

the pharmacy's circle of doctors in the desirable formulas of the United States Pharmacopœia and National Formulary.

Alkaline Aromatic Solution has met with the approval of many physicians and it is surprising how satisfactory the home-made product really is, and it is easily prepared. I have seen some samples of this preparation in drug stores, when purchased in gallon quantities, of which the last portion was faded and almost unfit for dispensing. In the home-product the amount prepared can be adjusted to the demand created. It really is an elegant pharmaceutical and quite effective.

When the special effort of the detail man is over, the demand ceases, and a large number of these so-called physicians' proprietaries add to the dead stock of every pharmacy and have no inventory value. What is the remedy? Get behind the United States Pharmacopœia and National Formulary preparations, and prescription business will show a profitable increase.

ABSTRACT OF DISCUSSION.

P. Henry Utech commended the efforts of the kind presented by Mr. Kolb. He had obtained satisfactory results in his home city; physicians were not informed, as they should be, on United States Pharmacopœia and National Formulary preparations and were glad to have the information. Persistent and continued efforts will be followed by satisfactory results.

NOTES ON SOME OFFICIAL PREPARATIONS.*

BY P. HENRY UTECH.

Within a few months the machinery for the task of revising the U. S. P. X will be set in motion. So painstaking and thorough—and withal so efficient—has been the work of the former Committee of Revision, to their credit let it be said that the U. S. P. X stands to-day without a parallel in the literature of pharmacy. Comment and criticism of the book since its publication four years ago has been more favorable and constructive than has characterized any previous edition of the work.

That the publication of an official text of such high standard and unusual excellence—the major portion of which represents the voluntary service of a large group of research workers, laboratory experts, teachers, professional pharmacists and physicians—could be so successfully consummated, reflects a fine spirit of coöperation, of unselfish interest and loyalty on the part of the entire personnel of the organization.

To the end that the forthcoming volume may keep pace with its predecessors, and be equally free from errors both of omission and commission, every effort has been made by the chairman, through the medium of the pharmaceutical press, the meetings of the various state associations, the colleges of pharmacy, as well as many other possible sources of contact, to enlist the coöperation and support of all the related interests of pharmacy. The following suggestions and comments on certain official preparations which have come under my personal observation are herewith respectfully submitted for the consideration of the Revision Committee:

* Section on Practical Pharmacy and Dispensing, A. Ph. A., Rapid City meeting, 1929.

Syrupus Aurantii: A formula for preparing Syrup of Orange similar to the present one has been official, with but slight modifications for the past five or six decades. In brief, they are simply processes for extracting the volatile oil from the rind of the fresh fruit with an alcoholic menstruum, and subsequently treating this liquor with an inert powder and sugar to render it water-soluble before admixture with the requisite amount of sugar or syrup. The addition of a small quantity of citric acid, to give the finished product a more characteristic flavor, was incorporated in Eighth Revision.

The present formula calls for the use of **Tincture Sweet Orange Peel**, the alcohol of which is neither necessary nor desirable. As at present devised the preparation appears to contain all the agents necessary to produce fermentation, minus the heat, and this latter is supplied unconsciously in the summer-time, as well as in overheated storerooms at any time. In fact I have had two successive lots of the syrup deteriorate within a few weeks after preparation.

With a view of overcoming this objection, the following formula for preparing the syrup extemporaneously was devised:

Oil Sweet Orange (recent)	6 cc.
Citric Acid	5 Gm.
Magnesium Carbonate	4 Gm.
Sugar	820 Gm.
Alcohol	
Water <i>aa qs</i> to make	1000 cc.

Mix the alcohol and water in the proportion of forty cubic centimeters of alcohol to twenty cubic centimeters of water. Triturate the oil intimately with the magnesium carbonate in a mortar and gradually add the diluted alcohol. Filter and add alcohol and water in the same proportions as before to obtain sixty cubic centimeters, returning the first portions until a perfectly clear solution is obtained. Dissolve the citric acid in this liquid and lastly add sufficient syrup to make one thousand cubic centimeters.

When there is little demand for the syrup, by simply keeping on hand the Spirit of Orange prepared as in the first step of the process, one can make it up extemporaneously by simply adding 2 cc. of the spirit to 30 cc. of syrup.

The formula herewith suggested possesses the advantage of economy in manipulation, is much superior in point of permanence, and if care be taken in selecting a strictly fresh high grade oil the finished product combines also the characteristic flavor and elegance of the U. S. P. syrup.

Syrupus Pruni Virginianæ: A footnote under the formula simply directs that it be preserved in tightly stoppered bottles in a cool place. Our experience has proven that when this syrup is kept in flint or clear glass bottles, both odor and taste undergo a perceptible change within a very short time. By storing in amber-colored bottles in a cool place the preparation retains the characteristic flavor for an indefinite period.

Spiritus Ammoniaë Aromaticus: The Purity Rubric should include within certain limitations an assay process for ammonia. Since its efficacy is dependent wholly on the amount of volatile ammonia present no methods are given whereby the official strength may be determined.

Tinctura Valerianæ Ammoniata: Even though every precaution be taken

in the percolation process to prevent it, the loss of the Aromatic Spirit cannot be avoided. This loss also increases perceptibly on standing. An assay process for ammonia should be included under the formula.

Liquor Magnesii Citratis: Objection to the promiscuous use of sodium bicarbonate in preference to the potassium salt has been raised by several physicians. In the latter case the potassium citrate in the finished preparation is of decided advantage in cases of kidney derangement where a diuretic action is desired, whereas in the case of the sodium salt this action is questionable. The question of economy should have little consideration where therapeutic efficiency is at stake.

It was voted to submit this paper to the Chairman of the U. S. P. Revision Committee.

ABSTRACT SECTION ON HISTORICAL PHARMACY, 1929.

"Medical and Pharmaceutical Knowledge of Balzac." by L. E. Warren, Drug Research Unit, Food Drug and Insecticide Administration, Washington, D. C.

Considered from every point of view it is generally conceded by critics that Balzac is the greatest novelist of all time. The writer has been an enthusiastic reader of Balzac for many years and has noted that there are many passages in his writings which show that Balzac had considerable knowledge of medicine and pharmacy as these were understood a hundred years ago. It seemed worth while to bring some of these to the attention of the Historical Section.

During his lifetime Balzac arranged most of his writings under the general title "Comedie Humaine." In the "Human Comedy," Balzac attempted to portray every human emotion in all the varying degrees exhibited by man. Love and hate, altruism and avarice, generosity and greed, magnanimity and anger, hope and despondency, grief, pleasure, pain, approbation and scorn, follow each other like the ever-changing colors in a rotating kaleidoscope. He attempted to paint every type of character, to depict every phase of human activity, to describe every profession, occupation and trade. Princes and paupers, nobles and peasants, politicians and authors, lawyers and priests, notaries and doctors, printers and painters, sages and idiots, lovers and mistresses, angels and cortesans are brought across his pages in an ever-bewildering procession. The Human Comedy is a picture of French Society of a century ago. It is far more than a picture—it is a mirror of human nature.

Unlike Dickens, who never lost an opportunity to ridicule the medical profession, Balzac had a general affection for physicians and some of his doctors are among the finest characters in French literature. References to medicines and their sources and to methods for treating the sick are constantly made throughout the length and breadth of the Human Comedy. Some of the stories are retold and many passages showing Balzac's knowledge of pharmacy and medicine are quoted, abstracted or reviewed.

ABSTRACTS OF SCIENTIFIC SECTION, 1929.

"Amino Alcohols. 3. The Potentiation of the Action of Epinephrine by Arylpropanolamines," by James C. Munch and W. H. Hartung.

Some arylpropanolamines homologous with ephedrine have a similar action with ephedrine in potentiating the pressor action of epinephrine in the anesthetized dog.

"Studies of Astringency: A Method of Measuring Astringency," by E. R. Theis.

If well-hydrated tissue is treated with an astringent liquid, a net increase of the system occurs, which can be accurately measured. The astringent action of various chemicals and commercial preparations has been demonstrated and is shown graphically.

"Oregon Drug Plants," by E. T. Stuhr.

Detailed list of drug plants found within the state.

"Gleditschia Triacanthos, Linné, a Preliminary Report on the Chemistry of the Fruit," by Loyd E. Harris.

Oleic, palmitic and stearic acids identified in fixed oil from seed. Glucoside found in seed and in seed pod.