

that he be given credit for this period. It would not work a hardship on the student and the college could back up this proposal. It would be a compromise between the colleges who have advocated "no experience" and the pharmacists who want more; the pharmacists of all states should work together on this matter. In addition to college graduation there should be a "clean-cut" year of experience whether the experience is obtained prior to entering college, during vacation periods or after graduation.

John R. Minehart said that what Secretary Christensen had reported should interest everyone concerned in pharmacy. In Virginia they have done away with the experience requirements altogether. Personally he would like to have three years of experience, but there must be "give and take" and he doubted if the mortality in Virginia would be any greater without experience than if three years of experience were required. This is a matter that should be considered very seriously.

Charles T. Heller said that in Minnesota the one year of experience in addition to graduation had been adopted.

The author replied that at least eight states have changed their laws within the last two or three years.

U. S. P. AND N. F. PREPARATIONS FIT FOR BEVERAGE PURPOSES.*

BY W. BRUCE PHILIP.

Pharmacy is a good, clean profession. It is true that the responsibilities placed on the pharmacists by the Government have given to a few weak members an opportunity to forget our high ethical standards and to bring discredit on themselves. Their discredit has been felt by all of us.

The prohibition law is one of our great problems. As these laws are often made and enforced by persons not trained in pharmacy or medicine, we should watch closely the enactment and enforcement of all laws of this character.

Regulation 2, being a revision of Internal Revenue Regulation No. 60 has been effective since October 1, 1927. This regulation interprets the 18th Amendment to the Constitution of the United States and the National Prohibition Act (41 Stat. 30S). It is the Government's guide for pharmacists.

Article XI, Sec. 112—(Page 98) begins—"The U. S. P. and N. F. preparations listed below are held to be fit for beverage purposes." This list is composed of: Cordial, 9 Elixirs, 3 Spirits, 6 Tinctures and 4 Wines as follows: Blackberry Cordial, Elixir Aromatic, Elixir of Anise, Red Aromatic Elixir, Elixir of Bitter Orange, Compound Elixir of Cardamom, Elixir of Licorice, Aromatic Elixir of Glycyrrhiza, Compound Elixir of Taraxacum, Elixir of Terpin Hydrate, Spirit of Ether or Hoffmann's Drops, Compound Spirit of Juniper, Compound Spirit of Myrcia (Bay Rum), Bitter Tincture, Aromatic Tincture, Tincture Sweet Orange Peel, Tincture of Caramel, Tincture of Lemon Peel, Tincture of Ginger, Compound Wine of Orange, Wine of Beef, Wine of Pepsin and Wine of Wild Cherry.

The Tenth Revision of the U. S. Pharmacopœia has been official since January 1, 1926 and the 5th Revision of the National Formulary have been official from July 1, 1926. Both of these revisions were more than a year old before the issuance of Federal Prohibition Regulations, 2. These revisions have deleted many of these preparations, leaving only 12 preparations of the U. S. P. and N. F. fit for beverage purposes.

Why in three years, 1927-1930, this list has not been revised by the Prohibition

* Section on Education and Legislation A. PH. A., Baltimore meeting, 1930.

Department is hard to say. Are the heads of this department ignorant, or unmindful, of these changes?

It seems to me that the Prohibition Department has not appreciated and acknowledged the effort of our revision committee. The question may be asked, Can we eliminate the 12 preparations left by making them unfit for beverage purposes and thus place us where we can demand the elimination of Section 1112 from the regulations?

The following are largely flavors, carminatives, stomachics, or bitter tonics: Elixir of Anise, Compound Elixir of Cardamom, Elixir of Licorice, Compound Elixir of Taraxacum, Bitter Tincture, Aromatic Tincture, Tincture of Sweet Orange Peel, Tincture of Ginger.

A fluidextract or a stronger preparation could, and in most instances has been prepared so that with a smaller dose or the using of a smaller quantity, the usual prescription of the physician, with his permission, of course, could be filled.

Bay Rum as an official preparation has passed out of the picture, due to the use of specially denatured alcohol. Specially denatured alcohol is now used by the commercial manufacturer of bay rum.

Spirit of ether is a simple mixture of ether and alcohol. I feel that if the purpose is sufficient, we could leave the manufacturer of this preparation to extemporaneous pharmacy, keeping the formulas in our Recipe Book.

Simple Elixir may offer, at first, a serious problem. Many feel we need a 22-24% alcoholic diluent or vehicle to preserve a prescription or to prevent precipitation. Do we? Do you know that hundreds of drug stores having no permit, are using to-day a non-alcoholic so-called simple elixir that for flavor is satisfactory for their purposes? Many of these druggists state that not only are the physicians satisfied, but the finished prescription gives satisfaction in every way. It is true they are violating the pure food and drug laws, as well as the state pharmacy law when they substitute a non-alcoholic simple elixir for the U. S. P. preparation without the doctor's permission. Can we not, if the reason is worth while, make our vehicle diluent non-alcoholic, devising a satisfactory name and formula and then have the pharmacist, whenever necessary, add enough alcohol to the prescription to make the finished preparation a correct pharmaceutical product. If you examine the elixirs of the National Formulary you will notice that a large number do not designate simple elixir, but direct the use of the proper proportion of alcohol to make the preparation.

My personal experience is that the bromides and salicylate are prescribed with a diluent that has less alcohol than simple elixir.

This leaves Elixir Terpin Hydrate. If this preparation is the only one left, the Federal Prohibition Department should consider the medical value of the preparation and exempt the preparation from any restrictions. If not, the preparation must go. Pharmacy cannot afford to be in any position where its good name and intention can be questioned. I feel that all these U. S. P. and N. F. preparations, as now made, must be revised.

It is my opinion that there are few preparations that were more useful than Tincture of Ginger. As a household preparation, it was useful as a medicine. The abuse of these preparations by dealers and the lay public is too well known to be repeated here.

We have been without Tincture of Ginger for sale over the counter or on physicians' prescriptions without liquor form 1403 for about five years. A little more peppermint or fluidextract of ginger is sold.

To conclude—let us change or eliminate these preparations, keeping all our U. S. P. and N. F. preparations unfit for beverage purposes, made and sold only as medicines.

A REVIEW OF FIVE HUNDRED PRESCRIPTIONS.*

BY A. C. TAYLOR.¹

To determine the problems that arise in compounding, observed from a viewpoint of occurrence; to establish the value and importance of each in college training, and the developing of questions in practical pharmacy for a Board Examination.

The prescriptions were all filled during last February and do not include prescriptions for biologicals. In nearly every case biologicals were called for verbally, phoned for, or the name written on a piece of paper. I had no record of them except that which was imperfectly determined by inventory and invoices. The number sold during the same period I estimate to be 17 units. I also filled 25 liquor prescriptions during the same period. The biological group required knowledge of product, attentive and careful selection, ability to price properly, and an acquaintance with the source, method of preparation and therapeutic value. The 25 liquor prescriptions plus the 123 containing narcotics, and 4 containing chloral hydrate, which are governed by a clause in our local pharmacy law, make 152 times that the problem of possible law entanglement confronted us. That brings the total number of prescriptions under consideration to 542, which number must be considered when arriving at percentages.

It is a generally accepted idea among Board members that the function of the examining board is to find out if a candidate will be a safe person to practice pharmacy. The proprietor of the pharmacy expects that the Board of Pharmacy has determined not only that the person holding a certificate as "Registered Pharmacist" is a safe person to practice pharmacy, but that he has acquired manual dexterity and skill; that he has learned to use in a practical way, the mental knowledge acquired during his college course. He expects this man to be thoroughly capable to handle any problem that may arise during the compounding and dispensing of medicines. He expects that the Board has determined his ability to fill prescriptions and dispense medicines correctly, promptly, neatly, legally and at a profit.

Now that pharmacy has lost a most valuable aid to pharmaceutical training—the old-time apprenticeship—the colleges must give more serious attention to the training of the student in practical work; work that the graduate must immediately commence to do as soon as he becomes a registered pharmacist. The filling of prescriptions is beyond argument the dominating work in a pharmacy. To ascertain if this graduate has acquired the proper amount of dispensing skill the Board subjects him to an examination in practical work. That usually consists

* Section on Practical Pharmacy and Dispensing, A. Ph. A., Baltimore meeting, 1930. No discussion.

¹ Washington, D. C.