALKALINUS.

CHARLES H. LA WALL, PH. M.

The N. F. preparation is unnecessarily high in solids and alkalinity. The formula submitted consists of: Sodium bicarbonate, 5.0 gm., Sodium benzoate, 10.0 gm., Sodium sali-

*Read at recent meeting of Texas Pharmaceutical Association. The object of the paper is evident. The reprinting is for the purpose of suggesting to other members a means for enlisting an interest in those who are not members of the American Pharmaceutical Association.

cylate, 10.0 gm., Sodium borate, 30.0 gm., Thymol, 0.2 gm., Menthol, 0.2 gm., Eucalyptol, 0.2 gm., Methyl salicylate, 0.2 gm., Alcohol, 40.0 cc., Glycerin, 150.0 cc., Water, q. s. to make 1000.0 cc. To color, red cudbear may be used, or a more resistant color which will not bleach out so quickly with hydrogen dioxide solution, the color known as vegetable red, which is sulphonated orcin, may be used. April, 1914.

LOTIO ALBA.

OTTO RAUBENHEIMER, PH. G.

The author calls attention to the hospital preparation of zinc oxide, solution lead subacetate, glycerin and lime water. This preparation is not intended to be used against acne, pimples, etc., Lotio Alba being composed of zinc sulphate, sulphurated potash of each 5.0 gm. and water or rose water 125.0 cc. The composition of sulphurated potash is discussed, as the value of Lotio Alba depends upon its strength.

Difficulties arising in having this preparation properly prepared suggests the precautions of filtration of separate solutions of zinc and potassa, finely divided precipitate by dilute solutions slowly pouring the potassa solution into the zinc solution with agitation. The pharmacist can prepare small quantities of sulphurated potash and although an unstable chemical is very stable in solution and it is recommended that this be kept as a stock solution for making Lotio Alba. May, 1914.

THE LINIMENTS OF THE U. S. P. AND N. F.

THOMAS LATHAM.

Comments and suggested formulæ.

Linimentum Ammoniæ to consist of ammonia water, liquid paraffin oil and oleic acid.

Linimentum Belladonnæ, camphor decreased to 37.5 gm. with the addition of Linimentum Saponis.

Linimentum Calcis, the lime water to be of the best and placed in the bottle first.

Linimentum Camphoræ, yellow paraffin oil to replace the cotton seed oil.

Linimentum Chloroformi, replaces the present formula with one consisting of chloroform and methyl salicylate in paraffin oil.

Linimentum Saponis, directs that this be made by solution of soap in alcohol and adding other ingredients.

Linimentum Saponis Mollis, methyl salicylate to replace the oil of lavender flowers.

Linimentum Terebinthinæ, petrolatum to replace rosin cerate as diluent for oil of turpentine.

Linimentum Aconiti et Chloroformi, N. F., can be improved by adding menthol.

Linimentum Ammonii Iodidi, N. F., present formula replaced by ammonium iodide in soap liniment.

Linimentum Iodi, N. F., considered obsolete.

Linimentum Opii Compositum, N. F., on account of the high price and comparative uselessness of tincture of opium and oil of peppermint the former is reduced from 100 cc. to 10 cc., and the latter replaced by menthol. Tincture of arnica, saponin and linseed oil are added.

Linimentum Saponato-Camphoratum, N. F., soap liniment has taken its place. White laundry soap may be used in making, as it congeals readily.

Linimentum Terebinthinæ Aceticum, N. F., the formula slightly modified as to quantities and saponin added.

Formulæ are also given for Analgesic Liquid Balm, University Rub, Boston Liniment or Veterinary Liniment. February, 1914.

A NOTE ON THE VALUE OF PRESERVATIVES IN SYRUP FERROUS IODIDE.

GEORGE M. BERINGER, PH. M.

Tartaric and citric acids in one tenth of one percent solution, serve well as preservatives. If carefully made no preservative is needed. However, to overcome careless manipulation it is deemed advisable to use a preservative. Hypophosphorous acid has the advantage of a reducing value which is not possessed by organic acids. It has the disadvantage that in the strength recommended it will act upon sugar and darken the syrup. This could be overcome

by using glycerin for a portion of the sugar. N. J. Phar. Ass'n., 1914. Jour. A. Ph. A., July, 1914.

MAGMA MAGNESIA, N. F.

SAMUEL T. HENSEL, PH. G.

The formula of George M. Beringer is changed in that a larger excess of sodium hydroxide is used to insure complete chemical reaction, the solution of the magnesium sulphate poured into the soda solution as directed in the Beringer formula and in addition the mixed solutions and precipitate are boiled for fifteen minutes. Artesian water used for washing the precipitate instead of distilled water as each gallon of precipitate requires about twenty-five gallons of water for washing. The need for a larger quantity of soda being explained by the peculiarities of mass action. August, 1914.

GLYCERITE OF BISMUTH.

WILBUR L. SCOVILLE, PH. G.

A corrected formula and assay process for this product.

The formula is simply a modification of the present one and in order to furnish a product of uniform strength the amount of bismuth is determined before the final quantities of vehicle are added in such proportion that each 100 cc. of product will represent the equivalent of 12.8 gm. of bismuth oxide. The bismuth determination being made by precipitating a measured portion of the glycerite with hydrogen sulphide, washing and weighing the residue. September, 1914.

THE PHARMACY OF ADRENALIN.

C. P. BECKWITH.

The chemistry of this sensitive substance is explained, being characterized as an amine base, an alcohol and a phenol. The solubility of the pure substance is given. It forms salts with acids which are usually very hygroscopic and difficult to preserve in dry form. Solution of these in alcohol or water being the usual manner of dispensing. The commercial solution being a solution of 3 to 1000 adrenalin chloride in physiological salt solution with one-half of one percent chloretone. This retains its activity for a long time if stored away from heat, light and air. Oxidizes on exposure to air as indicated by the change in color from pink to red and then to brown with a brown precipitate. As long as the undiluted commercial solution has not become deeper in shade than pink the loss of activity is practically negligible.

It is advised that adrenalin be dispensed alone and not in mixture. Incompatibilities mentioned are, alkalies and oxidizing agents are chiefly to be feared. In this category are such substances as oxygen, chlorine, bromine, iodine and their oxyacids, permanganates, chromates, nitrates and salts of readily reducible metals. Iron even in traces must be avoided and because of its distribution is extremely troublesome. Nose and throat specialists order spray solutions containing alkalies which if dispensed will render the adrenalin inert. In making dilute solutions sufficient hydrochloric acid should be added in such proportion that the total volume will contain one one-hundredth of one percent acid. November, 1914.

A FORMULA FOR A NEW TYPE OF SALINE ANTISEPTIC SOLUTION.

CHARLES H. LA WALL, PH. M.

Recommended as an alkaline and saline solution containing but little alcohol. Consisting of Sodium chloride, 5.0 gm., Sodium borate, 5.0 gm., Sodium bicarbonate, 10.0 gm., Oil of spearmint, 1.0 cc., Oil of eucalyptus, 0.5 cc., Menthol, 0.1 gm., Alcohol, 5.0 cc., Fluidextract of hydrastis (aqueous) 2.0 cc., Water, q. s. to make 1000.0 cc. Disolve the salts in 750.0 cc. of water and the oil and menthol in the alcohol. Mix the alcoholic solution of oils with 5.0 gm., of magnesium carbonate and triturate gradually with the aqueous solution. Filter and add the fluidextract and finally pass enough water through the filter to make 1000.0 cc. February, 1915.

IODINE OINTMENT—DATA AND METHOD OF ASSAY.

LEO. H. FRIED, PH. G., PHAR. D.

A method of assay for this ointment is given together with a report as to observations made concerning the absorption of iodine by the lard. Immediately after making, assay

showed 1.11 percent loss of free iodine. At ten days 1.16 percent and at eight months 1.20 percent. The maximum absorption taking place in ten days. May, 1915.

NEW METHOD OF MAKING SYRUPUS HYPOPHOSPHITUM AND SYRUPUS HYPOPHOSPHITUM COMPOSITUS.

F. A. UPSHER SMITH, PH. C.

These new formulæ are proposed with the view that it will be unnecessary for the druggist to carry in stock but one of the hypophosphites, namely calcium hypophosphite, the other hypophosphites are made in the process by reaction of potassium, sodium, iron and manganese sulphates, upon the calcium salt in molecular proportions necessary to form the corresponding hypophosphites, an excess of the calcium salt being used sufficient to represent the correct amount in the finished product. Minn. State Phar. Ass'n., Jour. A. Ph. A., May, 1915.

AMPULS.

HERMAN H. NORTH, PH. G.

Evolution of the word, history and forms, glass used and tests, manufacture and cleansing empty ampuls, methods of filling by gravity, pressure, vacuum, testing the sealing, sterilization, solutions decomposed and those not decomposed by heat, are the paragraph headings of a meritorious thesis and worthy of every practical pharmacist's attention. May, 1915.

CURRENT REVIEW OF PHARMACEUTICAL JOURNALS FOR APRIL, 1915.*

J. W. ENGLAND.

THE JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

Preliminary Note on a New Pharmacodynamic Assay Method, by Paul S. Pittenger, Phar. D., and Charles E. Vanderkleed, Phar. D. The authors propose the use of Carassius Auratus (Gold Fish) as test animals for the digitalis series of drugs, claiming that gold fish are exceedingly sensitive to variations, that the weight of the fish may be disregarded in making the test, that the individual variations in the susceptibility is much less than that of guinea pigs and frogs, and that the gold fish method is the simplest so far proposed and can be easily carried out by those not skilled in pharmacodynamic work. Furthermore, the animals can be procured at all seasons of the year and are inexpensive.

Examination of Calycanthus Floridus for Alkaloids, by E. R. Miller and H. W. Brooks. The results obtained make it probable that the plant, which is widely found in the Southeastern States, contains alkaloids.

The Analysis of Cigarettes, Cigars and Tobacco, and the Use of Lloyd's Reagent in the Determination of Nicotine, by Azor Thurston. A comprehensive series of analyses of twenty-six brands of cigarettes, both filler and paper.

Estimation of Calomel, by R. I. Grantham. Three methods were studied, the third one yielding the highest theoretical results.

Some Factors in Drug Absorption in Frogs, by W. F. Baker, M. S., M. D. A paper showing the variation in individuality of frogs with reference to drug absorption. The matter of absorption is largely due to the health of the frogs and the conditions under which they are kept.

Stillingia Sylvatica, by E. R. Miller, R. I. Brooks and C. P. Rutledge. A study of the root of Stillingia Sylvatica, with especial reference to the presence of the alkaloid stillingine.

Cannabis Sativa, by H. C. Hamilton, M. S. The author discusses the question, "Is the medicinal value of the drug found only in the Indian grown products?" and he concludes

* Read before Philadelphia Branch, May 11, 1915.