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

<sup>\*</sup> Read before Philadelphia Branch, May 11, 1915.

that American Hemp contains the same active ingredients as Indian Hemp, and that, if equal care is used in selecting the proper part of the drug for experiments, no material difference in activity will be found between the extracts of Indian and of American Hemp.

Estimation of Yellow Phosphorus, by H. Engelhardt and O. E. Winters. Methods for the determination of Phosphorus in Phosphorus Resin, Phosphorus Paste, Phosphorus Pills and Elixir of Phosphorus.

Pharmaceutical Education, by Frank R. Eldred. A study of methods of training for special branches of pharmaceutical work, with special reference to the requirements of modern pharmaceutical manufacturing and drug inspection.

Pharmaccutical Education, or the Education of the Pharmacist; Which Shall it be?" by Jacob Diner. A study of education as related to pharmacy and the pharmacists, differentiating between the education of the pharmacist and pharmaceutical education.

Forty-five Years of Manufacturing Pharmacy, by Frank O. Taylor. A sketch of the history of manufacturing pharmacy of this country, with special reference to the development of Parke, Davis & Co.

The Study of the History of Pharmacy by Students of Pharmacy at American Institutions of Learning, by Edward Kremers. An important paper upon the scope of the courses and the methods of instruction of historical pharmacy, with a plea for greater attention by schools of pharmacy to the subject.

Mineral Waters, by Julius Greyer. An able and comprehensive paper on this subject.

Restrictions in the Distribution of Poisons, by Carl T. Buehler, Ph. G. The author proposes two schedules of poisons, one to be sold on a physician's prescription only, and the other not, but to be recorded in a poison register.

Should the Retail Druggist Manufacture His Own Preparations, or Buy Them? by Charles J. Clayton. The author discusses the subject pro and con, believing that there are two sides to the question.

Some Pharmaccutical Notes, by William R. White, Ph. C. A series of practical notes on Oleate of Mercury, Spirit of Nitrous Ether and Fowler's Solution.

Difficult Prescriptions, by J. Leon Lascoff, Phar. D. A study of seven prescriptions with methods of preparation.

Red Gum, by John K. Thum. A valuable, practical paper on this useful astringent.

Pharmacopoeias and Formularies of the World, by R. H. Needham. An important list of Pharmacopoeias and Formularies published both in the United States and abroad.

Further Facts About Drug Importations, by Harry B. French, President of the Smith, Kline & French Co. An appeal for an amendment of the Federal Food and Drugs Act to protect the importer of drugs against certain acts perpetrated at the present time by the officials of the Government of the United States at ports of entry, and for the purpose of correcting inequalities of administration of the different ports.

Professional Pharmacy from the Vicupoint of the Commercial Laboratory, by Frank E. Stewart, Ph. G., M. D. A plea for co-operative work between the great commercial houses engaged in pharmacal and chemical industries and the medical profession, through its universities, laboratories, hospitals and clinics.

The House of Delegates of the A. Ph. A., by Prof. Henry P. Hynson. An exceedingly important communication urging a general discussion of the functions of the House of Delegates of the American Pharmaceutical Association and inviting suggestions regarding its betterment.

The Percentage of Moisture Lost in the Preparation of Some Official and Unofficial Drugs, by Edwin L. Newcomb, P. D. A valuable compilation of data concerning the moisture lost in the drying of vegetable drugs.

A Criticism of the United States Pharmacopoeial Descriptions of Vegetable Drugs, by Chalmers Joseph Zufall.

The Women's Section and Women Pharmacists, by Zada M. Cooper. A plea for the growth and development of the Women's Section of the American Pharmaceutical Association and the more extended employment of women in pharmaceutical work.

#### AMERICAN JOURNAL OF PHARMACY.

The Qualitative Separation and Identification of Some Oxymethylanthraquinones, by E. Monroe Bailey. A study of the color principles of Senna, Rhubarb, Alocs and the various species of Buckthorn.

Standardization of Sodium Thiosulphate Volumetric Solution, by Joseph L. Mayer.

# AMERICAN DRUGGIST.

Solving the Coal Tar Derivative Problem.—An editorial upon a subject which is exercising the deep interest of the American chemical industries of this country.

Advertising an Ethical Drug Store, by J. R. Moffett. An interesting chat upon the ethical conduct of the drug business.

How to Sell Disinfectants Over the Counter, by John Zeig, M. D. A practical paper on this important subject.

Pharmacy and Pharmacists, by John F. Patton. A brief and interesting paper by John F. Patton of York, Pa., a fine type of the old-time pharmacist and a former President of the American Pharmaceutical Association.

# THE DRUGGISTS' CIRCULAR.

The New British Pharmacopoeia, by H. H. Rusby, M. D. In this paper Dr. Rusby discusses with characteristic ability the salient features of the new British Pharmacopoeia pertaining to vegetable drugs.

Skin Foods and Toilet Cream, by H. C. Bradford. A practical paper on this subject.

#### MERCK'S REPORT.

Perfumery and the Chemist, by Edward T. Heiser. A study of synthetic perfumes, the author predicting that the time will not be distant when the flower scents will be all synthetical perfumes. "The florist of tomorrow will be the chemist; the garden will be the laboratory; and in crystalline form, among coal-tar stills and complex pots, we shall gather, 'Roses red and Violets blue, and all the sweetest flowers that in the forest grew.'"

# THE JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY.

Symposium on the Contributions of the Chemist to American Industries.—An exceedingly important collection of papers, covering but a few of the industries benefited by the science of chemistry, but they bring into strong relief the growing importance of the services of the industrial chemist and chemical engineer. The papers are too long to abstract, and should be read in the original.

#### THE JOURNAL OF BIOLOGICAL CHEMISTRY.

Human Milk, by Alfred W. Bosworth. An important study upon the acidity of human milk, the serum of human milk and the principal compounds of human milk.

The Estimation of Fat, by Helman Rosenthal and P. F. Trowbridge. A new method for the determination of fat in animals and food stuffs by means of a method of saponification. The method is so accurate that it can be used for the determination of fat in blood, which is not possible with the usual methods.

#### THE PERFUMERY AND ESSENTIAL OIL RECORD.

The number includes as usual a full market report. While synthetic chemicals for perfumery are generally very scarce, and command high prices, there is also a notable shortage in several essential oils; otherwise the most interesting feature of the report is the firming up towards the close of the Sicilian essences and the strained conditions between growers and dealers in both American peppermint and French lavender oils.

The Little Green Devil (Absinthe).—A remarkably interesting article upon a weed that for thirty centuries or more has been a type of all that was bitter, that has brought tens of thousands to a maniac's grave, and, incidentally, not a few into sounder health, that has inspired a novel by Miss Marie Corelli and given its name to a London suburb and convict prison. Since the present European war broke out the drinking of absinthe in both the French army and navy has been effectually stamped out, while the Government has supplemented the effort by absolute prohibition of the sale. According to published figures "absinthe ordinarie" contains 47.6 percent of alcohol, "absinthe demi-fine" 50 percent, "absinthe

fine" 68 percent, "absinthe Suisse" 80.6 percent, and in addition to the volatile and bitter constituents of wormwood herb, these liquors contain angelica, anise and marjoram. The bright green tint of the alcoholic extract is intensified by admixture of spinach or parsley, and then toned down to a dull olive green by the addition of burnt sugar, but it is to be feared that the desirable tint of the "little green devil" is frequently obtained by mixtures of indigo and turmeric, and even by acetate or sulphate of copper and green aniline dyes. With national prohibition of absinthe in France has passed away that Parisian function, the "absinthe hour," somewhere between 4 and 6 p. m., and with it the groups of idlers, moodily gazing into the opalescent depths of the seductive poison, diluted with water. The symptoms are quite distinct from ordinary alcoholism. Absinthe appears to act directly through the higher nerve-centers, nervous symptoms being the most prominent throughout. The exhilaration first experienced passes into hallucinations, nocturnal restlessness and terrifying dreams, followed next morning by nausea and vomiting, trembling of the hands and tongue, with dizziness and general unfitness. The final condition of the victim is delirium, epileptiform convulsions and hopeless idiocy. Wormwood herb can scarcely be passed over as an unimportant herb. The yield of essential oil is from 0.2 to 0.97 percent, with a specific gravity of 0.925 to 0.955 and a refractive index of 1.460 to 1.474; the chemical constituents being thujone, thujyl alcohol, acetic, isovaleric and palmitic esters, pinene, phellandrene and cadinene.

Insects Injurious to Plants, by E. M. Holmes, F. L. S., F. E. S. A continuation of Curator Holme's very interesting article on this subject from previous issues.

# THE PHARMACEUTICAL JOURNAL AND PHARMACIST.

Practical Notes on the British Pharmacopoeia, 1914, by David Gilmore. This is chiefly a report on the standards of the British Pharmacopoeia for Laudanum, Spirit of Nitrous Ether and Glycerite of Oleic Acid.

A New Color Reaction for Salicylic Acid," by P. A. W. Self, B. Sc., F. I. C. The author uses equal parts by volume of 40 percent formaldehyde and concentrated sulphuric acid, cooling the mixture thoroughly. Next, moisten the substance to be tested, in a porcelain dish, with the above mixture, add a little ammonium vanadate, and stir well. If salicylic acid is present a Prussian blue color—varying in intensity with the amount of salicylic acid—appears immediately, and rapidly changes, first to a greenish blue and finally to green. If, however, no salicylic acid (or other substance capable of yielding a color reaction) is present, the color given by the reagents alone is a yellowish red or orange, which after two or three minutes begins to change to greenish yellow and finally becomes green. With 1 milligramme of salicylic acid the color is intense.

Notes on the British Pharmacopoeia, 1914, by C. W. Kemsey-Bourne, M. P. S.

Pharmacopoeia Revision, by William Kirkby, M. Sc., F. C. S., Ph. C. An excellent review of the subject of Pharmacopæias in addition to the present British Pharmacopæia. The author in his researches goes back to the sixteenth century and notes many curious facts in pharmaceutical literature. Between 1618 and 1851, when the last revision of the Pharmacopœia Londinensis appeared, there were nine revisions of it. The years when these were published were 1650, 1677, 1721, 1746, 1748, 1809, 1824, 1836, 1851. But in all there were over thirty reprints and editorials. The amount of original matter in this publication throughout the first century of its existence seems to have been quite meagre. The first issue, and subsequent ones down to 1746, consisted chiefly of matter extracted from the Antidotarium of Nicolaus de Salerno (twelfth century) and the Antidotarium of Johannes Damascenus (John Mesué, ninth century). The apothecaries before the appearance of the official medicine book, depended largely upon Serapion, Dioscorides, Galen, Paracelsus, as well as upon Mesué, Avicenna, and Nicolas. The generally unsatisfactory character of the pharmacopæia and the attitude of the physicians toward unlicensed practitioners led to the appearance of quite a large number of non-official books. Many of these are of considerable interest, because they furnished an extensive reservoir from which the editors of the London Pharmacopæia were able to draw when they decided to put together a discriminatory edition. This was the issue of 1746. The books which appeared during the previous hundred years are worthy of attention. There were commentaries on the Pharmacopæia, such as Salmon's

and Quincy's, formularies such as Radcliffe's, the so-called Pharmacopœia Bateana, Woodall's Surgeon's Mate, Schroeder's Pharmacopœia Medico-Chymica, Culpepper's English Physician Enlarged, and many similar books. Some of these were compendiums of almost everything in physic and surgery. In Woodall's Surgeon's Mate (1639) we even find poetry, of which some may make an appeal to pharmacists of today. At the conclusion of some verses called:

Certaine Chimicall Verses; or Good Will to Young Artists, From the Author, he says:

Common it is with Chymists true their house-doves them withstand: Fearing all will be spent in smoke, time, goods, yea house and land.

A noyse domesticke shrill I hear, and I dare stay no longer: Good friends adieu till further time, I must obey the stronger.

You Chymists wise that wived are, be warned here by me,
Search not into this mysterie except your female gree.

For I have found to my great smart, when she list to contend,
Then down goes pot, yea, glass and all, and I vow to amend.

And need sayes yeeld, there's fault in him that stubbornly stands out
Till breech and jacket all be torne by searching secrets out.

The author concludes his article with an earnest plea that pharmacists be represented upon the Council publishing the British Pharmacopæia.



Panama-Pacific International Exposition.