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THE
PHARMACEUTICAL ERA

(ISSUED MONTHLY)



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44 GERRARD ST. E.
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EDITED BY

EZRA J. KENNEDY, Ph. C.

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THE COAL-TAR INDUSTRY

In the dye market the seeker after information is told that the industry of making colors is "almost able to walk alone," a statement that is further emphasized by the fact that makers are not only offering a fuller range of colors, but they are quoting lower prices. Such a statement two years ago would have been looked upon as representative of the impossible, but the continuation of the war in Europe has changed former existing conditions and thrown us upon our own resources. There has been great industrial development along all lines of business, but particularly in that known as the coal-tar industry, the story of which is very interestingly told on another page of this issue of THE ERA by John F. Queeny, a manufacturer who speaks from experience and first-hand knowledge, and who would have the average individual understand what he has to say.

That the products of coal tar are utilized in many other fields than those pre-empted by the dealer in drugs and dyes becomes quickly apparent as one studies the "genealogical tree" reproduced in Mr. Queeny's article. The coal-tar synthetic is almost ubiquitous in its ramifications, and its application extends to almost every sphere of human endeavor. This movement needs to be continued, and the coal-tar industry should be put upon a workable basis, for it has already been demonstrated that if it can be thus maintained, it will add to our country's wealth and help its legitimate prosperity. So organized, as Mr. Queeny sees it, we can then "undersell Germany not only in our own markets but in the markets of the world. A large natural resource will be conserved, profitable employment will be provided for thousands of our own people, and the question 'Why do we not make our own dyes?' will be answered."

LIFE OF THE PER CAPITA PERSON

The statement made by a member of the Association of Life Insurance Presidents at the recent meeting of that organization in this city that the American people consume 75,000,000 pounds of drugs each year is interesting, although it is doubtful whether the average individual who wants to insure your life has any better means of getting at the real facts than any one else. But when we are told that the average citizen has increased his consumption of alcohol since 1860 from 6.4 to 19.8 gallons

and that this increase has raised the death rate among moderate drinkers 18 per cent and among the steady drinkers 86 per cent, we begin to believe that our informant has been studying statistics and that his conclusions are worthy of some credence. The per capita person, as the insurance man sees him, is one who hurries to his death, arriving at his finish and the age of forty-three years simultaneously. He is trying, with the aid of new knowledge and inventions, to crowd the experiences of two lifetimes into one. He is having some success, but the strain is telling on him. His hair has aged and he is getting bald. Other indications show that he is seriously overstraining his heart, arteries, kidneys, nerves and digestion. The patriarch's three score years and ten hold out for him no visions of ripe old age. But as pharmacists let us think twice before we concede that the rush of our per capita friend is all due to the excessive use of drugs and alcohol. These substances may be accelerators but there are many other contributing causes.

THE NARCOTIC SITUATION

In this issue of THE ERA appears an article on the narcotic situation embodying the views of Charles B. Towns; whether it meets the approbation of the average druggist or not, it is worthy of careful perusal and of the earnest consideration of all persons who are endeavoring to place the control of the narcotic evil into competent hands. In the exposition of his subject the author brings much positive information concerning the evils created by the use of habit-forming drugs. Credit also must be given to him for his candor, for he lays his cards upon the table in full view to show that he has no ulterior motives in waging war against this great evil. His strongest argument, it seems to us, is that relating to the care and treatment of habitues, a project that is receiving the attention of many physicians, sociologists, and legislators.

Interest in the control and sale of narcotic drugs is becoming more and more pronounced throughout the entire country at the present time. In New York City a committee of the State legislature has been holding hearings in its attempt to investigate this nefarious traffic, with a view to providing remedial legislation. Strange as it may appear, the preponderance of evidence presented at these hearings seemed to establish the fact that the evil is spreading, notwithstanding the satisfactory results which had been derived from an enforcement of the Harrison anti-narcotic law and the Boylan act of the State. In Massachusetts, at the recent meeting of The New England Association of Boards of Pharmacy, this illegal traffic was the main subject of discussion, and the officials were unanimous in the opinion that every effort should be made to eradicate it. The officials went on record as being determined to suppress all illegal sales, so far as they relate to the conduct of drug stores, and that they would use their best endeavors to close up all pharmacies that refuse to comply with the State laws and regulations. From other sections come similar reports and it is safe to predict that all of the incoming legislatures will be called upon to provide legislation to eliminate the traffic in nar-

otic drugs and the train of evils that follow in its wake.

The relation of these facts is sufficient to show that the trend of this proposed legislation is unmistakable, and whether physicians or pharmacists may oppose it or not, more onerous restrictive measures for the regulation of the traffic are bound to be enacted. Not only are illegal methods of sale likely to receive attention, but methods and results of treatment of drug victims in hospitals where, it is asserted, many addicts have died because of the incompetence or ignorance of their caretakers, are to be investigated. All humanitarians will agree with Mr. Towns when he says that responsible authorities must see that "this type of sick man shall not in the future be trafficked in by the medical practitioner, by the sanatorium, or by anyone else who may claim to treat such people." The admission that such conditions exist furnishes a curious commentary on our present day civilization. Theoretically, at least, every individual is an asset to the State whose duty it is to afford him the greatest possible protection from the forces which would retard his development or assail his well-being. The logic of the situation demands that the further creation of victims shall be made impossible, and that those who have fallen by the wayside should be reclaimed by wise and judicious reformatory treatment.

ALCOHOL FOR COMMERCIAL PURPOSES

When Congress several years ago passed an act providing for the denaturing of alcohol, predictions were freely made that such legislation opened up a new era of prosperity for the country. Ordinarily alcohol possesses such valuable properties of a chemical nature, solvent powers and heating value, that next to water it was really the most valuable liquid known. But the use of the rectified spirit as a beverage precludes its utilization generally in the industrial arts, owing to the necessity of making it an article of taxation in the belief that such treatment tends to decrease the quantity consumed for beverage purposes.

It is a matter of history that until January 1, 1907, the United States was the only manufacturing country in the world of any importance that made no distinction between alcohol as a beverage and alcohol as an industrial substance. For years previously Germany had freed alcohol to the industries, which gave to that country advantages in certain industries that were not possible here, and as a result that country attained a position with which we could not compete. Ten years ago our Government took the initial steps to make alcohol free to the industries by providing processes for denaturing it, and thus relieving it from the imposition of the internal revenue tax. By this means, it was hoped, its use would be made possible for all sorts of manufacturing operations, and many industries were to be emancipated from the burden of taxation. Chemical production was to be accelerated and commercial projects were to develop that had never before been profitably worked in this country. The alcohol to be denatured could be easily made from unlimited quantities of raw ma-

terial, most of which had been allowed to go to waste, while the distilling apparatus for the manufacture of alcohol was so inexpensive and simple, that almost any one could set up his plant and become a distiller.

But in the practical solution of the problem of providing the industries with cheap alcohol the Government found it necessary to surround the manufacture of the denatured product with many restrictions, so that production other than that made in a large way was practically impossible. Whether experience will enable the authorities to provide opportunities for increasing the number of manufacturers without surrounding them with too many onerous details is yet but a partially solved problem.

That the field for the use of denatured alcohol is becoming more and more extended, there is no reason to doubt. From Miami, Fla., comes word that a company there has been organized to manufacture alcohol on a large scale, and it is stated that preliminary experiments at Davie, in the same State, have shown that alcohol for fuel purposes can be produced for from 5 to 5 1-2 cents per gallon. At this rate its use would compare favorably with that of gasoline. Of course, most authorities assert that the fuel efficiency of gasoline is greater than that of alcohol, volume for volume, but the difference is small. Alcohol has one advantage, however; it is almost non-explosive, and it lacks the offensive odor of gasoline, both before and after combustion. It is said to be cleaner, also, in its effect on the internal economy of an engine.

But this is only one application of the use of cheap alcohol, although dozens of industries can be mentioned in which its employment is extending. In the manufacture of varnishes, celluloid, dyes, explosives, etc., its use as a solvent is most important, and the increased consumption in these industries during the past two years is a strong argument why the alcohol industry should be further extended in this country. There are many factors that enter into the development of manufacturing industries and the greatest freedom should be allowed in utilizing the wealth of raw material from which alcohol can be made and which is to be found on nearly every farm and plantation.

The scarcity of drugs throughout the world during the last two years has been productive of greater effort in the domain of original research. Botanists have been scouring the countries in both hemispheres for various forms of plant life that could be utilized in some way to take the place of similar products eliminated from commerce through the continuation of the European war. This necessity has become the mother of invention. Chemists have evolved processes in which sodium compounds have taken the place of corresponding potassium salts, while the worker in leather has called upon the flora of the tropics for his tannin and vegetable dyes. The pharmaceutical chemist has had his problems to solve, and that he has had some success is evident from many directions. He has found that the plant *Datura alba*, which grows wild in almost every part of the Philippine Islands, contains a considerable quantity of atropine, an alkaloid heretofore ob-

tained in the temperate zone from *Atropa Belladonna*.

Reference has been made in another paragraph to the views of Virginia druggists on the sale of liquors in drug stores in that prohibition State. It would seem that there has been a wide divergence of opinion among laymen, and some division of opinion among lawyers as to whether or not a druggist requiring alcohol for his own pharmaceutical purposes, but not for sale, required the license to a retail druggist provided for under the Acts of 1916 of that State. According to a notice issued by J. Sidney Peters, Commissioner of Prohibition, this doubt has been largely cleared up by a decision of the judge of the Circuit Court of Rockingham County, who decides that a druggist does not require a special license to buy, store and use alcohol necessary to a bona fide drug business, but not for sale. The judge confines such unlicensed druggists to formulas prescribed by the U.S.P. and N.F., and who, in the conduct of their business, are not required by the United States Government to pay the Federal liquor dealer's tax.

Another indication that druggists are looking askance at the question of handling liquors is seen in the proposal of the executive committee of the Detroit Retail Druggists' Association that the legislature of the State be petitioned to prohibit drug stores handling or selling liquor under the forthcoming prohibition regime, for, as most of our readers know, Michigan went "dry" in the recent election. The desire of many druggists to protect their stores from the possibility of becoming illicit sources of liquor supply shows good judgment on their part. The druggists of West Virginia, Virginia, and a few other States have experienced similar feelings with regard to the temptations surrounding the pharmacy in "dry" territory, and that the Detroit druggists would eliminate liquor from their stores shows that they possess sufficient force of character to not only do their own housecleaning but to do their best as citizens to uphold the will of the people as expressed at the last election.

The United States Public Health Service has done much to disseminate information concerning health measures and preventive medicine. Reports of its work during the past year show that it has helped to eradicate trachoma, and reduced typhoid fever, malaria and other preventable diseases. It has also made great strides in clearing up pellagra, that disease of mystery which so long has baffled many medical investigators, but which is now known to be caused by a restricted diet and may be prevented and cured by means of a properly balanced ration. The practical application of this knowledge has already resulted in a reduction of the prevalence of this disease, while further developments in its control are expected.

A complete index to Volume XLIX of THE PHARMACEUTICAL ERA, covering the year 1916, has been prepared and will soon be ready for distribution. Copies may be obtained by subscribers who will send requests for the same to the publishers.

BOOKS REVIEWED

ELEMENTS OF INDUSTRIAL CHEMISTRY. By Allen Rogers, in charge of industrial chemistry, Pratt Institute, Brooklyn, N. Y. 8 vo., 514 pages, cloth, \$3. New York. D. Van Nostrand Company.

This volume is an abridgment of Rogers' Manual of Industrial Chemistry, by forty specialists in various technical and industrial lines, and according to the author, it has been prepared to meet the needs of those teachers of the subject who find that the time at their disposal does not warrant the employment of an extended treatise. As a textbook this work should find a receptive lot of readers, for it comes at a time when increased interest is being taken in all that pertains to the industries dependent upon the application of chemical knowledge. The book contains twenty-seven chapters, the first three of which relate to general processes applicable to most industries; water, its uses and purification, and fuels. The remaining chapters discuss the products manufactured in the various industries, the text being largely descriptive, although sufficient theory has been included wherever necessary to help the student to a proper understanding of the subject. As a reference work for the pharmacist it should prove most serviceable, as it will give him much valuable information that is closely related to the products used in his own calling. The volume contains 117 illustrations.

THE CHEMIST & DRUGGIST DIARY for 1917.

This volume marks the 49th year of publication, and like its predecessors, contains a vast amount of information of interest to the English chemist and druggist, besides a plethora of advertising that would gladden the heart of any American publisher. Thus we find postal information, a list of British drug trade associations, a directory of London metropolitan medical institutions and information relating to British excise duties, exports and imports, enemy firms in liquidation, the "reading matter" proper concluding with a "legal and pharmaceutical section," the most interesting part of which is the "encyclopaedia pharmacologia," being a digest of decisions relating to the practice of pharmacy. The products advertised cover a very wide field and all are carefully indexed. The Diary is published by the London Chemist & Druggist and is sent postpaid to all subscribers of that journal.

LESSONS IN PHARMACEUTICAL LATIN and Prescription Writing and Interpretation. By Hugh C. Muldoon, Ph.G., instructor in organic and analytical chemistry and Latin in the Massachusetts College of Pharmacy. 12 mo., 173 pages, cloth, \$1.25 net. New York: John Wiley & Sons.

LATIN FOR PHARMACISTS. By George Howe, Ph.D., professor of Latin, University of North Carolina, and John Grover Beard, Ph. G., assistant professor of pharmacy, University of North Carolina. 12 mo., 134 pages, cloth, \$1. Philadelphia, P. Blakiston's Son & Co.

If one is to judge by the number of books that have been recently published on medical and pharmaceutical Latin, the language of the Caesars still holds a prominent place, notwithstanding the fact that a certain Chicago professor came out strongly less than a year ago with a plea for writing prescriptions in English. The practice of ages is not to be so easily uprooted, and our medical and pharmaceutical students are likely to continue the study of Latin for some years to come. The publication of two books on the subject, almost simultaneously, seems to emphasize this conclusion, and so far as acquiring a knowledge of the Latin grammatical forms is concerned, it would make very little difference to the student which of these books he might select. Both develop the subject in a progressive manner, and the authors of each are equally awake to the necessity of making the non-Latin student familiar with pharmaceutical terminology. In Professor Muldoon's book particular attention is devoted to the writing of titles, while detailed explanation of metric prescriptions is given, as also the requirements of "Harrison Law" prescriptions. In both books special attention is directed to the writing and reading of prescriptions, and both carry comprehensive Latin-English and English-Latin vocabularies.

ANNUAL REPORT OF THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE OF THE UNITED STATES for the fiscal year 1916. 8 vo., 421 pages, cloth. Washington, D. C.

This report contains an account of the operations of the Public Health Service set forth in the following order: Scientific research, foreign and insular quarantine and immigration (maritime quarantine); domestic (interstate) quarantine; sanitary reports and statistical; marine hospitals and relief; personnel and accounts; miscellaneous. Among the investigations prosecuted by the division of pharmacology of the Service during the year were the following: Isolation of vitamine from brewers' yeast; toxicity of heavy metals; standardization of drugs; examination of life-saving devices; cocaine substitutes, etc.; the work of the division in preparing the digest of comments on the U. S. P. and N. F., and the digest of laws and regulations relating to poisons and habit-forming drugs, being familiar to most druggists. There are now on duty connected with the Service 50 pharmacists rated as follows: Pharmacists of the first class, 28; second class, 16; third class, 6.

A LABORATORY GUIDE FOR GENERAL BOTANY. By C. Stuart Gager, director of the Brooklyn Botanic Garden. 12 mo., 191 pages, cloth 90c net. Philadelphia, P. Blakiston's Son & Co.

According to the author, this laboratory guide is intended for the use of students in their first course in universities and colleges, or other institutions doing work of similar grade, and it has been prepared in harmony with the theory that the beginning student needs to learn in first laboratory course, not merely botanical facts, but how to observe and how to record his observations. In the introductory section of the work the student is informed of the nature and purpose of laboratory work with instructions relating to note books, laboratory drawings, and using the microscope. Part I is devoted to the anatomy and physiology of the plant, while Part II covers the morphology and life history of the plant. The order of topics follows that adopted in the author's Fundamentals of Botany reviewed in the November ERA of last year, page 456. The book is well printed and quite free from typographical errors, although we note one "slip" on page 151 in the eleventh line where the word "microscopes" meets the eye instead of "microspores."

MANUAL OF CHEMISTRY. A guide to lectures and laboratory work for beginners in chemistry. A text-book specially adapted for students of medicine, pharmacy and dentistry. By W. Simon, Ph.D., M.D., late professor of chemistry in the College of Physicians and Surgeons of Baltimore, etc.; and Daniel Base, Ph.D., professor of chemistry in the Maryland College of Pharmacy, department of the University of Maryland. Eleventh edition, thoroughly revised. 8 vo., 648 pages, cloth, \$3.50 net. Philadelphia and New York, Lea & Febiger.

Simon's Chemistry has been one of the standard text-books adopted by many colleges teaching medicine and pharmacy, its usefulness being attested by the fact that ten previous issues, each in several large printings, have been exhausted. This would command attention in any consideration of the book, but the fact is that the authors have "sensed" the needs of the students in these related fields, and have placed before their readers the dominant facts of chemical knowledge in a clear and concise manner.

In this edition, the former chapters on light and electricity have been omitted from Section I, the articles on the spectroscope and the polariscope being placed in the appendix. Section II treats of general chemistry, the matter falling into two subdivisions, the first of which treats of non-metals, and the second of the metals. Section III is devoted to analytical chemistry and is intended to serve the student as a guide in his laboratory work. Qualitative methods are chiefly considered, but a chapter on quantitative determinations by volumetric methods is also included. Section IV treats of organic chemistry, the section on physiological chemistry having been dropped, teachers of this subject preferring, the authors state, a separate text in which a more extended treatment can be given. The chapter on proteins is retained, however. Viewed from any angle, Simon's Chemistry is accurate in statement and comprehensive enough to satisfy all of the requirements of "a textbook for students of medicine, pharmacy and dentistry."

The Coal Tar Industry

Value of Raw Material Wasted Ample to Build a Navy or Equip an Army—Industry Important in many ways besides for Medicines and Dyes and should be Firmly Established and Thoroughly Organized in America.

By JOHN F. QUEENY

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COAL TAR! What does that word suggest to you? The chances are that the first thing you picture to yourself is the smoky, smelly tank of melted tar used in street repairing. Give your imagination free rein and, nowadays at least, you can conjure up all kinds of reds, and blues, and greens, and sigh as you reflect how the scarcity of dyes has affected the high cost of living! A third idea may suggest itself—that of poison, a dreadful, deadly poison, something foul and mysterious, something to shun and avoid. True, coal tar is, as a recent writer has stated, a "black evil-smelling liquid," and as everybody knows, it is the raw material from which dyes are derived.

A lump of coal appears to be solid but in reality it consists of only one-half to two-thirds of solid matter. The other half or third is liquid and gas and can be boiled out of the coal just as water can be boiled out of molasses. Of course, a much higher temperature is required, and this makes it necessary for the process to be carried out in a closed retort in order to exclude air and thus prevent burning the distillate.

The destructive distillation of coal, as the process is called, was originally carried out for the single purpose of manufacturing illuminating gas. The coal tar which condensed and accumulated in the mains and scrubbers of gas-works, was a source of trouble and expense until Perkin, an English chemist, in 1856, discovered that coal tar could be used as a source of raw material for making mauve, a delicate purple dye for silk. The first coal tar dye factory was built in England, but the Germans, quick to see the vast possibilities of such an enterprise, soon took up the matter, and it is to them that we owe the wonderful story of the development of the coal-tar industry, a story which in accomplishment of the impossible rivals the fairy tales of childhood.

U. S. Should Lead in Coal-Tar Production

More recently a second and greater source of coal tar has been developed. When the growth of the iron and steel industry made it evident that the supply of charcoal necessary for the recovery of pig iron from iron ore in the blast furnace was limited, a substitute was found in coke, the solid residue from the destructive distillation of coal. Condensation of the liquid products given off in the coking process yields coal tar. Leading the world as the United States does in the manufacture of iron and steel, it should follow logically that we would lead in the manufacture of coal tar and coal tar products. But such is far from the truth. Until within the last few years practically all the metallurgical coke manufactured in our great steel centers was made in the wasteful bee-hive oven, a device which allowed all the valuable gas and coal tar to go to the four winds and become a nuisance instead of a useful economic asset. In the nineties the first by-product coke-ovens, a type of oven which saves the coal tar given off in the distillation, were installed in this country. Since that time the number has but slowly increased. The result has been a shameful and needless waste of nature's stores that should be a cause of humiliation to any country. Of the 69,000,000 tons of coal coked in the United States in 1913, 52,000,000 tons were coked in bee-hive ovens and everything but the coke wasted; while only 17,000,000 tons, less than one-quarter of the total amount, was coked in by-product ovens, and the gas-ammonia and coal tar saved. The value of the coal tar that has been ruthlessly wasted in this country would be ample to build a navy and equip an army, such as we ought to have, and in addition, provide for the maintenance of an adequate national defense. Why all this dissipation of

natural resources? There have been many contributory causes but it has been largely due to the shortsightedness of our people and government in not recognizing the vital importance of the coal-tar industry and encouraging and fostering it until it is able to take care of itself.

COAL

AMMONIA GAS (Used for heating and lighting.)	LIQUOR (Fertilizer, re- frigeration, household amonia.)	COAL-TAR re- (Dyes, medi- cines, food pro- ducts, perfumes, and steel.)	COKE (For the manu- facture of iron and steel.)
		motor fuel, photographic chemicals, dis- infectants, wood pre servatives, explosives.)	

Fig. 1—Products of the Destructive Distillation of Coal. European Contest a "Coal-Tar War"

The present European war has been referred to as a chemical war. It could be just as appropriately spoken of as a coal-tar war. Fuel for motors; high explosives for the huge shells hurled by the big guns; food products, such as saccharin to supplement the dwindling sugar supply; antiseptics and medicines for the hospitals that are returning ninety per cent of the wounded to the fighting lines—all these are products of the coal-tar industry. In these days when the need of a national defense is so keenly recognized, the importance of a well-developed coal-tar industry to such a defense must not be overlooked, and patriotic, as well as economic considerations, demand that no steps should be neglected to establish such an industry.

We hear a great deal in the public press about coal-tar dyes, which are glibly referred to as coal-tar derivatives. The fact is that dyes comprise but a very small and rather insignificant part of the coal-tar industry. A noted American chemist used an apt comparison recently when he said that the price of the dye which goes into a suit of clothes was about that of a good cigar. It would be much easier for the country to get along without dyes than to deny itself the other important substances that are derived from coal tar. Local anaesthetics, such as novocaine, stovaine, anaesthesin, better suited to many purposes than cocaine itself; antipyretics or fever specifics, such as acetanilide, aspirin, acetphenetidin, triphenin, phenocoll, neraltein, pyramidon, trigemine; specifics, such as adrenaline and epinine for Addison's disease; soamin and arsacetin for sleeping sickness; salvarsan or "606" for syphilis; and the excellent laxative, phenolphthalein, are but a few of the many useful coal-tar medicinals. Sweeteners, such as dulcin, sandoce, and saccharine which is five hundred times sweeter than sugar; essences, like cinnamon, almond oil, oil of winter-green and coumarin; photographic developers, among which are unal, amidol, glycin, adurol, kachin, and reducin may be mentioned; high explosives, for example, lyddite, melinite, cresilite, and T. N. T.;—these constitute a very small number of the many useful and indispensable coal-tar products. However, it serves to illustrate the wide range of substances that may be obtained from coal tar, among which dyes, despite the public attention given them of late, must play a minor role.

We speak of these substances as coal-tar derivatives, but they are derivatives in much the same sense as an automobile is a derivative of iron ore, or a pipe organ is a derivative of a tree. The coal tar supplies the raw product, as iron ore yields iron, or a tree lumber, but

COAL-TAR

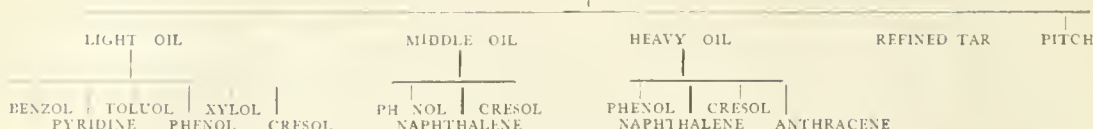


Fig. 2—Crude Products of Coal-Tar Distillation.

other materials must be used, and much labor expended before the finished product is obtained, and such a finished product as anisic aldehyde, the delicate perfume of the hawthorn, or phenyl acetic aldehyde, the fragrant odor of the hyacinth, bears far less resemblance to the original coal tar than does the dulcet toned organ in the hands of the master to the rugged tree that supplied its parts. A blacksmith usually has a junk pile which he uses for repair parts. If he wants a wheel, a gear, a spring, an axle, a rod, or what not, he can likely supply his need from the junk pile. Coal tar is the junk pile of the chemical manufacturer. Instead of wheels, gears, springs, etc., coal tar supplies him with benzene and pyridine rings, methyl, hydroxyl, carboxyl, and amino groups, etc., and their various combinations. Leaving out of consideration the many dyes that are not in fashion, there are generally on the market in this country in normal times more than 900 different coal-tar dyes. The number of coal-tar products known at the present time is far up into the thousands, and more are constantly being discovered. All of these are made from less than a dozen different substances that are found in the raw tar, namely: benzol, toluol, xylol, phenol, cresol, pyridine, quinoline, naphthalene and anthracene.

The Preparation of Coal-Tar Products

When it is desired to prepare artificially from coal tar some natural substance, the first problem which confronts the chemist is to obtain the substance in a pure form. He now proceeds to tear the molecules of the compound apart by suitable chemical reaction, and thus determine just what groups, such as methyl, carboxyl, amino, etc., go to build up the molecule; and further, exactly how these groups are placed with reference to each other. With some compounds this has been a fairly easy matter, while others have required the thought and work of many chemists for years before the mystery of the structure of their molecules has been solved. Camphor, for example, was investigated by many different chemists during a period of thirty years before its true structure was definitely established.

After determining the structure of the compound, the next task is to succeed in putting the different groups together, by chemical means, in the correct way and thus produce the compound artificially, or, in other words, synthesize it. The whole task may be likened to a jeweler first taking a strange make of watch apart to see how it is arranged, and then selecting suitable wheels, springs, jewels, cases, and pinions from the miscellaneous parts at his disposal and putting them together in such a fashion as to duplicate the original. He synthesizes a watch. The watch corresponds to the molecule of a chemical compound, and the wheels, springs, etc., to the various chemical groups that comprise the molecule.

Let us carry the figure a bit further. It is quite likely that in trying to synthesize his watch, the jeweler might hit upon some other combinations of parts that would produce another kind of watch which would be entirely new. This has happened many times to the chemist, and new compounds that do not occur in nature, but which have proved to be very useful, have been discovered. The

powerful sweetener, saccharin, discovered by Dr. Ira Remsen of Johns Hopkins University, Baltimore, and the laxative, phenolphthalein, discovered by Professor Adolf von Baeyer of Munich, are but two such cases.

It takes clay and timber and iron to build a house, but they cannot be used for that purpose in the crude form. Clay must first be made into bricks, timber must be sawed into lumber, and iron drawn into nails. So it is with coal-tar and its products. The dozen different substances, referred to above as obtained directly from coal tar, are called "crudes" by the chemical manufacturer. They are the clay, timber, and iron of the coal-tar manufacture. Before they can be used to make a finished product, they must be changed into other substances like benzoic acid, salicylic acid, benzaldehyde, phthalic anhydride, toluol-sulphamide, nitrobenzene, aniline, and many other substances. These are called "intermediates." They are bricks, lumber, and nails of organic chemical manufacture. The complexity of the manufacture of a finished coal-tar product can be illustrated by the genealogy of indigo (Fig. 3).

Intermediates Formerly Were Imported

Before the present European war practically all intermediates were imported, chiefly from Germany; and this in spite of the fact that we were annually wasting millions of dollars' worth of coal tar. Why was this done? The answer is a simple one, and an illustration will make it clear. One substance, phthalic anhydride, is an intermediate for the dye, indigo, and for the laxative, phenolphthalein. Manufacturers of phenolphthalein in this country could import phthalic anhydride from Germany much cheaper than the relatively small quantity required could be manufactured here. In Germany a vast quantity of phthalic anhydride was required by the dye industry, and phthalic anhydride like everything else can be made much cheaper in large quantities than in small amounts. From this it can be seen that the manufacture of dyes and of medicinals is very closely related. There is another relation: by-products from the manufacture of medicinals are often the intermediates for the manufacture of certain dyes, and vice versa. The manufacture of all coal-tar products, whether dyes, medicinals, foods, or explosives, are very closely related one to the other in the way indicated above, and we cannot develop one branch of the coal-tar industry successfully without developing all.

In the last two years we have learned the economic folly of depending upon a single country for any class of commodities. How much worse such a condition would be in case we were one of the belligerents! We are very much awake today to the necessity of a domestic dye industry. To have this we must develop a great and intricate organic chemical manufacturing industry. When this is accomplished, and not before, will we be able to compete with every nation in coal-tar products, and the deplorable waste of coal tar will be at an end.

Wonderful Development Since 1914

Since 1914, organic chemical manufacture has undergone a wonderful development in this country, but it is a matter of years to establish such an intricate industry firmly. It took Germany forty years. Accordingly, should the war end within a year, two years, or five, Germany would be

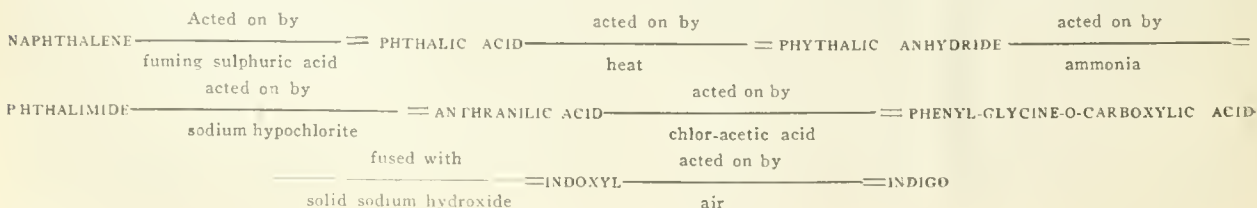
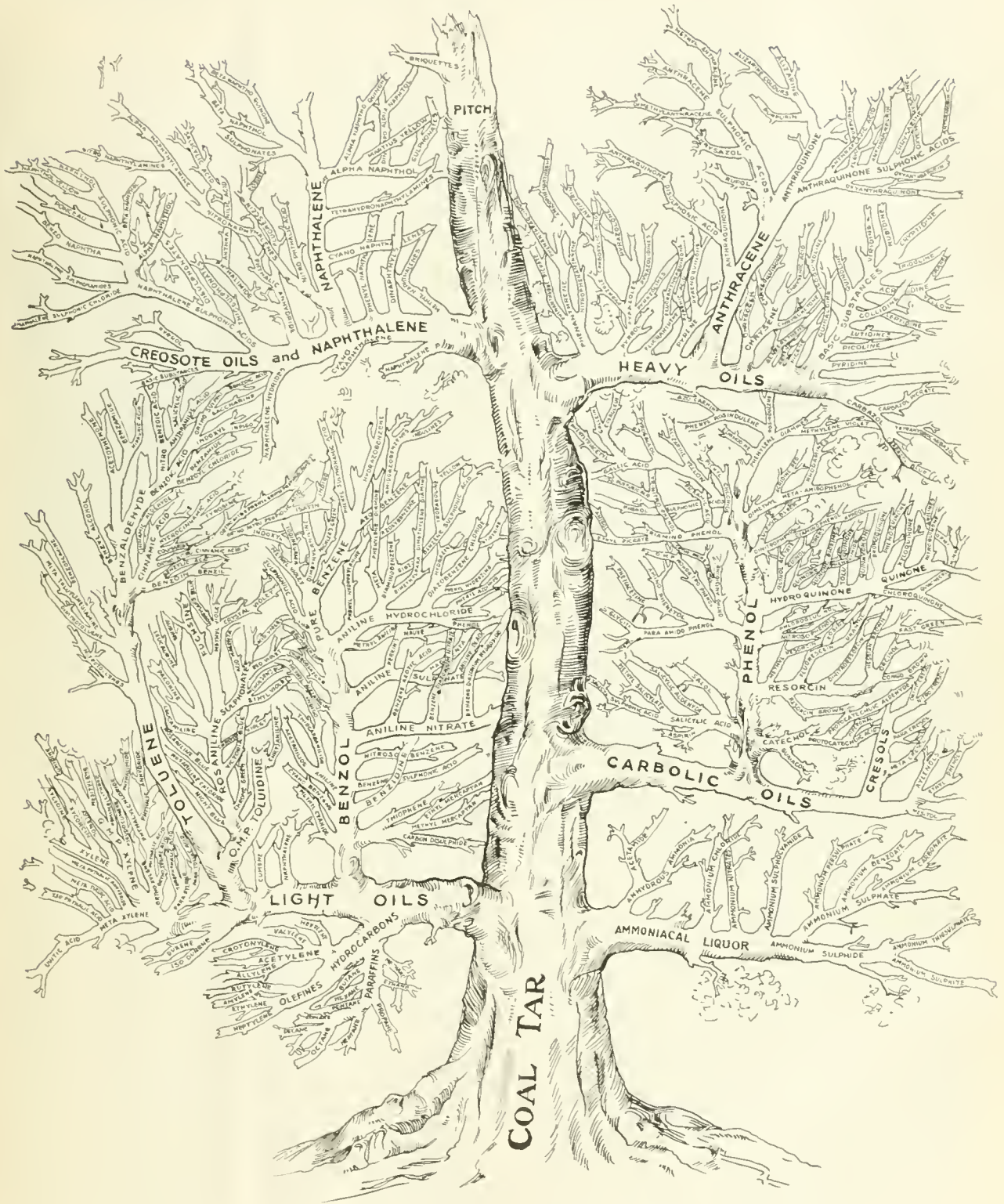


Fig. 3—Genealogy of Indigo.



The Coal Tar Genealogical Tree

able to crush out by competition all the progress we have made thus far in coal-tar manufacture. The arrival of the merchant submarine, *Deutschland*, with a cargo of dyes recently, is Germany's reminder that she is going to do all in her power to crush out such an industry when peace unties her hands. She has done it in the past. At one time a chemical substance, chloral, was being manufactured in this country. German chemical manufacturers decided to

crush this "upstart" enterprise. They lowered the price of German chloral below all competition, doubtless making up the loss by raising the price elsewhere, and kept it there until the American manufacturer was forced to abandon his plant. The price of German chloral then soared sky-high and stayed there. Just as in the case of chloral, we will pay more for our coal-tar products in the long run if we buy them of Germany instead of making them ourselves.

GIVING PRICES IN TRADE-JOURNAL COPY

(From Printer's Ink.)

A retail merchant has asked "Printer's Ink" why manufacturers so seldom quote prices in their trade-paper advertisements. He says that by far the greater proportion of all advertising that is directed to the retailer contains no prices, and that for this reason it fails to convince many who might otherwise be interested in the merchandise described.

"The way to sell goods through trade-paper advertisements," declares this dealer, "is to describe them in detail, explain the selling helps and give the cost. The first thing the retail merchant must know about a product is what it is going to cost him. He needs to know whether the difference between the retail advertised price and his wholesale cost allows him a living profit. If this cost is not mentioned, the merchant cannot be blamed for thinking it is so high that the manufacturer is afraid to state it. No doubt I have passed by opportunity after opportunity and bargain after bargain, but because of the absence of a price in the advertisements I did not know what I was missing."

This merchant raises a question that is in the minds of thousands of other retailers. When manufacturers advertise to the trade, why do they usually fail to quote their prices? In not doing so, are they not neglecting something that would make their advertisements much more effective? Apparently, yes; but still there are excellent reasons why manufacturers find it inadvisable to quote prices. The principal reasons are that comparatively few manufacturers have a uniform schedule of prices that applies in all territories, to all buyers and under every condition. Nobody regrets this more than the manufacturers themselves. If they could quote a uniform price that would apply to everybody, everywhere, it would relieve them of many of their worries. This question of price is an extremely intricate one. It is influenced by many factors, such as markets, quantities, location, competition, freight rates, policy and other things peculiar to every manufacturing business. While the price to any one class of trade or in any specific territory may be fixed, a slightly different price may apply somewhere else. Therefore, if, under these conditions, the manufacturer were to publish a price broadcast, it would cause so many complications that a score of trained diplomats would be required to adjust them.

The jobber-relation is another reason why manufacturers do not quote prices in their trade advertisements. The price list of the manufacturer may be uniform, f.o.b. his factory, but if the goods are sold by jobbers the chances are that there are some price variations.

Many manufacturers could advertise the prices that apply to most of their trade and not cause any complications, but they dislike to circulate widely a quotation that is not their best price. Undoubtedly it would reach readers who are entitled to the lower quotation and influence them unfavorably. Furthermore, a published price that is not as low as certain factors in the trade are entitled to would be a dangerous piece of information to get into the hands of competitors. They could use it to the disadvantage of the advertiser. Similarly, the manufacturer who has quantity discounts, and a lot of manufacturers have, would not care to tell the small buyer about the discounts the large buyer gets. Should the little fellow not notice them, competitive salesmen would be sure to call them to his attention. It hurts any buyer to learn that someone else is getting a lower price than he is.

So, evidently, this retail merchant touches a ticklish subject when he asks why most manufacturers do not quote prices in their trade advertising. Or course, in the main, his point is well taken. There is no denying the fact that advertisements to the dealer are vastly more resultful when net prices are quoted. This would suggest to the manufacturer the advisability of quoting prices in trade advertising whenever it can be done. Retailers quite naturally resent the way manufacturers needlessly withhold prices from their selling literature. It causes unnecessary delay and inconvenience in ordering through the mails. Where manufacturers can clear away the objections and lay their prices face upward on the table they will get a greater dealer-response from trade-journal and direct-advertising appeals.

Competition from Germany is not the only obstacle that confronts the manufacturer of finished coal-tar products. The manufacturer of such products in America today is a pioneer. Our chemical laboratories are familiar with most of the chemical reactions involved but the production of a substance in large quantities on a commercial scale is a very different thing from making it in small quantities in the laboratory. German chemical plants carefully guard against the dangers in manufacture that experience has taught them, and the American manufacturer is constantly encountering dangers in his plant that the laboratory cannot reveal. Overcoming such dangers often means an enormous expenditure of time and money, and even then many of them cannot be overcome. Chemists in their laboratories have worked for years with benzol, and none have dreamed of the danger that lurks in its use in large quantities. When subjected to the fumes of benzol for a long period of time with his clothing frequently wet by the liquid, the workman, if his habits of cleanliness are not the best, often suffers serious and insidious systemic derangements. This will probably prove to be the case with many other substances regarded at present as entirely harmless which must be handled in large quantities in the manufacture of coal-tar products. Time and experience only will discover these. Already chemical manufacturers in this country are taking stringent and drastic steps to meet and forestall such difficulties. It has been found necessary to provide workmen with better shoes than they will provide for themselves, to supply them gratis with daily changes of fresh underwear, and to require them to take a bath daily before leaving the plant. Various other sanitary measures have been resorted to, but no one can tell when it may be necessary to inaugurate further regulations to safeguard the health and comfort of the workmen. We may rest assured that American manufacturers will do all in their power and knowledge to minimize these hidden dangers; and should accidents occur, as they are bound to do, we may be sure that the fault does not lie within the present knowledge of the manufacturer.

Government Aids the New Industry

Since September 8, 1916, a new tariff revision on coal tar and its products has been in force. This tariff provides for a duty of thirty per cent ad valorem with an additional duty of five cents a pound on colors, dyes, explosives, and photographic chemicals; and thirty per cent ad valorem with no additional specific duty on medicinals and flavors. Intermediates are subject to a duty of fifteen per cent ad valorem and a specific duty of two and a half cents a pound. Crude products of coal-tar distillation are on the free list. It is the evident intention of our government to encourage and build up the dye and explosive industry in this country. The economic and military wisdom of such an intention can scarcely be questioned. In the war for chemical supremacy which is sure to come with peace in Europe, Germany is bound to do all in her power to crush such an industry in this country. The progress made during the last two years has been phenomenal and will doubtless continue until Germany is free to compete with us. Manufacturers claim that without a tariff on crudes and intermediates, as well as on the finished product, the coal-tar industry in this country will be unable to compete with the well-organized and thoroughly established industry of Germany. They point out that as our coal-tar industry approaches maturity it will be more and more able to take care of itself and that the tariff can be gradually removed, until after a period of years, it no longer exists. Whether such be the case or not, only an intimate knowledge of conditions and the course of experience will enable us to judge. On one thing technical men are agreed; the United States of America must have a firmly established and thoroughly organized coal tar industry. We can then undersell Germany not only in our own markets but in the markets of the world. A large, natural resource will be conserved, profitable employment will be provided for thousands of our people, and the question "Why do we not make our own dyes?" will be answered.

The druggists of Sterling and Rock Falls held an informal oyster supper one evening last month. The affair was so successful that the druggists agreed to hold such a gathering every month during the winter. All of the proprietors and their clerks were present.

The Biologicals of the U. S. Pharmacopoeia

By F. E. STEWART, Ph.G., M.D., Phar.D. *

(Continued from the December, 1916 ERA, page 466)

The Antitoxins

WHEN bacteria grow and multiply in the body, symptoms of poisoning (toxemia) are manifested, consequently, it was inferred that bacteria either produced poisons during their growth or contained poisons. Subsequent experiments proved that the poisonous effects

of a few bacteria are traceable to substances elaborated during the growth of the bacteria, which pass out into the surrounding media, and the poisonous effects of the other class seem to be due to the actual constituents of the bacterial cell. To the former the name *exo-toxins* or *extra-cellular toxins* was given, and the latter were named *endo-toxin* or *intra-cellular toxins*.

Among the bacteria producing soluble extra-cellular toxins or *exo-toxins*, the bacillus of diphtheria and the bacillus of tetanus are the most important. When these bacteria are grown on culture media, such for ex-



F. E. STEWART

ample as beef bouillon, the soluble toxins produced are absorbed by the media and become extremely poisonous. When separated from the bacteria and properly standardized, these concentrated solutions of toxin are called "diphtheria toxin" and "tetanus toxin" respectively, and are used for producing the corresponding antitoxins.

The injection of a soluble toxin into the body stimulates the body cells to produce antitoxin. The formation of antitoxins may be briefly explained in the following manner:

It has already been stated that during the immunization of an animal, a specific enzyme or digestive ferment is formed by the body cells which has the power of digesting and destroying the protein which called it into being. In other words, when the white of an egg, or any other protein, is injected into the body tissues, the body cells are stimulated to produce a specific proteolytic enzyme or digestive ferment which has the power of digesting it, but does not possess the power of digesting any other protein substance. Because of this "law of specificity" the injection of bacterial proteins, living or dead, stimulates the body cells to produce a specific enzyme or digestive ferment which has the power of digesting the kind of bacterial protein injected and no other.

The blood serum of an animal thus immunized is called *immune serum*, as already stated. Immune serum manifests four main specific actions, namely, (a) antitoxic action; (b) bactericidal and lysogenic action; (c) opsonic action; (d) agglutination and the closely allied precipitating action. It is therefore assumed that immune serums contain "*antibodies*" to which these actions are due. The antitoxic action is assumed to be due to the presence of *antitoxins*. The bactericidal or lysogenic action is assumed to be due to the presence of *bacteriolyins*. The opsonic action is assumed to be due to *opsonins*, the function of which is to prepare the bacteria for ingestion and digestion by the leucocytes (phagocytosis). The agglutinating action is assumed to be due to the presence of *agglutinins*, which action becomes apparent when the immune serum is added to a small quantity of the suspension of the corresponding bacteria: the organism becomes agglutinated into clumps and motility is suspended or destroyed. When

immune serum is added to a filtrate of a culture of the corresponding bacteria, precipitation results, supposed to be due to the presence of *precipitins*.

The antitoxins are therefore antibodies. They are produced when the corresponding toxins are injected into the body. These toxins are therefore classed as antigens. Antigens are substances which cause the formation of antibodies when injected into the animal body. The antigens include toxins, enzymes or ferments, precipitogens, agglutinogens, opsonins, lysogens, antivenins, agglutinins, complements, opsonins, amboceptors and precipitins.

When the blood drawn from the veins of an animal immunized against an infectious disease, is allowed to clot, the so-called antibodies remain in the supernatant serum. By injecting this serum into the veins of an animal or man (or by injecting it subcutaneously) the contained antibodies are conveyed into the blood of the individual injected and immunity results. This immunity is called *passive* because the immunized individual's body cells take no part in producing it.

Diphtheria antitoxin and tetanus antitoxin are derived from the blood serum of animals immunized against the *toxins* of the diphtheria bacillus and tetanus bacillus, respectively. They do not contain the specific antibodies above enumerated, with the exception of antitoxin.

SERUM ANTIDIPHThERICUM, U. S. P.

Antidiphtheric Serum

Ser. Antidiph.—Diphtheria Antitoxin

A fluid, having a potency of not less than 250 antitoxic units per mil, separated from the coagulated blood of the horse, *Equus Caballus Linne* (Fam. *Equidae*), or other large domestic animal, which has been properly immunized against diphtheria toxin. It must be kept in sealed glass containers in a dark place, at a temperature between 4.5 deg. and 15 deg. C.

A yellowish or yellowish-brown, transparent or slightly turbid liquid, with sometimes a slight granular deposit; nearly odorless, or having an odor due to the presence of an antiseptic used as a preservative.

Antidiphtheric Serum gradually loses in potency, the loss in one year varying between 10 per cent and 30 per cent. The serum must come from healthy animals, must be sterile, must be free from toxins or other bacterial products, and must not contain an excessive amount of preservative (not more than 0.5 per cent of phenol or cresol, when either of these is used), and the total solids must not exceed 20 per cent. Serum of a lower potency than 250 units per mil must not be sold or dispensed. Only such Sera may be sold or dispensed as have been prepared and propagated in establishments licensed by the Secretary of the Treasury of the United States.

The United States law requires that each container of Serum sold or dispensed by licensed establishments shall bear upon the label, in addition to the name of the Serum, the name, address and license number of the manufacturer, and the date beyond which the product cannot be expected to yield its specific results. The label must also contain the laboratory number of the Serum and the total number of antitoxic units claimed for the contents of the container.

The standard of strength, expressed in units of antitoxic power, shall be that established by the United States Public Health Service.

Average Dose—Hypodermic, 10,000 units. Protective, 1,000 units.

Preparation of Diphtheria Antitoxin

Before describing the preparation of diphtheria antitoxin, let us consider for a moment what is going on in the throat of a child suffering with diphtheria. The diph-

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theretic membrane growing in the throat of a child suffering with diphtheria is in fact a culture of diphtheria bacillus together with broken down tissues, etc. During the growth of the diphtheria bacillus in the throat of a patient, the bacilli are producing their soluble toxin. This toxin is being absorbed into the circulation of the patient, resulting in the stimulating of the patient's body cells to produce diphtheria antitoxin. If sufficient antitoxin is promptly produced by the patient's body cells, the toxin is neutralized and prevented from uniting with the nerve tissue of the patient, with which it has a strong affinity. If sufficient antitoxin is not produced by the patient's body cells, the toxin unites with the nerve tissue and poisons the patient. The patient may die from toxemia or from asphyxia, due to the growth of the membrane.

The first step in the preparation of diphtheria antitoxin is the propagation of the Klebs-Löffler bacillus (*Diphtheria bacillus*), the cause of diphtheria. A culture is selected capable of producing a large amount of antitoxin when injected into the body of a horse. Such culture having been obtained, it is used as a mother culture for the production of so-called seed cultures. The so-called seed cultures are planted in test tubes 24 hours before they are needed for use. These cultures are used for inoculating bouillon contained in Fernbach flasks, and are grown on the surface of the bouillon for 6 or 7 days.

After they are inoculated, the Fernbach flasks are placed in the incubating room and kept at about 35 deg. to 37 deg. C. during the time of cultivation. At first the bacilli grow rapidly and at the end of 24 to 48 hours, the surface of the bouillon is covered with a thin pellicle. This pellicle continues to extend, becoming thicker, until it curls under and some of the growth falls to the bottom of the flask. During all this time the metabolic products of growth, that is, the soluble toxin, etc., are being received by the bouillon, which becomes strongly toxic in character. The cultures are now removed from the incubator and the diphtheria germs killed by an antiseptic and filtered out, first through asbestos and then through Berkefeld filters. The filtrate, known as diphtheria toxin, is then standardized and placed in storage in a refrigerating room, ready for use in preparing diphtheria antitoxin.

The next step is the immunizing of horses against the diphtheria toxin. Only healthy horses are used. This is assured by keeping the animals under observation of veterinarians for at least two weeks, and testing them for glanders before they enter the antitoxin laboratory. Previous to injecting the diphtheria toxin into the tissues of the horse for producing immunity, the toxin is standardized on guinea pigs. The toxin injections are made subcutaneously. Because of the differences in susceptibility noted in various horses, only very small doses are at first employed. The intervals between injections depend upon the time necessary to complete subsidence of the reaction produced by the toxin. The doses of toxin are gradually increased until at the end of two or three months, more than ten times the original dose is given.

Horses vary greatly in the strength of the antitoxin which they will produce. Some animals will produce an antitoxic serum, 1 c.c. of which may contain 250 antitoxic units. Another may supply an antitoxic serum containing 800 antitoxic units per c.c. Some horses may produce a serum containing 1,000 per c.c. Park stated that none of the horses used by him has ever yielded 2,000 units per c.c. After the horses have reached the point where the injections are not followed by an increase in the antitoxic power of the serum, the animals are bled. For that purpose, a sharp cannula is introduced into the jugular vein, the horse being prepared for the purpose by being led into a specially constructed stall where it is under perfect control during the operation. The skin is previously shaved and sterilized. The cannula is then plunged into the vein, and, through a sterile rubber tube, the blood is allowed to flow into high glass cylinders protected by parchment covers, as much as five or six liters of blood being drawn without injuring the animal. The cylinders containing the blood are then permitted to remain standing in the blood-clotting room for two or three days, preferably at or below 10 deg. C. At the end of this time, the serum has separated from the clot, which is then drawn off and stored in the refrigerating room. This antitoxic serum, standardized and preserved by the addi-

tion of phenol, cresol or other antiseptic, constituted the antitoxin of commerce until the introduction of Gibson's process for concentrating and purifying the product.

Chemical Composition of Diphtheria Antitoxin

The analysis of diphtheria antitoxin shows that its principal constituents are:

(a) Proteids

1. Fibrinoglobulin, formed from the fibrinogen during coagulation.
2. Euglobulin.
3. Pseudo-globulin, which carries with it almost all the antitoxin.
4. Serum-albumin.
5. Nucleo-proteids.

(b) Inorganic Matter

In addition to sodium chloride, the serum contains minute quantities of phosphates and salts of calcium, potassium, and other metals.

SERUM ANTIDIPHThERICUM PURIFICATUM, U. S. P.

Purified Antidiphtheric Serum

Ser. Antidiph. Purif.—Antidiphtheric Globulins, Concentrated Diphtheria Antitoxin, Diphtheric Antitoxin Globulins, Refined and Concentrated Diphtheria Antitoxin.

A solution in physiological solution of sodium chloride of certain antitoxic substances obtained from the blood serum or plasma of the horse, *Equus Caballus Linne* (Fam. *Equidae*), or other large domestic animal, which has been properly immunized against diphtheria toxin. After the serum or plasma from the immunized animal has been collected, the antitoxin-bearing globulins are separated from the other constituents of the serum or plasma and dissolved in water; and sufficient sodium chloride is then added to make a solution containing from 0.6 to 0.9 per cent of the salt. It has a potency of not less than 250 antitoxic units per mil. It must be kept in sealed glass containers in a dark place, at a temperature between 4.5 deg. and 15 deg. C.

A transparent or slightly opalescent liquid, with sometimes a slight granular or ropy deposit, nearly odorless, or having an odor due to the presence of the antiseptic used as a preservative. The liquid sometimes is more or less viscous. The serum must come from healthy animals, must be sterile, must be free from toxins or other bacterial products, and must not contain an excessive amount of preservative (not more than 0.5 per cent of phenol or cresol, when either of these is used), and the total solids must not exceed 20 per cent. Serum of a lower potency than 250 units per mil must not be sold or dispensed.

Purified Antidiphtheric Serum must comply with the requirements for loss of potency, control, labeling, and standard for potency under *Serum Antidiphthericum*.

Average Dose—Hypodermic, 10,000 units. Protective, 1,000 units.

Preparation of Purified Diphtheria Antitoxin

By means of the Gibson process, or one of its modifications, the antitoxin bearing globulin, known as pseudo-globulin is precipitated from the antitoxic serum and then used for the preparation of "Purified Antidiphtheric Serum" or "Purified Diphtheric Antitoxin."

In the Gibson process the antitoxic serum is treated by the addition of saturated ammonium sulphate solution which throws down the globulin and the serum is discarded. After filtration, the combined euglobulin and pseudo-globulin (the latter containing the antitoxin) are redissolved in saturated sodium chloride solution. The pseudo-globulin is next precipitated from the solution by glacial acetic acid, the euglobulin on solution being valueless, is discarded. The pseudo-globulin, containing the antitoxin is then collected on a filter, dried between filter papers, placed in parchment dialyzers and dialyzed in running water to free it from inorganic matter.

When placed in dialyzers, the antitoxic globulin is a whitish waxy colloidal mass. During the process of dialyzation, it becomes a clear, limpid, straw-colored fluid. This fluid is further purified by passing through several layers

of filter paper and then twice through Berkefeld filters. "Sufficient sodium chloride is then added to make a solution containing from 0.6 to 0.9 per cent of the salt." The next step is the standardization of the Purified Diphtheria Antitoxin by the U. S. Government process, see page 11.

SERUM ANTIDIPHThERICUM SICCUm, U. S. P. Dried Antidiphtheric Serum

Ser. Antidiph. Sicc.—Dried Diphtheria Antitoxin

Dried Antidiphtheric Serum is obtained by the evaporation of either Antidiphtheric Serum or Purified Antidiphtheric Serum in a vacuum over sulphuric acid or other desiccating agent, or by passing over it a current of warm air freed from bacteria. It has a potency of not less than 4,000 units per gramme. It must be kept in hermetically sealed amber-colored glass containers free from air, at a temperature between 4.5 deg. and 15 deg. C., preferably in a dark place.

The Dried Serum is either in the form of orange or yellowish flakes or small lumps, or as a yellowish white powder, without odor. The Serum is soluble in nine parts of distilled water, but the solution is opalescent and slightly viscous; it may be dissolved more readily in larger amounts of distilled water or physiological solution of sodium chloride. Immediately before use the Serum must be dissolved in recently boiled and cooled distilled water under the most rigid aseptic conditions. The solution must be used immediately and if there should be any serum or solution remaining, it must be discarded. Dried Antidiphtheric Serum if kept as directed does not lose potency, as does the liquid serum.

It must comply with the requirements for control and labeling under *Serum Antidiphthericum* and the standard of strength, expressed in units of antitoxic power, shall be that established by the United States Public Health Service.

Average Dose—Hypodermic, 10,000 units. Protective, 1,000 units.

Standardization of Antitoxin

In the preparation of diphtheria antitoxin it is of great importance that a certain standard of strength shall be maintained. As an aid to this end the Hygienic Laboratory of the United States Public Health Service at intervals issues to licensed manufacturers a small quantity of standard antitoxin, with which all diphtheria antitoxins are compared and their relative strength thereby ascertained.

The method of testing is as follows:

Materials:

1. Diphtheria toxin.
2. Standard antitoxin furnished by U. S. Government.
3. The antitoxin to be tested.

The toxin and the standard antitoxin are combined in such proportions that, when injected into a guinea-pig weighing 250 grams, the toxin in the mixture will still be of sufficient strength to cause death in four days. The amount of toxin used is carefully noted and remains constant through the tests. The same mixture is now made again, using the antitoxin which is to be tested in place of the standard antitoxin. If the guinea-pig lives beyond the fourth day after the injection of this second mixture, the antitoxin being tested is of standard strength. If the animal dies on or before the fourth day, the antitoxin is less potent than the standard; if it survives without severe symptoms the antitoxin is stronger. In either case further experiments are made in order to ascertain the minimum amount of antitoxin necessary to so neutralize the action of the fixed amount of toxin that the guinea-pig will survive beyond the fourth day. If the minimum protective amount of certain antitoxin is 1-500 c.c., this particular antitoxin will contain 500 units per cubic centimeter; if the amount is 1-10000 c.c., each c.c. will contain 1000 units.

Tests for Purity and Safety

In addition to standardization for strength, the scientific production of antitoxin includes careful tests for its purity. Five c.c. of the serum from each bleeding are injected into guinea-pigs, which are kept under observation for 14 days.

This test is to detect the possible presence of foreign toxin in the serum. Culture-tests for the accidental presence of bacteria are also made at each stage in the preparation of the antitoxin. The serum, before filling, is filtered twice through a Berkefeld filter. Finally two syringes containing at least 2 c.c. of serum are taken from each lot under test, and their contents injected into guinea-pigs. If the guinea-pigs remain well after 14 days the serum is considered safe for use.

(To be continued.)

U. S. Bureau of Chemistry Asks Power to Fix Standards

WASHINGTON, D. C., December 18—A great deal of attention is being attracted to the endeavors of Dr. Carl Alsberg, successor of Dr. Harvey W. Wiley, chief of the Bureau of Chemistry of the Department of Agriculture, to have Congress enact legislation enlarging the powers of the bureau to an extent heretofore unthought of. Dr. Alsberg last week appeared before the Committee on Agriculture of the House of Representatives to explain the need for an appropriation of \$75,000 included in the estimates submitted to Congress for the Agricultural Department to enable the Secretary of Agriculture (the Bureau of Chemistry would naturally do the work) to carry out the purposes and to enforce the Food and Drugs Act, and a small piece of new legislation slipped in under the head of recommendations, providing that "Hereafter, for the purpose of aiding in the enforcement of the Food and Drugs Act of June 30, 1916, as amended, hereinafter called the act, the Secretary of Agriculture shall have authority from time to time to establish standards of strength, quality or purity for articles of food, and for articles of drugs sold under or by a name not recognized in the United States Pharmacopoeia or National Formulary official at the time of promulgation of the standards, and to alter or revoke the same, but no such standard, or the alteration or revocation thereof, shall be effective until a date, to be specified in the order of promulgation, which shall be not less than one year from the date of the order. Whenever a standard of strength, quality or purity for any article shall be in effect hereunder, each such article, if it fail to conform to such standard, shall, on that account, be deemed misbranded, within the meaning of the act, unless it be labeled so as plainly and conspicuously to show that, and how, it differs from the standard, and shall be subject to all provisions of the act to the same extent and in the same way as an article misbranded in any other respect within the meaning of the act."

The appearance of a statement in DRUG AND CHEMICAL MARKETS of December 6 to the effect that the Agricultural Department officials contemplated asking Congress to enact this legislation created a great stir in the drug trade. It is realized that if a law of this kind should be slipped through, it would have the effect of conferring upon Dr. Alsberg powers no less than those assumed by a czar. Members of the House Agricultural Committee are responsible for the statement that the proposed legislation would increase the powers of the bureau of chemistry far beyond those intended when the pure food and drug legislation was passed originally.

Dr. Alsberg told the committee he recognized the possibilities contained in the recommendation for which he is largely responsible and has also said he has no objection to the establishment by Congress or by a commission of a standard by which the bureau of chemistry could determine the quality of food and drugs within the meaning of the proposed enlarged construction of the so-called pure food and drugs act. The committee on agriculture will hardly approve a proposition so far reaching as this, especially in the short session of Congress.

The main objection to this legislation is that the way it is now framed would put into the hands of one bureau, directly under the President, too much power. Furthermore, there is no appeal provided from the decision of the bureau. A third important objection is that the Bureau of Chemistry would have the power to fix its own standards and then to enforce them.

Indiana Druggist Has One Whole County to Himself

It is not often that a druggist has a town, let alone a county, to himself, but such is the enviable position of Mr. Charles G. Genolin of Nashville, Ind., and so he lays claim justly to being the biggest druggist in the State.

Brown County is one of the small Indiana counties, both in point of area and population, yet even at that Druggist Genolin has a large and fertile field. The area of Brown County is 320 square miles with a population of about 10,000 souls. It boasts of a school system equal to any. In the present day of rural free delivery and parcel post he is brought into competition with stores in adjoining counties, but it is a part of Mr. Genolin's religion as well as business to try always to be alert, genial, obliging, sincere, and truthful.



CHARLES G. GENOLIN

unique record, save for the fact that he fell in love with pharmacy. It was true then even as now that what we want earnestly enough, we are likely to move toward, and so it was not many days before Charles Genolin's passion for the drug store was in a measure gratified by being given a position as helper in a pharmacy during the interval of the school vacation. He continued at the old stand five or six years in the dual capacity of teacher and druggist, all the time utilizing his spare hours in the profession of mortar and pestle.

In due time he passed the examinations, bought the home store, and became a full-fledged druggist. From the beginning of his business career Mr. Genolin has bought through one jobbing house because he has been convinced that their business relations have the stamp of mutual interest. He has been loyal to his wholesaler and his wholesaler has been loyal to him.

In 1908 Mr. Genolin was elected clerk of the Circuit Court for a term of four years. He performed the duties of this office successfully and operated his drug store at the same time. In 1913 he was elected a member of the General Assembly, being joint representative from Brown and Monroe counties. Another druggist was also a member of this branch of the Legislature, and with the assistance of Representatives and Senators and such men as Messrs. Barrett, Keene, Cassady, and others, they succeeded in getting some wholesome pharmacy laws on the statute books.

As president of the Indiana Pharmaceutical Association, Mr. Genolin has been active in the cause of ethical pharmacy. In his recent address before the State meeting of that body held in June, 1916, he earnestly urged that advantage be taken of the time which now seems ripe for legislation favorable to the druggist—not class legislation, but legislation that is not restrictive alone, but which will recognize and guarantee and promote the inalienable rights of the druggist.

Mr. Genolin does some advertising and has great faith in printers' ink. He loves to come in personal contact with people and he uses many of his spare moments in reading drug journals to learn what his brothers in the profession are doing and how they are doing it, and in keeping abreast with current news. The president of the Indiana State Pharmaceutical Association believes in broad interests and humanitarian ideals. He declares that the crying need of the hour in pharmacy is a higher degree of efficiency, better service—in short, a thoroughly

organized druggist as well as drug store. To quote from his address given before the Indiana Association:

"The druggist is a legitimate factor in the business world, and has come to stay. He has his useful niche in life and is performing the functions of his sphere better than ever before, and as the years roll by the bona fide, wide awake, square dealing druggist will be better understood and more appreciated. And there are a few things he should not forget. That the business man is marked, doomed, be he druggist, grocer, or what not, who betrays his trust and discloses to his trade that he does not practice square dealing methods, and be sure sin will find you out. Believe in yourself, believe in the goods you sell. Believe that when you make a sale you make a friend. Druggists who deal in misrepresentations are destined to a short life. Confidence! O, we need the confidence of our families, of our friends, of our customers. A kindly consideration and interest in behalf of the customer will inevitably develop a social and business atmosphere of mutual good will, and you cannot easily destroy the cables of confidence and friendship. If mutual love held all men bound how beautiful this world would be. The doctor, too, is human, and though some may be a bit eccentric or unsocial, or even unjust—some druggists possess the same attributes, and it is as true as gospel he, too, is susceptible to social sunshine, generous and just consideration.

"Indeed, bitter recriminations and an antagonistic attitude can only make a bad matter worse.

"We want co-operation between doctor and druggist, not antagonism and division. In a large way we erect our own barriers, create our own estrangements in business affairs, and perhaps it is true, that drug stores in a few cases need a broader-minded, bigger personality. Be a live wire and don't substitute your backbone with wish-bone. There is always room for the organized, efficient druggist, the man who has a propensity and principle toward fair-dealing methods, and a genial, friendly demeanor—in short, a sterling manhood that will not only win patronage but impress the souls of your community. And not only manifest but feel more than a commercial interest in your clerks and nine times out of ten they will appreciate this attitude, and will magnify your business by giving you better service. And then I'm sure your business will be a pleasure, and if a man's business is not a joy to him he must be either a grouch or a price-cutter.

"As a rule druggists do not charge enough for prescriptions, the element 'time' scarcely ever being considered. Remember when you give your time, you give your talent, your professional talent, and you are entitled to a reasonable remuneration.

"If all druggists had the right stuff in them, if personally they were 'organized' and co-operative, impressed and possessed with a love and loyalty for the profession, it seems plain that conditions not harmonious and wholesome would be corrected; standard prices and square dealing would be an evolution and legitimate margins restored. But unfortunately for our fraternity we have a few druggists in the ranks who balk, and bring into disrepute the profession of pharmacy by reason perhaps, of a mistaken and diseased viewpoint, superinduced by a King Midas greed for gold at any cost."

THE "WELLCOME" PHOTOGRAPHIC RECORD AND DIARY, 1917

"A Short Guide to Photographic Practice" is the title of the opening article in the new edition of this valuable annual. It might very well be the title of the whole compact publication, which deals with every essential phase of photography, from exposure to the final touches to the finished print. The book is made intensely practical by the provision of really useful tables and the "Wellcome" Photographic Exposure Calculator. The question of tank development receives full attention, and tables are given for timing development with all varieties of plates and at all possible temperatures. With its diary, its memo pages and spaces for recording notes on exposure, its pencil and wallet, this pocketbook provides a companion which no photographer should be without. Price in the United States, 50 cents.

Clean-Up Day in the Narcotic Situation

What a Layman has done toward Solving the Drug Problem, How he stands toward the Druggist, and what he wants Druggists to do about it.

By CHARLES B. TOWNS

SOME druggists, both wholesale and retail, have come to consider me antagonistic to their interests. This is only because they are not acquainted with me and do not know the causes that have led me to take up the subject of anti-habit forming drug legislation.

These druggists have judged me too exclusively on the score of my personal activity and have not gone far enough back of my initiative in assisting to put through anti-habit forming drug legislation. Had they done this, they would have realized that everything I have ever proposed, or have ever succeeded in putting through in the way of such legislation, was proposed because of the facts I had learned from practical experience in handling thousands of drug cases. My reason for writing this article at this time, therefore, is two-fold. First, I want to set myself right before the drug trade and to let them know clearly and fully of my interest in this subject. Second, I want to discuss with them the habit-forming situation as it stands at this time, for I believe that when the druggists do realize from the medical and sociological viewpoints, all that this problem means, they will unquestionably, not only change their views and ideas on this subject, but they will be glad to co-operate in eliminating this great and growing evil.

While the drug interests very properly claim all credit for the existing Federal anti-habit forming drug legislation, the anti-narcotic law has fallen far short of its purpose. The law should be amplified in many respects, and there should be further and more effective legislation on the subject as well. At the time this legislation was being placed on the statute books the drug interests sincerely thought, I believe, that it would prove effective in lessening the unnecessary traffic in and illegitimate consumption of such drugs. Having delved into the merits and demerits of the present law, I would like to have druggists understand why I am again taking up this work.

It will clear this situation at once to understand that the complete regulation of habit-forming drugs is now a national question and the people are going to make of it a moral issue and tie it up so close to political reform that some political party will take it up and tie it to a party principle. It is not an individual matter at all. It is a question of national interest. I call your attention to the fact that the American people as a whole are "getting busy" about this matter; and so far as being the originator of anything, I can say that I am merely in the position of being called on to offer what help I can because of my practical knowledge of drug addiction.

Since 1901 I have devoted my time to the study of this habit-forming drug problem exclusively. My reason for taking it up was that I thought there was a need of medical ways and means to help those afflicted with drug habits and the ways and means to give this help came into my hands. Consequently, since the inception of my work, I have been able to study this great problem in all its phases at first hand and not only at home but in many foreign countries as well.

Had I not been thus placed in a position to know how and why such drug habits were formed, I could not have been prepared to deal with this evil from its many varied angles. I have learned how such habits were created and why they were formed; have obtained the intimate personal and social history of thousands upon thousands of individuals who were afflicted with the drug habit; and have come in contact with the problem from the sociological side of my work in all the different levels of society—all the way from the race-track "tout," the common gamb-

ler and the prostitute, to some of the most important men in the United States, men whose social, political and financial influence is felt the country over. Many of these victims have acquired the taking of the drug through no fault of their own. The prescription and administration of the drug had come regularly through legitimate medical channels. I have also treated the Chinaman on his native soil; and under the most favorable conditions I have visited the most of the principal hospitals of Europe as well. I therefore believe that I can honestly say that I know the "drug habit" game from top to bottom.

Being a layman, I have not been prejudiced and handicapped from either a medical or a pharmaceutical standpoint. I know the druggist's relation to the dispensing situation and I know the physician's great responsibility in connection with the prescription problem. My financial interest in this work has been the means of acquiring an intimate knowledge of the evil; what I know, I have learned in conducting my hospital. And now, I want to show that in my prosecution of this matter I have no selfish interests at stake. For any success on my part in lessening the traffic in and consumption of habit-forming drugs will tend to lessen the number of drug takers; and this reduction in numbers will proportionately lessen the income I should derive from treating this class of patient. From a financial consideration I have everything to lose in furthering this work and the only gain that can come to me is that of personal satisfaction in knowing that I have given to the world the benefit of my medical findings, and that I am willing to do, earnestly and honestly, all that I can to reduce the consumption of this class of drugs to the needs of legitimate medical practice.

I might remind my readers at this time that I have freely, and without any reservation, given my findings to the medical profession, and that in so doing I have put behind me forever all excuses for the promotion of schemes for the treatment or care of this type of patient. I have nothing to sell and no schemes to promote. What I want to see done, before any further drastic legislation on this subject is effected, is to have some responsible authorities investigate the medical treatment and care of this type of unfortunate and publish their findings to the world. They must provide for patients who are eligible for proper treatment, yet lack the means to pay for it; and they must see that the sick of this class who may have a permanent underlying physical disability which requires the regular use of the drug, shall be properly "franked" with the necessary prescriptions to supply a drug for such needs; further, they must see that this type of sick man shall not, in the future, be trafficked in by the medical practitioner, by the sanatorium, or by any one else who may claim to treat such people.

It would require too much space and time for me to analyze the existing Federal legislation on this subject and to show its defects and how it fails utterly to reach those basic conditions which must be met if this problem is ever going to be solved. But I want to set the druggists right as to what I think their position on this subject should be. I want them to know I have no axe to grind; but on the contrary, that my knowledge of this subject should give them the advantage of protection against the conditions growing out of the unnecessary use of such drugs. I am not a "humanitarian"; I am not gushing about "welfare work," nor am I parading under the guise of a "high moralist": I am none of these.

The pharmacists of this country might as well make up

their minds that they must get out from under this habit-forming drug problem. The scope of the drug evil is a great deal broader than they realize, or than, as a class, they are willing to admit that it may be. For instance, the average doctor or druggist will tell you that the small quantity of a drug contained in usual "patent" or other "preparations," cannot establish a drug habit. This is the great, big mistake. My findings have demonstrated the fact that practically any preparation which contains a certain minimum quantity of an opiate, and which, under the present law can be sold as a druggist may see fit without a physician's prescription, will, if taken regularly, establish just as surely a drug tolerance as if the patient were getting the drug straight, in equal dosage, regularly, by mouth or hypodermic syringe.

The "drug habit" may be established just as easily by taking paregoric daily, as by taking morphine straight by the mouth in small quantities; yet at the present time druggists have a perfect legal right to sell this preparation without a prescription in any quantity they may see fit. The horrible spread and use of cocaine grew out of so-called catarrh cures, which contained from three to five per cent of the drug. This quantity was supposed to be harmless, but every druggist knows how the sale of one of these "catarrh cures" grew enormously merely on the strength of its cocaine content.

Heroin is today doing more harm than any other opiate, although it is a comparatively recent morphine product, and was first used in preparations classed as cough mixtures. But any preparation containing heroin is absolutely sure to establish a tolerance if taken regularly, and had it not been for my personal appearance in Washington before the final passage of the Harrison bill, the quantity of this drug permitted in such prescriptions would have been about three times that now allowed. I will go further and say that all that class of drugs known as hypnotics, which are prescribed by physicians and dispensed by druggists to alleviate pain and headache and to produce sleep, must also come under the restriction of law.

Synthetic preparations producing results similar to those of the so-called "hypnotics" must also come under the law. It is a fact that physicians cannot intelligently prescribe these drugs. There is no more pathetic case of the drug habit than that of the man or woman who has been taking something for a certain length of time to make him or her sleep. The most pathetic case of drug habit that came under my observation in many years was that of one who had been taking antikamnia and codeine. The hypodermic syringe, which through a bill that was drawn by the writer and is now a law in the State of New York can be sold legally in this State to physicians alone, should be placed under legal restrictions as to sale and use.

The principal arguments that have been advanced by the drug interests when they have opposed the enactment of anti-habit forming drug legislation have been that the doctor and the druggist will be hampered and hindered in their work by the restrictions proposed. My answer to all this is—and I am familiar with both sides of this subject—that the responsibility for the use of this habit-forming drug should be put squarely up to the physician. The physician ought to be held to strict accountability for every drug he prescribes and administers. It is not right that the sick should be either imposed upon by the unscrupulous doctor, or unnecessarily exposed to the dangers involved in the taking of such drugs when prescribed by a conscientious but ill-advised medical practitioner.

All those who have met me in the committee rooms at Albany and Washington, know that in discussing this matter I have hewed close to the line of what I believed to be right. This action on my part has created much unfavorable comment and antagonism by a certain class of medical men who were not willing to admit their responsibility in connection with this subject; so readers may be sure there is no hope of personal gain on my part in taking this position. I believe, too, that when the druggists of this country thoroughly understand this problem they will to a man be glad to surrender whatever profit they might derive from this illegitimate, immoral and poisoned source of revenue.

If druggists don't do it now, they will do it later. Public sentiment is going to bring about this needed reform. The evils growing out of the illicit and unnecessary traffic in

these drugs, the reckless prescribing, the improper treatment given to those afflicted with drug habit, the lack of care and consideration for those unfortunates who must have such drugs for legitimate medical reasons—all these present and admitted evils of this frightful situation must and will be accounted for or the people will find out why they are not. We can rest assured that whenever the truth, the whole truth and nothing but the truth of this monster source of moral corruption and physical degeneracy is brought out, the people will deal with the situation surely and in short order.

The Federal government should be made to feel its responsibility. The State and newspaper authorities throughout the country should without the slightest fear or favor, declare this responsibility. An end should and must be put to this damnable curse unless we want to repeat the degenerate example of drug-cursed China. I told the chairman of the Ways and Means Committee, before the existing Federal anti-drug bill became a law, that it would prove ineffective. I told him it was loosely drawn and that it would not answer his purpose. We have now had time to check up the workings of the law and the government now realizes the shortcomings of the act. In fact the Commissioner of Internal Revenue for the government has had to make rulings to cover contingencies which the law did not cover and which I have pointed out it should be made to cover. Those of us who have been in a position to observe the actual working of the law, realize that something must be done immediately to correct the situation. Both the pharmaceutical and the medical professions should welcome any aid and assistance in this matter. I hope I have made it clear that I can have no financial interest in this subject and that I cannot be charged with other than the purest motives in this undertaking. I believe I know this subject thoroughly. I believe I understand both doctor and druggist; and as I want to accomplish nothing but what is for the best good of afflicted drug users and for the future of the country as well, why cannot all of us join hands and clean up this habit-forming drug situation?

New York: 293 Central Park, West.

FOOD AND DRUG OFFICIALS CO-OPERATE

WASHINGTON, D. C., December 11.—The work accomplished by the cooperative efforts of the officials charged with the enforcement of the Federal Food and Drugs act and the officials who enforce State laws regulating commerce in similar products is outlined in the annual report of the chief of the Bureau of Chemistry, U. S. Department of Agriculture, which has just been published. The report states that such co-operation has been more effective than ever before owing to the manner in which the office of State Co-operative Food and Drug Control has conducted its work. This office was established in 1914 for the purpose of making food and drug law enforcement more effective by facilitating the systematic exchange of information regarding law violations and methods of detecting them between Federal and State officials and among officials of the various States.

The co-operative work, however, has accomplished much more than the exchange of information. Federal and State officials have united in their efforts in improving the food supply in definite localities and for the correction of specific abuses in the production and sale of particular products.

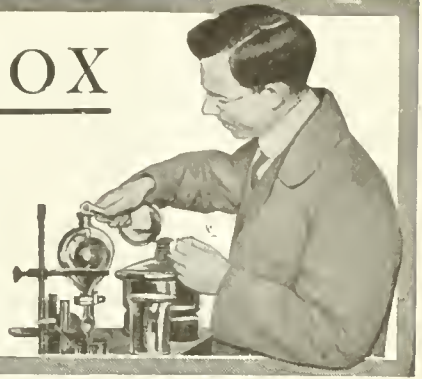
Food and drug officials found that, owing to high prices current for certain synthetic drugs widely used by physicians in treating various diseases, there were being put on the market cheap imitations which were sold under the name and label of the genuine medicines but which on examination were found to have little or none of the therapeutic effects of the genuine articles. Though a number of shipments were seized, and a number of individuals successfully prosecuted under the Federal food and drugs act, and indictments returned under the postal laws, the traffic could not be wholly suppressed by Federal action, nor all the offenders reached. The situation was laid before the State and municipal officials who instituted many prosecutions and seizures, with the result that the joint action of the Federal, State and municipal officials broke up this fraudulent traffic.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Returning Gold to Its Natural State

(W. H. L.)—"We notice a great many valuable formulas in the ERA. Can you give me one for returning gold to its natural state after dissolving with acids?"

Gold is insoluble in hydrochloric, nitric and the weaker acids, but it is dissolved by nitrohydrochloric acid (aqua regia), a solution of gold perchloride or auric chloride (AuCl_2) resulting. If to this solution ferrous sulphate be added and the container set aside, metallic gold, having its characteristic lustrous appearance, is precipitated, a ferric salt remaining in solution. Oxalic acid and most free metals also precipitate the gold. This is a convenient way of preparing pure gold, or *fine* gold, as it is called, or of working up the gold residues of laboratory operations. The precipitate, after boiling with hydrochloric acid, washing and drying, may be obtained in a button by mixing with an equal weight of borax or acid potassium sulphate and fusing in a good furnace. You will find all of this information in any standard work on chemical analysis. Besides nitrohydrochloric acid, gold is also dissolved by free chlorine and bromine, and by mercury, with which it forms an amalgam.

Dose of Collinsonia

(M. S.)—The average range of dosage for extract of collinsonia (stone root) is practically that given in the Era Dose Book, viz., $\frac{1}{2}$ to 2 grains. There is no official process for making a fluidextract of this drug, while some of the pharmaceutical manufacturers state that the solid extract as made by them represents about seven parts of drug to one part of extract. The dosage of the crude drug is variously stated by different authorities, as follows: Era Dose Book, 10 to 40 grains; Shoemaker ("Materia Medica"), 10 to 60 grains; Gould ("Practitioner's Medical Dictionary"), 15 to 60 grains (in decoction), the last named giving the preparations and doses; fluidextract, 10 minims to 1 fluidram; tincture (1:10), $\frac{1}{2}$ to 2 fluidrams.

Collinsonia, according to Shoemaker, is a local astringent, exerting, when administered, a sedative effect upon the mucous membrane, and producing a sensation of warmth in the stomach and bowels. It is used as a local application to incised or contused wounds, while it has been recommended internally for gravel and other urinary affections. No one of the medical authorities we have consulted gives an "average dose" for the extract, but basing an opinion on the range of dosage given by the various writers one can say that such a dose would be about 3 grains. So far as we can discover in medical literature but little attention has been given to the therapy of the extract of collinsonia, most writers naming the fluidextract or tincture.

Chili Con Carne

(R. C. O.)—Chili con carne, as you probably know, is a native Mexican dish, the characteristic ingredient being the big pepper which is indigenous to the country of Montezuma and Southern Texas. There are variant formulas, some of which are attempts to Americanize the real thing. Here are two:

(1)

Clean, singe, and cut in pieces for serving, two young

chickens. Season with salt and pepper, and saute in butter. Remove the seeds and veins from eight red peppers, cover with boiling water, and cook until soft; mash and run through a sieve. Add one teaspoonful of salt, one onion finely chopped, two cloves of garlic, also finely chopped, the chicken, and boiling water to cover. Cook until the chicken meat is tender. Remove to a serving dish and thicken with a sauce made with three tablespoonfuls of butter and flour cooked together; there should be $1\frac{1}{2}$ cupfuls of sauce. Canned pimentos may be used instead of red peppers.

(2)

Cut 1 pound of fresh pork into chunks and parboil. Soak five chillies, in hot water, take out the seeds and veins, wash them well, and put into a mortar. Pound to a pulp, adding a little garlic, black pepper, two cloves, and a cooked tomato. Fry this in hot lard, then add the meat with some of the liquid in which the meat was boiled, and a little salt.

Explaining the Metric System

(S. D. N.)—Any work on the arithmetic of pharmacy explains more or less fully the system as used in the new Pharmacopoeia. Such books as Beal, Chemical and Pharmaceutical Arithmetic, \$1; Stevens, Arithmetic of Pharmacy, 75 cents; Sturmer, Pharmaceutical Arithmetic, \$1.50, contain information of this sort. In explaining the relationship of weight, volume, etc., as measured by this system, any good high school arithmetic will prove helpful. The Bureau of Standards, Washington, D. C., has also published some useful bulletins on the comparison between the tables of weights and measures in the metric system and corresponding tables of the English system. The most useful tables of this character for the druggist are those given on pages 654 to 662 of the Pharmacopoeia. Tables of the equivalents of metric units for all commonly used quantities in other systems are also given in the Era Dose Book.

The metric system in the Pharmacopoeia is intended for use, and every druggist should have a set of metric weights and measures. These he should use in all manufacturing operations, and obviate the laborious practice of converting the individual units of one system into another system, a custom that opens the door to error and makes checking and re-checking necessary to assure one that his figuring is correct.

Books on Dermatology and Cosmetics

(E. D. H.)—The following are standard books on dermatology, cosmetics, etc.:

Jackson, Diseases of the Skin	\$ 2.75
Van Harlingen, Text-Book of Diseases of the Skin,	3.00
Walker, Introduction to Dermatology	3.00
Joseph, Handbook of Cosmetics	1.00
Koller, Cosmetics	2.50
Mixer, Health and Beauty Hints	1.00
Saalfeld, Lectures on Cosmetics (Treatment).....	1.75
Wooten, Toilet Medicine	1.00

Deodorizer for Inside Closets

(M. G. F.)—We are not familiar with the particular fluid recommended for destroying the fecal matter in the

type of indoor closet you name. However, we believe that any standard disinfectant solution will answer the purpose, formulas for variant types of such preparations being given in the Era Formulary. Here is one of these formulas for an "odorless disinfectant":

Alum	10 pounds
Sodium carbonate	10 pounds
Ammonium chloride	2 pounds
Zinc chloride	1 pound
Commercial hydrochloric acid	Sufficient
Water, enough to make	10 gallons

Dissolve the alum in 8 gallons of boiling water; then add the sodium carbonate, followed by the hydrochloric acid, continuing the addition of the acid until the precipitate first formed is dissolved. Dissolve the remaining salts in the balance of the water and add to the first solution.

Solutions containing corrosive sublimate, potassium permanganate, or other strongly antiseptic substances are also recommended.

Reciprocal Registration in Pharmacy

(R. W.)—A registered pharmacist by examination, with certain grades, in any of the States holding active membership in the National Association of Boards of Pharmacy, can become registered by reciprocal exchange in any other State in the list of such membership, without further examination. The official application with instructions for proceeding may be obtained by sending the required fee of \$5 to H. C. Christensen, 450 Bowen avenue, Chicago, Ill., who is the secretary of the association. The States holding active membership in the National organization are Alabama, Arkansas, Arizona, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, and Wisconsin.

Formula for Celluloid

(C. H. W.)—Celluloid is a substance resulting from a mixture, made under certain conditions, of nitrocellulose and camphor, the latter appearing to play the part of a solvent for the nitrocellulose. From the literature on the subject, it would appear that nitrocellulose is always the basis of celluloid, but the camphor may be replaced by similar substances. Most of the processes are covered by patents, and the literature of the U. S. Patent office should be consulted before undertaking to make any of these compounds or their substitutes on a commercial scale. As suggestive, we print the following information from technical works on the subject:

Substitute for Celluloid

Acetic cellulose, like nitrocellulose, can be converted into an elastic corneous compound. The substances particularly suitable for the operation are organic substances containing one or more hydroxy, aldehydic, amide, or ketonic groups, as well as the acid amides. Probably a bond is formed when these combinations act on the acetate of cellulose, but the bond cannot well be defined, considering the complex nature of the molecule of cellulose. According to the mode of preparation, the substances obtained form a hard mass, more or less flexible. In the soft state, copies of engraved designs can be reproduced in their finest details. When hardened, they can be cut and polished. In certain respects they resemble celluloid, without its inflammability, and they can be employed in the same manner. They can be produced by the following methods—*the Lederer process*:

I.—Melt together one quart of acetate of cellulose and 1½ parts of phenol at about the temperature of 104 to 122 degs. F. When a clear solution is obtained place the mass of reaction on plates of glass or metal slightly heated and allow it to cool gradually. After a rest of several days the mass, which at the outset is similar to caoutchouc, is hard and forms flexible plates, which can be worked like celluloid.

II.—Compress an intimate mixture of equal parts of acetic cellulose and a chloride or chlorhydrate at a tempera-

ture of 122 to 140 degs. F., and proceed as in the previous case.

In the same way a ketone may be employed, as acetophenone, or an acid amide, as acetamide.

III.—A transparent, celluloid-like substance which is useful for the production of plates, tubes, and other articles, but especially as an underlay for sensitive films in photography, is produced by dissolving 1.8 parts, by weight, of nitrocellulose in 16 parts of glacial acetic acid, with heating and stirring and addition of 5 parts of gelatin. After this has swelled up, add 7.5 parts, by weight, of alcohol (96 per cent), the syrupy product may be pressed into molds or poured, after dilution with the said solvents in the stated proportion, upon glass plates to form thin layers. The dried articles are well washed with water, which may contain a trace of soda lye, and dried again. Photographic foundations produced in this manner do not change, nor attack the layers sensitive to light, nor do they become electric, and in developing they remain flat.

IV.—Viscose is the name of a new product of the class of substances like celluloid, pegamoid, etc., substances having most varied and valuable applications. It is obtained directly from cellulose by macerating this substance in a 1 per cent dilution of hydrochloric acid. The maceration is allowed to continue for several hours, and at its close the liquid is decanted and the residue is pressed off and washed thoroughly. The mass (of which we will suppose there is 100 grams) is then treated with a 20% aqueous solution of sodium hydrate, which dissolves it. The solution is allowed to stand for three days in a tightly closed vessel; 100 grams carbon disulphide are then added, the vessel closed and allowed to stand for 12 hours longer, when it is ready for purification. Viscose thus formed is soluble in water, cold or tepid, and yields a solution of a pale brownish color, from which it is precipitated by alcohol and sodium chloride, which purifies it, but at the expense of much of its solubility. A solution of the precipitated article is colorless, or of a slightly pale yellow. Under the action of heat, long continued, viscose is decomposed, yielding cellulose, caustic soda and carbon disulphide.

For a full description of this subject, we would refer you to the book by Masselon, Roberts and Cillard, on "Celluloid, Its Manufacture, Applications and Substitutes."

Bacillus Bulgaricus

(Sr. M. G.)—The "Bulgarian plant" for producing buttermilk concerning which you write, is known as *Bacillus bulgaricus*, a ferment which under suitable conditions of temperature, etc., causes milk to turn sour. In form the bacillus is long, sometimes fairly slender and sometimes fairly thick, and has a tendency to filament formation in old cultures. It grows preferably under anaerobic conditions, but grows well also under aerobic conditions. The following statement from "New and Non-official Remedies," published by the American Medical Association, contains the principle facts concerning this ferment:

Carbohydrates are essential to successful cultivation of this bacillus. Broth with 2 per cent dextrose is quite suitable for most strains, especially if calcium carbonate in the form of pieces of marble is added, so that the acid formed during growth is promptly neutralized. Some strains are said to grow well on beerwort. The medium par excellence is milk or some medium prepared from milk. Milk agar, prepared by precipitating the casein and dissolving agar in the whey, is an excellent medium if dextrose is added. Milk is acidified rapidly and a coagulum is formed with little separation of whey. The amount of acid formed varies with different strains from 1 per cent to 3 per cent or even more.

Two varieties of *B. bulgaricus* are used for the preparation of a milk, which is usually called Bulgarian milk. One of these strains forms a slimy milk; the other does not. The slime-forming strain usually separates no whey. The other variety usually separates a small amount of whey. The coagulum is smooth and flows like thick cream. The slime-forming property may be lost temporarily or permanently. By frequent transfers on milk the slime-forming property is preserved and even enhanced. Old cultures are not slimy. Under what conditions slime-forming properties are acquired is not known.

The acid produced is 94 per cent lactic acid. It has been stated that the butter-fat and the casein are decomposed. If this is true the reaction is slow and the result not noticeable for several days.

The group of bacilli to which *B. bulgaricus* belongs is sometimes called "lactobacilli." They are able to multiply in the presence of considerable amount of acid and therefore belong to the group often misnamed acidophil. They are not acidophil in the true sense of the word, but are acid-resisting. Whether we are justified in distinguishing species in this group, or only varieties, remains a subject for research. Probably the lactobacilli form a large group consisting of many varieties, similar to the *B. coli* group or the group of streptococci. Research will probably show that some varieties retain their properties with tenacity, while other varieties are readily transformed.

Market milk usually contains bacilli of this group. The optimum temperature for cultivation is about 45 deg. C. Milk incubated at this temperature will, as a rule, turn very sour in the course of several days and show an acidity of from 2 to 3 per cent. The lacto-bacilli have been considered active in the ripening of certain cheeses. They are found frequently in feces of man and animals. It is stated that the feces of infants can be used for the preparation of buttermilk after several transfers through milk. The Bulgarians, if they lose their "maya," which is the name of the starter for their sour milk, can replace it by using part of the stomach or intestines of a calf.

Cultures may be prepared in broth containing dextrose, or, better, in sterilized milk. Viability decreases rapidly. Frequent transfers are therefore necessary. To preserve a culture in best condition it should be transferred at least once every two days. A milk culture will contain living bacilli for many days, but their activity becomes impaired and the slime-producing property is lost. The amount of acid formed also becomes less.

Washing Powders for Softening Water

(J. H. G.)—Preparations in dry form for softening water for washing (laundry) purposes are generally known as "washing powders," their composition varying somewhat as to ideas of the particular manufacturer or the method in which the product is to be used. Gathmann ("American Soaps") states that the washing powders usually sold to the consumer as soap powders may be described in a general way as mixtures of powdered soap with about its own weight, more or less, of carbonate of soda. Some special brands are made which, in addition, contain other detergent agents, such as carbonate of ammonia, sal ammoniac or borax, while still others are found to which filling, in the form of talc, silicic acid, etc., has been added. The soap itself may have been made by any of the processes known—cold, half boiled, or boiled, settled or boiled down—and the stock used may have been any fat, or mixture of fats, according to the grade of the washing powder to be made. The Era Formulary gives nearly a dozen different formulas for washing powder, the following being typical:

(1)

Crude potash	3 parts
Sal soda, effloresced	6 parts
Borax	1 part

(2)

Sal soda, dried	5 ounces
Borax, powdered	5 ounces
Powdered yellow soap	5 ounces

(3)

Sal soda, effloresced	90 parts
Sodium hyposulphite	10 parts
Borax	2 parts

London Soap Powder: Yellow soap, 6 parts; soda ash, crystals, 3 parts; pearlash, 1½ parts; sodium sulphate, 1½ parts; palm oil, 1 part. These ingredients are combined without any water, spread out to dry, and then ground to powder. This powder is adapted for use with hard water, the excess of alkali carbonate easily neutralizing the lime in the water.

Show Globe Colors

(O. P. B.)—On general principles, any color can be deepened by lessening the quantity of water employed, or

made lighter by adding more water. The best method is to make a concentrated solution and then to dilute it with water to the required shade. Here are three formulas taken from the Era Formulary:

Green

Nickel sulphate	3 ounces
Sulphuric acid	6 ounces
Water	2 gallons

Dissolve the nickel sulphate in the water, and add the acid, stirring constantly. Allow to deposit, and decant.

Orange

Make a solution of potassium dichromate in water, and darken with sulphuric acid; this is a beautiful lasting color, equally brilliant by day or night. Use only distilled water.

Red

Distilled water	2 gallons
Sulphuric acid	5 ounces
Cochineal	1½ ounces
Potassium bitartrate	1 ounce

Dissolve the cochineal and potassium bitartrate in water, dilute largely, add the sulphuric acid and the remainder of the water and filter.

Fluorescent and Dichroic

"Pharmaceutical Formulas" contains this formula under the above caption: Nearly fill the carboy with water, then add a solution of 10 grains of fluorescein (or uranine) in 1 ounce of rectified spirit, and mix. This makes a very pretty fluorescent solution, it is said, but as it becomes mouldy in a month or two it requires the addition of 20 drops of formalin, which should be dropped in when the carboy is put in its place, and not mixed.

THE CARE OF GOLD FISH

So many druggists stock gold fish during the winter time that a little knowledge concerning their care and well-being is timely. People who buy these tiny members of the finny tribe are naturally disappointed if the fish do not remain healthy and bright colored and sometimes they think it is because the stock has been poor or they bewail the druggist's lack of ability to inform them how to take care of their pets.

Druggist Briggs of Palmyra, N. Y., has been especially successful in the sale and care of gold fish. He keeps an aquarium in his own home and takes personal care of them himself. In this way he is able to advise customers as to the proper way to look after these shiny little members of the carp family.

Mr. Briggs has best results by feeding each morning. He allows one tiny piece of fish food to each fish in the globe. Each little piece is about twice the size of an ordinary pin head. There should never be enough given that there is any left floating in the water. If a day is skipped once in awhile in feeding them, no great harm is done, but regularity is advised.

Once a week Mr. Briggs catches each fish in a little net, putting them into a bowl of salt water, using a teaspoonful to a quart. They are left in the salt bath about an hour during which time the globe, the pebbles, and shells are all thoroughly scrubbed, the seaweed washed off, and fresh water put into the aquarium. The fish are then returned to their home and are ready to enjoy themselves after this housecleaning. It is remarkable how bright and sprightly they will appear after this treatment. Mr. Briggs has been successful in keeping some of the same fish for several years by this method.

The Baltimore Retail Druggists' Association held a meeting recently at the Emerson Hotel, at which various matters of importance to the trade, and in particular the bill before Congress which permits uniform price agreements as a means of averting ruinous competition, were discussed. The attendance was quite large and much interest was manifested in the proceedings.

WOMEN IN PHARMACY

Conducted by EMMA GARY WALLACE

Some Window Displays for January *Featuring Plasters, Liniments and Regulators*

PROCURE a five-fold cloth-covered screen and a supply of glass-headed push pins. Upon three of the screen sections—the two end ones and the middle one, fasten plasters with the push pins. Have some of them so that the folder can be read and others open so as to show the nature of the medication. Have prepared a number of display cards about twice the size of each plaster. Let each display card contain a single sentence telling some good point of the plaster treatment. For example:

1. Plasters reinforce and strengthen weak muscles.
2. A plaster holds the exterior medication to the spot needed.
3. A good plaster acts as a constant, gentle massage.
4. A plaster protects the surface and does not interfere with the digestion, body elimination, or the daily tasks.
5. A plaster is a localized counter irritant.

Set the screen so that all parts of it may be readily inspected from the pavement.

Now set a rather low display stand arranged in the form of steps, on the left hand side of the window. Fill these shelves fairly full of the liniment you wish to push. Borrow or rent the lay figure of a woman and clothe it in an attractive kimono. On one shoulder pin a round display card which reads:

"I have a lame back and shoulder,
but a good rubbing with Blank's
Liniment and a Belladonna Plaster
will relieve me by the morning!"

In one hand put a plaster and in the other a bottle of the liniment.

On the other side of the window place a table neatly covered with a white cloth and on it put a glass of water, a tumbler, a spoon, and a bottle of stomach corrector or a liver regulator. Have a dose mixed in the glass. Behind the table stand the lay figure of a man, either in a dressing robe or street suit. Place one hand on the bottle of medicine and the other on the tumbler. On his right shoulder fasten a round card which reads:

"When I have cleaned my system with some
of Blank's Regulator, and put a Plaster on
my sore chest, I know I shall feel better."

Put a rug on the floor and don't detract from the display by scattering anything about the window base.

The Crown of Glory Week

If hair tonics, shampoos, and brushes are to be featured the window display must be to the point. Prepare a large and handsome gold crown by taking a pasteboard base, covering it with gold paper, and sewing in place a rich assortment of ruby and turquoise-colored jewel-beads. These can be bought at any fancy goods store, are flat on one side, and are pierced so that they may be sewed in place.

Put a little mahogany table in the middle of the window. On this rest a crimson velvet cushion and on the cushion put the crown. Above the crown suspend a white card lettered in blue and gold which reads:

"No begemmed diadem is half
as lovely as a woman's well-
kept, luxuriant head of hair."

Procure from some hair dresser the bust of a handsome form. Drape the waist part in white satin and decorate with some of the jewel-beads. This woman should have a beautiful head of hair which is better very simply dressed or even hanging loosely over her shoulders.

At one side of the window put a large china bowl, a bottle of the shampoo, a little rack with several towels, a sponge, a bath spray, and anything else which may be needed by the average home worker to properly cleanse the hair.

On the other side of the window place bottles of hair tonic in goodly number and scatter a number of hair brushes of different styles about the window base. Put price tickets on the brushes. If there are any having especially valuable points in regard to sanitation, point these out by means of a brief card of explanation, such as:

"Permits of cleansing with hot water,"

Or,

"Finest bristles and substantial back."

A Dental Window

This window should be purely educational. Have a table in the middle of the window with a trained nurse standing back of it. On the table have arranged everything necessary in keeping the teeth clean and in good shape. In front of the table stand a placard bearing some crisp sayings, such as:

1. Clean teeth mean good health.
2. Pyorrhea is the result of a germ. Use our Pyorrhea mixture.
3. Many diseases originate in unhealthy teeth.
4. Poor teeth mean poor digestion.
5. A child with poor teeth cannot do good work in school.
6. Defective teeth mean defective health.

On both sides of this table make an elaborate display of brushes, powders, dentifrices, and in order to start these along, make a combination offer of perhaps \$1.25 in value for \$1.00 in cash during two or three days of the special sale.

Creams and Powders

This window must be one which will appeal mostly to women as they are the ones who use these goods very largely.

If possible have a demonstrator inside of the store provided with squares of cheese cloth and open boxes of cleansing cream. Almost any woman will be convinced if a little of this cream is put on the square of cloth, rubbed over her own cheek, and brought away exceedingly soiled. The demonstrator must also explain the advantages of these toilet articles.

The window will best have a setting of a lady's boudoir. Have a toilet table in the center of the window with all sorts of toilet articles arranged on it. At one side of the window have a little low table with a rocking chair beside it and the figure of a woman seated back of it apparently soaking her finger nails in a bowl of perfumed water. Have a manicure set on the table beside her and manicure materials. She should have a little lace cap on her head and an attractive silk kimono about her.

Now arrange four low window display stands across the front. On the back of each one put a card which reads: "For the very dark brunette," "For the medium brunette," "Especially for the blonde," "For one with sallow or muddy complexion." On each of these tables assemble the things which will fit the description.

Arrange boxes of talcum on the window base with a length of dark blue satin ribbon in front of each. Shake a little of the talcum out on the ribbon to show that it is white or tinted, and the particular shade.

These windows, if carefully prepared and the color scheme nicely arranged, will surely sell goods.

January Leaders

HERE are some things especially appropriate to push in January. Let the window displays, the store arrangement, the printed publicity and the salesmanship, all concentrate on educating the people in regard to the use of:

First week in January—Plasters, liniments and regulators.

Second week in January—Shampoos, hair tonics, hair brushes and combs.

Third week in January—Tooth pastes, tooth brushes, dentifrices, toothache plasters, dental floss, etc.

Fourth week in January—Cold creams, skin foods, talcums and face powder.

Do you realize that if all the druggists in your locality will but concentrate with you on informing the public concerning the uses and qualities of these goods, that everyone will reap a rich harvest by way of reward? If only one man does it, he likewise will gain, but not in proportion to what he would gain if all the people are aroused over some particular need, and several druggists advertising together on the same thing at the same time, can make an impression difficult for one by himself to achieve.

Decide on your January leaders. Get ready for your advertising and displays, and "cash in" when business might otherwise be quiet.

Plans for the First Week

Mid-winter is the time many people need external application to relieve rheumatic and muscular pains. The advantages of plasters and liniments naturally go together. Many times these very pains are an expression of a clogged system and for this reason, a stomach or liver regulator is especially timely in conjunction with them. Many times it will be possible to make a sale of a plaster, a bottle of liniment, and a box of pills, and that, too, to people who never would have thought of it.

The Second Week and Its Business

In the second week, emphasize the fact that artificial heat makes the hair grow dry and brittle; that dust clogs the pores and makes the hair lustreless; and that heavy hats, especially the close-fitting ones of the present modes, are unventilated and likely to cause over-heating of the scalp. It will also be timely to point out that constitutional depletion is often indicated by falling hair. Show that a clean scalp is necessary to health, and a good brush and reliable shampoo are necessary to keep the hair clean, while a suitable tonic and scalp massage cream will do much to make the hair lively and bright.

It is a good idea also to make a specialty of hair tonics for gray hair. So many tonics yellow gray hair or make it look dingy, but there are a few which can be relied upon to leave the hair beautifully silvery in color and texture. If there are hair dressers or beauty parlors in the neighborhood, it should be an easy matter to persuade them to join in the campaign of this week. Remember the more attention can be attracted, and the more interest aroused, the more lasting will be the results.

The Third Week of Profit Making

Dental week has already been celebrated in two or three cities but the thought is still comparatively new. Boards of health, parent teachers' associations, and dentists should be willing to co-operate here. It might be well to have a whole page of advertising every day in the week, or for the weekly issue of the newspaper if the town is a small one. The expenses could be borne by all participating in the ad. and a symposium of publicity arranged, the center space being given to crisp, informative health maxims regarding the teeth and diseases depending upon the condition of the mouth and teeth. Here is an almost untilled field which has never been intensively cultivated.

The Last the Best of All

At this time of year the cold winds of out of doors and the confinement of indoors begin to tell on the complexion. Many times tiny wrinkles begin to appear as the skin grows dry. Lines are likely to show from the nostrils to the corners of the mouth as a result of dust and the little particles of soot so likely to fill the air when many chimneys are belching out great quantities of smoke.

Show the advantage of cold creams. Explain why some of your cold creams are particularly good. Many people do not know the difference between a grease cream, a vanishing cream, and a massage cream. Remember that beauty columns are constantly directing women how to make little dabs of cold cream and skin foods and whitening lotions. Show the folly and expensiveness of this method. A chemist requires years of experience and correct laboratory conditions in order to insure good results.

There is a good deal of misapprehension concerning the nature of face powders. Some women regard them as necessary and others as deceptive and injurious. Show that a good face powder is a protection but should be washed from the face before sleeping. Explain the nature of good powder and mention some that you have. In the same way, make a special effort and popularize a few worthy lines of talcums.

A Winning Method

Wherever possible, offer samples of the goods you are demonstrating. If this is not possible, be prepared to show these goods and to explain their merits. Be patient even when people are a bit tedious, for they may prove to be good customers. Remember that it is always possible to sell accessories such as powder puffs, etc., along with many sales.

Do not say when a customer has given her order, "Is this all, Madam?" Naturally she will respond to the suggestion and say, "Yes, thank you, that is all today." Instead of that remark, "What else can I show you? I wonder if you wouldn't like to look at some new vanity cases I have just received which only take a little room in one's bag?" Many times a suggestive sale will lead to the purchase of several articles.

During the month of January, push certain lines of goods. Do it systematically, intelligently, persistently and expectantly, for if you look forward to getting a goodly amount of trade and go after it, it will surely be yours.

AROUND THE CIRCUIT

It is well to impress the public with the truth that public health is purchasable and that prevention of disease, sanitation, and prompt and proper medication, are among the means of obtaining it. It is the part of women, and especially the druggist women folk, to help along with health measures wherever they may be. "Where there is no vision, the people perish."

The many friends of Mrs. L. D. Drury of the W. O. B. A. R. D. are greatly pained to learn of Mr. Drury's death. After a long and painful illness, he passed away November 29. Mr. Drury has long been identified with the best interests in pharmacy. He believed in organization, being a member of the city association, the national association, the Massachusetts State Pharmaceutical Association, and the American Pharmaceutical Association. Sympathy is extended to Mrs. Drury in her sad affliction.

Interest seems to be growing at this time in Sunday closing, and Newark, N. J., druggists have arranged to keep one store open in each district, the rest closing during a certain portion of Sunday. The same plan is being tried in Minneapolis, and St. Paul will not be far behind. The W. O. has long worked to this end and it is with joy they hail tidings of more places where druggists have the courage and find it possible to obtain a reasonable amount of Sunday rest.

The newly elected officers of the Women's Pharmaceutical Association of the Pacific Coast are: President, Mrs. Volintine; first vice-president, Mrs. White; second vice-president, Miss Dolcini; secretary, Mrs. Sawyers; treasurer, Miss Laird; Advisory Board, Mrs. Flint, Miss Fisher, Miss Farrell; executive committee, Miss Roehr, Miss Nast, Miss Nelson, Mrs. Kane, Mrs. Burk. The membership is making a thorough study of the Ninth edition of the Pharmacopoeia.

The chapters of the W. O. and other bodies of women pharmacists, should be cautious about endorsing the eight-hour law for working women which is now being brought up in many of the states. The proposition as it is brought

forward in some places is ambiguous and if it includes domestic service, would practically disorganize our homes and change all our hotel service. Many of the working people themselves object to the proposed plans.

The whist party given at the home of Colonel and Mrs. John W. Lowe on November 23 for the ladies of the W. O. B. A. R. D. and their husbands, was a most enjoyable affair. There was a large attendance of representative drug people. Among the prize winners were Mrs. W. Acheson of Cambridge, Mr. L. W. Grigen of Alsten, Gerry Russel of Boston, and Mrs. Blanche Edmonds of Newtonville.

Mr. and Mrs. Tafel entertained the Louisville Chapter No. 11, at a recent evening gathering, when the Chapter members brought their husbands with them.

Philadelphia Chapter, No. 6, is planning a winter of great activity. This group of women takes an active interest in the civic affairs of the city and in the work of the state federation. The usual Christmas entertainment was given Wednesday afternoon, December 27. Santa Claus was on hand with his pack of good things for the children of the members and especially for their guests, the little children of one of the settlement houses. This is an annual affair with the Philadelphia Chapter to which everyone looks forward.

The November meeting of Milwaukee Chapter, No. 19, W. O., N. A. R. D. was held on Wednesday, November 29, at the home of Mrs. William Loppnow. They had a splendid attendance and also one new member present. Among other things, a report from the Health Department was read. This came in response to investigations made by the committee on sanitation in public buildings, etc., and showed that work in that direction, even at the very start, has had good results. A recommendation was made by the chapter to the Milwaukee Pharmaceutical Association that all druggists make prompt report of sales of antitoxin to the Health Department, with a view of reducing contagion to a minimum. The constitution was read and adopted. The chapter has decided to have a bowling club. The social committee is completing plans for a poverty party. With the New Year comes the annual banquet or birthday anniversary which takes place on the last Wednesday of January.

Indianapolis Chapter, No. 20, W. O., N. A. R. D., organized September 20, 1916, with the following members: Mrs. Frank H. Carter, 1920 Broadway; Mrs. Edward Ferger, 104 E. Maple road; Mrs. James C. Mead, 2635 College avenue; Mrs. Arthur E. Johnson, 2736 N. Capitol avenue; Mrs. John E. Clark, 425 E. Walnut street; Mrs. Harry J. Borst, 970 N. La Salle street; Mrs. John W. Stokes, 224 E. North street; Mrs. James W. Carshadver, 3641 Kenwood avenue; Mrs. J. V. Riesbeck, 1406 Leonard street; Mrs. James E. Sprvule, 7 The Lexington. These ladies have already persuaded a number of others to join them. Of course, to begin with they had no money, but they are not the type of women to sit down and lament about it or to be idle. The first thing they did was to give a dance and cleared \$60. Following this, their good friends of the Indianapolis Retail Drug Association, presented them with \$50; so this youngest of all the chapters has \$100 working in a Building and Loan Company with enough on hand to meet their current expenses. They have set their meetings for the first Monday of each month, and each member must come prepared to talk on a subject given out by the hostess at the previous meeting one month before. The subject first chosen and which each of the members was asked to think about and to discuss freely, was "How can the W. O., N. A. R. D. help the N. A. R. D.?" Some extremely interesting points were brought out. Their next subject is "Liquor and the Drug Store." On Friday evening, December 29, Chapter No. 20 had an evening with their husbands, meeting at the home of Mr. and Mrs. F. H. Carter. A most delightful time was enjoyed and the spirit of good fellowship is manifesting itself as the drug people of the Hoosier city become better acquainted and find out how fine their neighbors in the same line of business are.

The first annual Drug Show held at the Coliseum by the drug trade and allied interests, proved to be a unique occasion which interested the public greatly. It was held from December 2 to 10, and during that time great throngs of people visited the Drug Show. The members of the Chicago Chapter W. O., N. A. R. D. were fully alive to their opportunity, and they conducted a tea room and holiday bazaar, also a rest room in an especially assigned portion of the Coliseum. Dainty lunches were served in the tea room, the ladies taking turns in the business management. Mrs. Frank H. Ahlborn was in charge of the supplies for the holiday bazaar. Fancy work, useful household articles, aprons, towels, and all sorts of nifty little nick-nacks were offered for sale. The booth which served as a rest room also gave an excellent meeting place for the members and their friends. Among those who had charge of the tea room were Mrs. W. W. Klore, Mrs. Riemenschneider, Mrs. Sisson, and Miss Katz. A portion of the money raised by the Chicago ladies was used for charity purposes and to give Christmas cheer to those who would otherwise have been without it.

The officers for the ensuing year of the W. O., B. A. R. D. of Boston are president, Mrs. Mary R. Green; first vice-president, Mrs. Ella S. Twitchell; second vice-president, Mrs. Ethel T. Corner; recording and corresponding secretary, Mrs. Gertrude M. Acheson; treasurer, Mrs. Gertrude K. Ernst; auditor, Mrs. H. F. LaPierre; directors, Mrs. Winifred B. Woodrow, Mrs. Frances L. Hayes, Mrs. Lily M. Connolly, Mrs. Jessie F. Waterhouse, Mrs. Delia M. Tobin, and Mrs. Florence L. Berry; chairman of the hospitality committee, Mrs. Sarah A. Finneran. The W. O., B. A. R. D. has enjoyed some very profitable gatherings so far this year. An afternoon of music was enjoyed at the Hotel Brunswick, November 16. Luncheon was served under the direction of Mrs. Sarah A. Finneran. Mrs. Adelaide M. Godding poured and Mrs. Grover, Mrs. Forbush, and Mrs. Berry served. The December meeting of the W. O., B. A. R. D. was held also at the Hotel Brunswick, and the members were entertained by a program on Dickens's children in fiction.

Louisville Chapter No. 11 recently gave a very successful 500 party under the auspices of the managers of the club house fund. Mrs. W. E. Weinedel acted as hostess. The chapter was invited to attend the conference of the Fifth District of the Kentucky Federation of Women's Clubs. It is interesting to note that more and more our chapters are being recognized and welcomed in federation circles.

Those who live in towns adjacent to rural districts will do well to get Public Health Bulletin No. 77 from the United States Public Health Service. This deals with rural school sanitation and suggests ways by which the wide awake druggist can co-operate with school boards in bringing about cleaner and more healthful conditions.

The officers of the Women's Section of the American Pharmaceutical Association for the ensuing year are: President, Mrs. F. A. Ruddiman of Tennessee; Mrs. John F. Hancock of Baltimore, honorary president; and Mrs. G. D. Timmons of Indiana, chairman of the executive committee. These ladies are accomplishing good work and interesting others by their earnestness.

The W. O., B. A. R. D., held a meeting on Thursday, November 16, at Hotel Brunswick, the president, Mrs. J. H. Green, presiding. An excellent account of the State Federation meeting held at Franklin, Mass., October 30, was given by Mrs. F. B. Twitchell. An interesting report of a conservation meeting held at Melrose November 15, was given by Mrs. J. H. Godding. Miss Ida E. Dow of Boston, a versatile artist, accomplished pianist, and sweet singer, gave a classified program that was well received. Refreshments and a social hour closed the meeting.

The druggist people of Reading, Pa., had a most enjoyable Hallowe'en gathering at Spring Valley. There was dancing and music and a real old-fashioned supper.

May a happy New Year full of blessings be the portion of every reader of the ERA.

Western Druggist Builds Success

Wilbur N. Joyner Establishes Chain in Pacific Northwest

WILBUR NEWELL JOYNER, engaged in the drug business for the past 26 years, part of which time he spent in Columbus, Ohio, and in Chicago, the last nine years being in Spokane, Wash., is rapidly acquiring a chain of stores, now having three in Spokane and several in view in outside towns of the Pacific Northwest.



WILBUR NEWELL JOYNER

He recently opened an attractive and elaborately arranged store in the exact business center of Spokane and has organized and is president of the Joyner Drug Stores, the Physicians & Surgeons Supply Company (wholesale), Joyner's Mail Order House and the United Drug Company.

Upon locating in Spokane, nine years ago, he purchased the Dulmage Pharmacy, at Lincoln street and Riverside avenue, and soon afterwards incorporated Joyner's Original Cut Rate Drug Store, thus starting the first cut-rate store in Spokane.

Shortly after this he started the Physicians & Surgeons Supply Company, as a wholesale house, and at the same time started a mail order drug business which has since grown into Joyner's Mail Order House. This carries practically everything in the drug business as well as sundries, jewelry, and general merchandise.

Mr. Joyner organized the United Drug Company six years ago, the object being to operate a chain of stores throughout the Northwest with the parent store in Spokane.

Several locations, according to Mr. Joyner, have now been secured in other towns in Washington, Oregon, Idaho and Montana. He announces that many stores will be started by the United Drug Company in a short time.

The last store added to the Joyner chain was that recently opened at Howard street and Riverside avenue,



Joyner Drug Store, Howard St. and Riverside Ave., Spokane, Wash.

Spokane, which is considered the exact business center and one of the most prominent corners in that city. The floor space of this new store is 40 by 60 feet, including a full basement and a mezzanine floor. On the mezzanine floor are located the truss fitting rooms, the suit case and hand grip departments, the S. & H. green stamp redemption office and the executive office of the Joyner Drug Company.



Interior of Joyner Drug Store, Howard St. and Riverside Ave., Spokane, Wash.



Interior of Joyner Drug Store, Lincoln St. and Riverside Ave., Spokane, Wash.

In the basement are a public rest room and laboratories of the company, as well as the stock room for imported articles.

The main floor is finished in solid oak throughout, and a feature of the arrangement is oak display cases on the main as well as on the mezzanine floor. This is a feature of all the Joyner's stores. This floor is occupied with the prescription department, rubber goods department, and an elaborate French ivory display, including picture frames, toilet sets and manicuring sets, making an artistic section. Additional to this is a watch and clock department, a large pipe and cigar department, perfume and toilet article department, and leather goods department. Umbrellas, canes, candy, chewing gum, thermos bottles, cutlery, safety razors and the general sundry line usually carried in the drug stores of today, including dolls and children's novelties are handled.

The store at Main avenue and Howard street, known as the United Drug Company store, occupies the first and second floors as well as the basement of the building, which is 55 by 85 feet. The basement ceiling is 18 feet high and is occupied as the stock room and laboratory for the United Drug Company. The main floor is occupied by the United Drug Company store and the second floor is occupied by Joyner's Mail Order House and the Physicians & Surgeons Supply Company.

The Joyner store at Lincoln street and Riverside avenue is the parent store, and, like all the stores, has a truss fitting department. This also carries a complete drug supply, elastic hosiery, abdominal supports and shoulder braces.

The company makes a specialty of cameras and supplies and operates a six-hour developing plant with a capacity of handling from 75 to 100 rolls of films. Exceedingly large tanks are used and all printing is done by electric lights.

"I attribute the real feature of my success to date to hard work and honest dealing with the public," said Wilbur N. Joyner, in giving a few of the inside facts on how he built up the Joyner's Cut Rate Stores, the United Drug Stores and the Joyner's Mail Order House.

"When I started, eight years ago, in Spokane, I had one clerk and now I have 60. I never abuse the confidence of the public, I always aim to give them the best values that their money will buy, I keep in constant touch with the business and the employes and make courtesy to patrons a rule not to be broken under any circumstances.

"I advertise in the newspapers constantly and consider this one of the greatest features of building up the business and also send out catalogs to mail order customers. We are doing a general merchandising business and I find the catalogs and newspaper advertisements an aid in this.

"Another feature of progress, in my estimation, is that I have always made it a rule to get the most prominent corners possible and then give great attention to the window displays.

"All of the stores have the most modern type of solid plate glass fronts which, with the displays in them, is prob-

ably the main business getting feature of the trade. The interior of the store is also arrayed in a manner to suggest to the customer something else he or she may want or need and if it is on exhibition, it reminds the customer of his or her needs.

"We never take chances of hurting our reputation by the sale of obnoxious drugs or catering to the vicious element. We have never catered to the liquor business and make no feature of Sunday business, only keeping open for the general benefit of prescription customers.

"We keep the stores open until 12 midnight during the week but close at 8 p.m., Sunday. One reason for closing all the stores at midnight is that the 'owl cars' leave at 12:30 a.m.

"We also avoid the sales of obnoxious articles which are under the ban of the Government or the postal authorities or any state law or city ordinance.

"We purchase our drugs in large quantities and make up our own lotions and many of our medicines in our own laboratory aside from handling a large prescription business.

"Conferences are held among the employes about once a week."

A TAU PHI SORORITY GIRL

California is noted for its beautiful and brainy women, and even among these Miss Rose Virden of Tropic is a leader. She could not very well have been anything but a pharmacist had she wished, for she comes of a long line of ancestors who delighted in curing people of their physical ills.



MISS ROSE VIRDEN

Rose attended the College of Pharmacy of Southern California at Los Angeles, and in June, 1915, was given the degree of Ph.C.

In April, 1916, she successfully passed the California State Board of Pharmacy examinations. Through her attainments and enthusiasm she has been the means of realizing an ambition for like success in several of her young lady friends who are now registered at her Alma Mater.

At present Miss Virden is serving as vice-president of her College Alumni, is a member of the Ladies' Auxiliary of the California Pharmaceutical Association, and has an active interest in everything which tends to further the fraternal spirit among the drug folk.

She is also a charter member of the Tau Phi Sorority of the College of Pharmacy of U. S. C., founded two years ago among the young women and graduate members of her school. The sorority is working toward the end of having itself recognized as a national institution and to unite the sororities of the different colleges under a common head.

Miss Virden would be very glad to hear from any one interested in the work of the Tau Phi Society as she is anxious to do what lies within her power to make the sisterhood of broad and general usefulness. She is enthusiastic about the opportunities for women in pharmacy, believing it a field especially adapted to those who are possessed of a scientific mind and who are conscientious in the performance of their duties.

Profits Out of the Coffee Cup

A Trade Winning Side Line That Pays Dividends

Nine tons of coffee—eighteen thousand one pound bags—sold in three days is the staggering record of a New York chain store during one of their "One Cent Sales." This announcement is so staggering that the average druggist looks upon it as a trade phenomenon, but he feels very much towards it as he does toward the fact that for the first nine months of 1916 the United States exported \$1,486,546 worth of candy: the statement is interesting, but it means very little to him as a retail druggist.

Nine tons of coffee sales by a metropolitan chain store in three days is too big to grasp even as an inspiration, but there are other coffee statistics. In a northern New Jersey city a certain progressive independent firm of druggists sell the year round an average of 150 lbs. of coffee a month at 33 cents a pound and with a profit of 33 1-3%. Here are figures within reason, figures that any druggist could write into his books, figures that could even be bettered by many druggists.

It has long been a favorite lament of the drug trade that coffee, teas, and spices, formerly all staple articles of stock in the apothecary shop, have been lost by the modern drug store to the grocery. Writers of innumerable papers which have been read before almost every pharmaceutical association in the country, have expatiated upon this deplorable condition. From time to time certain druggists have proved that these trade conditions can be remedied, but the bright exceptions who have taken up and pushed coffee to a profitable conclusion have not been numerous. Recently, however, a wave of interest in coffee seems to be spreading over the trade.

The interest in coffee today is being enlivened by the tangible evidences of success that druggists in all sections have before them in this field. Practically all of the various chains of stores, not only in the East but in the Middle West, the South, the Coast even, are pushing coffee hard, and the average druggist is not slow to believe that there must "be money in coffee." There is.

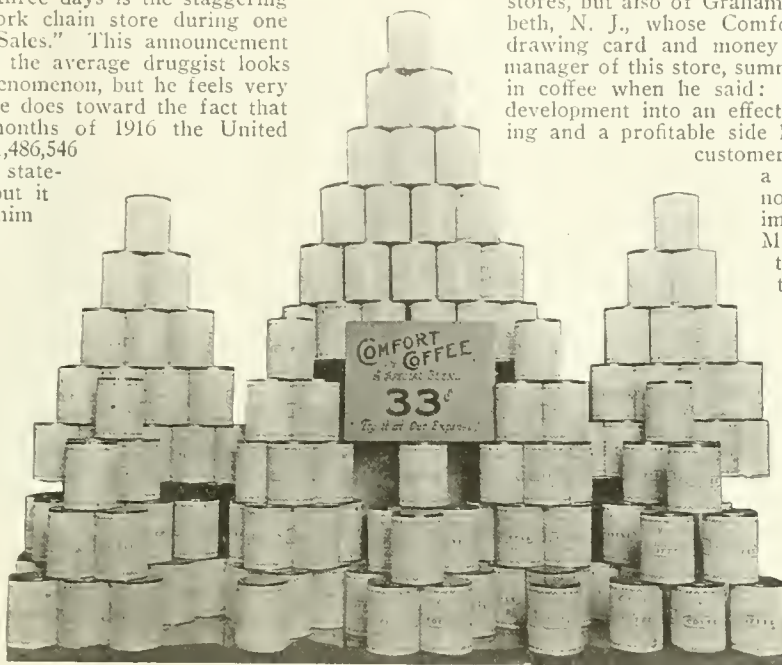
The druggist enjoys a peculiar advantage over the grocer in selling coffee. Dr. Wiley practically voiced a sentiment that almost everyone has when he said that the very best and purest of certain foodstuffs can only be bought in drug stores. When a person buys coffee, or tea, or honey, or spices, or chocolate in the drug store, he feels instinctively that he is getting something a little extra. This feeling is a valuable asset to the druggist who sells coffee. He should use, not abuse it.

It is probably because of this feeling on the part of the buying public that the druggists who have made the greatest success in selling coffee have done so by selling a special brand. The buyer knows that any of the standard brands on sale the country over will be the same in a grocery in New York as in a pharmacy in San Francisco, but if the druggist pushes a special private or druggists' brand of coffee he makes a distinctive appeal.

This was the experience not only of the chain stores, but also of Graham & McClosky of Elizabeth, N. J., whose Comfort Brand has been a drawing card and money maker. Mr. Remley, manager of this store, summed up their experience in coffee when he said: "Coffee is capable of development into an effective means of advertising and a profitable side line. When you get a

customer by the palate you have a good hold on him, and nothing makes such an impression as coffee." Mr. Remley emphasizes the need of neat, attractive, air tight, moisture proof containers.

In this connection the advice of A. B. Davies, of the well-known coffee brokerage firm of Davies & Sullivan is valuable. Mr. Davies is in a position to give special help to the pharmacist, for he has sold hundreds of tons of coffee to the drug trade, and is well posted in the requirements of coffee drinkers and on drug trade conditions.



An Effective Drug Store Coffee Display

"Druggists," he said to an ERA representative, "have an initial advantage over grocers in that they can sell out their coffee stock more frequently and consequently keep it more fresh. A grocer must carry a dozen or more standard brands in order to meet the calls of his customers, while the wise druggist will only handle one. Given the right blend, freshness is absolutely the deciding factor in the flavor and aroma of coffee. The minute a coffee gets damp or exposed to the air it deteriorates quickly. Even in the finest containers a coffee roasted and packed six months ago is not half so good as one packed two months ago, and after six months it ceases to be good coffee at all.

"My advice to the druggist who was planning to go after this very profitable business would be to get a good special brand that he knows will make just as good coffee as he says it will, and then to push it hard. He ought never to order more than a six weeks' or two months' supply."

The winter season is the best coffee season, and the druggist who pushes coffee in connection with his soda fountain will find them a valuable working pair. Use the coffee you sell on your fountain. See that it is made right and served right. Offer a few free sample cups to some of your customers, or print "free coffee cards" good for a cup of your delicious coffee at the fountain and distribute them wisely. Let your dispensers talk coffee at the fountain.

The quick-action way of starting a coffee trade, however, is to inaugurate a "One Cent Sale"—selling, say one pound of coffee for thirty-five cents and two pounds for thirty-six cents. It is possible to buy a very good grade of coffee at a price that will allow a five cent profit on the two-pound sale, and while, of course, this arrangement cannot be taken as a permanent basis upon which to sell, still the figures cover the cost, and give the advertising free.

In the matter of pricing coffee, the druggist can drive home another point by just slipping under the price of the regular advertised brands. These sell at from thirty-five to thirty-eight cents a pound. The druggist can sell a better coffee for from thirty-two to thirty-four cents.

Evolves Business On "Cut Prices"

*James O'Donnell, Washington Druggist, Believes
"Bargains" Help Trade*

THERE are two rules which may be regarded as the foundation stone of the business built up by William J. O'Donnell, one of the best known druggists of Washington and regarded as perhaps the most aggressive of price cutters. One of these rules—and it admits of no exceptions—is to give the public exactly what it wants, and the other, governed by conditions, to sell as much of an article as a customer calls for. To these two rules may be added a third—never to be out of anything. These three rules Mr. O'Donnell, according to his own admission to THE PHARMACEUTICAL ERA, has made his guiding principles, and to them he largely attributes his success. How great this latter is can be inferred from the further statement that the business has grown from \$25 a day in the first store opened by Mr. O'Donnell twelve years ago at 9047 F street, Northwest, Washington, to \$600,000 a year for the five pharmacies now conducted by him. In a sense, therefore, Mr. O'Donnell is not merely a retailer, but also a wholesaler, and there is probably not a store in the national capital that approaches the F street place in the volume of patronage. A steady stream of people can be seen passing in and out all day long and far into the night, for the opening hour is 7 A.M. and the closing time midnight, Sundays as well as on weekdays, and some two score clerks are required to wait on customers.

The establishment is rather unusual in these days of diversification and of adding all sorts of merchandise to a drug store stock in that it carries few articles apart from the usual assortment of medicaments and sick room supplies along with a complete line of patent and proprietary goods. A preparation that has not been advertised and for which no market has been created will stand small chance of being admitted to the O'Donnell list, but when it has been made known and is asked for it becomes a regular part of the goods handled, and is likely to be found there if nowhere else.

"I don't advise anyone what he shall buy," said Mr. O'Donnell, in speaking of his methods, "but tell all they must use their own judgment. If Fletcher's Castoria, for example, is wanted, however, I will not persuade a patron to buy something else. I have no preparations of my own to sell and push, to the detriment of some manufacturer, and am a merchant pure and simple. My clerks are instructed to follow out this idea, and to refrain from persuasion or argument."

"Another thing: I have very little of what is generally called system, as you may observe. The fixtures are simple and designed solely to facilitate the movement of goods. There is no attempt at elaborate display, and things appear to be in somewhat of a jumble at times, but we always know where to find what is wanted and are never 'just out of' anything. By a carefully worked out method we know when our stock of a particular article is running low, and goods are ordered in time, so that there shall not be a lack of them."

Believes in Cut Prices

Mr. O'Donnell believes in cut prices and, for that matter, in low prices. "Offer an article at a reduction, and you will get people to buy it freely," he says; "but put it up to some regular and commonplace figure, and the demand will stop or at least decline greatly."

It is Mr. O'Donnell's opinion that cut price sales help the manufacturer in that they tend to popularize his goods and stimulate the consumption far beyond what it would otherwise be. He illustrates this with chewing gum. One lot of the brands turned out he sells at three packages for ten cents and another at two packages for five cents. This year he expects to bring the sales of chewing gum up to \$4,000 alone.

"We sell Cuticura soap at 18 cents," he said, "and have never advanced the price or varied it. If we were to sell it at 20 cents the sales would fall off 20 per cent in a short

time. If you sell too high you restrict the demand and if you sell too cheap you kill an article. When quinine sold at 25 cents, we had a great demand for quinine pills, but now that this article has gone up to 75 cents or even more, the substance is dead; no one now asks for quinine pills. An illustration of what I mean by cut prices helping to sell goods and stimulating the demand is supplied by Epsom salts. When I started here, we had calls for small quantities, and I bought it by the pound. Now I order it in quantities of ten barrels at a time, and this has helped every druggist in town. Every article of merit that is offered at a price reduction will almost at once show gains in the sales. It is the bargain instinct in the average persons which asserts itself, and the druggist who takes advantage of it helps the manufacturer, and his fellow druggist as well, because there are numerous times when it will be more convenient to go to another store, and when, the price being equal, the nearer store will get the trade."

Competition has not troubled Mr. O'Donnell. When he opened his F street place, he had the Temple pharmacy, almost across the way, to contend with, and one of the Evans pharmacies, which are among the most popular in Washington, was right around the corner. Mr. O'Donnell's store is not even on a corner and does not loom up conspicuously. But his methods, his manner and his personality soon made themselves felt. Not long ago he bought the Temple pharmacy, the previous owner having gotten into financial difficulties.

As stated, Mr. O'Donnell carries few of the articles to be found in many other stores, such as cameras, photographic supplies, fancy goods, etc. In the first place, he does not believe in mixing things, and he has no room at present to take up such side lines in any considerable volume. But he expects to make some improvements shortly and take in more room. His cigar counter sells perhaps more cigars, cigarettes and other smoker's supplies than nine-tenths of the tobacco stores, two clerks being kept busy nearly all the time even now when many persons have left Washington, not to return until Congress meets again.

It goes without saying that Mr. O'Donnell deems it necessary to be on the job. Not all the time, for he keeps regular hours, getting there at a fixed time in the morning and leaving at 4 P.M. Sundays he also takes off. But when he is there, nothing escapes his attention, and he is business and aggressiveness all over, even to his hair, which stands up straight like a brush and is closely cropped. He seems to radiate energy, without acerbity, for his blue eyes nearly always have a twinkle in them.

"This is a constant grind," he remarked casually between answers to queries of customers, "and a man would go crazy unless he took some recreation. I went away on a summer vacation in June and did not get back until October 1, and I keep regular hours. I have competent and reliable assistants. Do you know," he added, "that I have never been in my store at Thirteenth and F streets, and don't hardly know what it looks like. I allow my manager there an absolutely free hand, for this inspires confidence and gives encouragement."

Mr. O'Donnell began in the drug business at the age of eighteen, walking into a store one day, when he had practically no experience, and boldly starting in. Of course, he did not tell the proprietor that he had been in the business only one month or so. Later he worked for a wholesale house, but soon got back to the retail trade and also graduated in pharmacy, taking a full course. The prescription trade of his store is large, but of course, the proprietaries and patents make up the bulk of the business.

The only kind of publicity Mr. O'Donnell has ever used is newspaper advertising. To this day he retains copies of his first advertisement, which he has followed in the main. No hand bills, circulars, cards, sandwich menu or other means of attracting attention of the public have ever found a place in his methods.

PHARMACEUTICAL PERSONALS

NOW CHAIRMAN OF MASSACHUSETTS BOARD

John J. Tobin of South Boston was elected chairman of the Massachusetts State Board of Registration in Pharmacy, December 5, succeeding William E. Martin of Holyoke. Mr. Tobin has served the past year on the board, having been appointed by ex-Governor Walsh. He was born in Boston 44 years ago, and attended school in the West End, and it was there that his first experience in the drug business was secured. Nineteen years ago he opened a drug store in South Boston, at Dorchester and Eighth Sts., where he has built up an excellent business. Mr. Tobin is vice-president of the Boston Association of Retail Druggists, commodore of the South Boston Yacht Club, and a member of the Massachusetts State Pharmaceutical Association, the



JOHN J. TOBIN

Knights of Columbus and the Ancient Order of Hibernians. He is married and has four children. His home is at 5 Telegraph street, South Boston.

CHAIN STORE PROPRIETOR RETIRES

Albert E. Lynch, proprietor of the A. E. Lynch Drug Company chain of stores in Cambridge, Mass., after conducting drug stores in that city for nearly thirty years, has retired from that business. The Inman square store has been sold to Clifford W. Wilder and Ferdinand A. Wyman, Jr., who will continue the business under a corporation. Paul A. Egan has purchased the East Cambridge store, which Mr. Lynch has owned for sixteen years. The North Cambridge store has been purchased by George S. Coakley, a former clerk with John A. Cunningham. Mr. Lynch opened his first store at the corner of Columbia and Hampshire streets, September 25, 1887. He conducted this store for 23 years. The Inman square store was purchased by him in 1910. While Mr. Lynch retires from the drug business he will continue in the real estate and insurance business with an office in the new Inman building, of which he is part owner. From the business experience he has gained through his associations as a bank director, chairman of the retail trade committee of the Board of Trade, president of the Inman Square Business Men's Association and in his own private affairs as a drug store proprietor and a limited operator in real estate, his success in the field he has chosen to follow ought to be instantaneous and substantial.

PERSONAL BREVITIES

—E. L. SCHOLTZ, president of the Scholtz Drug Company, Denver, Colo., recently delivered an address before the advertising bureau of the Denver Civic and Commercial Association, in which he commended the appearance and character of local advertisements. He stated that the reason he advertised was not only to increase sales and profits, but to establish in the public mind a leadership for his stores in the drug line. Advertising, in his opinion, should be done continuously and consistently. Incidentally, Mr. Scholtz paid a high tribute to the standing of Denver advertising men and women.

—L. P. HADLEY, druggist, at Anita, Iowa, according to the newspapers of Council Bluffs, was secretly married to

Miss Alma Brauer, formerly a clerk in the Cumberland post office. The newly married pair had intended to keep their marriage a secret until the holidays and at that time surprise their friends with the announcement. The Rock Island newspapers, however, got hold of the item and made the fact public. Mr. Hadley is well known in political circles in his part of the state and was formerly chairman of the Progressive County Committee.

—L. C. FIX, of the H. K. Mulford Company, salesman of the Middle West, was elected Secretary of the Ohio Society of Philadelphia, at the November meeting of that organization held at the New City Club. Mr. Fix is a native of Zanesville, Ohio, and has been very active in bringing together the natives of the Buckeye State in the Quaker City. The Society will hold several social functions throughout the year, and its headquarters are located at 313 South Broad street.

—DISHONEST POLITICIANS have been demanding, and in some instances securing, contributions of \$100 to \$200 from New Bedford (Mass.) druggists by saying that the money was to help the candidacy of Charles F. Ripley of Taunton for inspector for the State Board of Registration in Pharmacy. When Mr. Ripley heard of it he was in Boston, and immediately telephoned New Bedford druggists to give up no money. "It was done absolutely without my knowledge or consent," he declared.

—LEON C. ELLIS, druggist at Lynn, Mass., was nominated for member of the Massachusetts State Board of Registration in Pharmacy by Governor McCall, to succeed Charles F. Ripley of Taunton, who is ineligible for re-appointment. He will be the first representative from Lynn on the board. He runs a pharmacy at 2 Market street, Lynn, and is chairman of the Lynn Cemetery Trustees, and a member of the Massachusetts State Pharmaceutical Association.

—STEPHEN J. CASWELL, Rockford, Ill., druggist, recently celebrated his 69th birthday anniversary. He was born at Bangkok, Siam, where his father was a missionary. He has been a resident of Rockford since 1861 and has been connected with the drug business in that city for more than 50 years. He has conducted the store he now owns since 1881. Locally he is regarded as an authority in numismatics and has a choice collection of old coins and stamps.

—J. BENGSTON, for the last 40 years proprietor of the City Drug Store, Rock Island, Ill., has disposed of his business and will retire. His successor is John A. Bengston, a nephew. Young Mr. Bengston learned the business in the store which he now owns. He is a graduate of Northwestern University School of Pharmacy in Chicago, having taken a three years' course. During his college days he taught Latin and later public school.

—J. K. HALL HOUSTON, who went to Burlington, N. C., a year ago from Greensboro, N. C., and opened the Houston Drug Company store, has been forced to give up his work on account of ill health and will retire and rest a while. R. Homer Andrews of Chapel Hill, who has been prescription clerk since the store opened, has purchased an interest in the business and now becomes manager.

—PROF. C. E. A. WINSLOW, of New Haven, addressed the Mulford staff at the Glenolden Laboratories on December 8th. The subject of his lecture was "Sir John Simon." Professor Winslow holds the Chair of Public Health at Yale University and is editor-in-chief of the Journal of Bacteriology. His lecture was very interesting and greatly appreciated by his hearers.

—THEODORE DANGLMEYER, JR., owner of the Red Cross Pharmacy, Waltham, Mass., has been sued for \$5,000 damages by Mrs. Catherine Murdock of West Newton, Mass., who alleges that in September last she bought a quantity of Rochelle salts at the pharmacy and was made violently ill on taking a dose. She alleges that the salts contained some poisonous ingredient.

—W. M. F. KAEMMERER, a member of the American Pharmaceutical Association who some years ago was awarded the Dr. Enno Sander prize of \$50 for the best paper on Pharmacy and Dispensing, and for a number of years a well-known drug clerk of Columbus, O., is about to open a new store in that city under the name of The Athletic Club Pharmacy. Mr. Kaemmerer is a Columbus product and began the drug business at the age of 14 when he was apprenticed to F. W. Schueller, now retired, and with whom he remained for nine years. His next position was with Charles Huston, where he saw six years of service, resigning to enter the New York College of Pharmacy from which he graduated in 1898. In his new undertaking Mr. Kaemmerer will have as his assistant E. W. Harrington, who for several years conducted pharmacies in the North End district of Columbus and who for four years was connected with the State food and drug department as an inspector of drugs.

—S. A. ECKSTEIN, of Milwaukee, was elected president of the Wisconsin Pharmacal Company at the annual meeting held last month. Other officers elected were: Vice-president, C. Pfeiffer, Plymouth; secretary, E. G. Raeuber, Milwaukee; treasurer, Louis H. Cressin, Milwaukee; directors for three years, C. Pfeiffer, Plymouth; Louis H. Cressin and O. Hackendahl of Milwaukee. L. G. J. Mack was named director to fill the vacancy caused by the death of Christian Widule. A dividend of 6 per cent was declared and the report showed the company to be in a prosperous condition.

—W. L. SALMON, assistant general manager of the Liggett drug stores in the Boston district, was given a farewell dinner by the 25 managers of that territory on December 19 at Young's Hotel. W. G. Sweet acted as toastmaster, and among the speakers were general manager J. A. Crane, H. H. Wadsworth, C. E. Johnson, Charles Davis, who will succeed Mr. Salmon in Boston, and S. S. McCully of Providence. Mr. Salmon expects to leave on January 1 for Winnipeg, Can., where he will take charge of the company's stores.

—WYNN L. EDDY, who recently retired from the Utah Board of Pharmacy, and Roy McAllister, who succeeded him, were guests of honor at a luncheon given recently by the other members of the board at the Alta Club, Salt Lake City. J. L. Franken was toastmaster, and speeches were made by various members of the board and guests present. A photograph of the members of the board was presented to Mr. Eddy.

—EDWARD MALLINCKRODT, president of the Mallinckrodt Chemical Works, announced before Christmas that bonuses would be distributed to the six hundred employes, a month's salary to each salaried employe. The bonus to workmen was on a sliding scale, those with the company five years getting ten per cent of a year's wages, those there three years seven per cent, two years four per cent, one year two per cent.

—C. W. WILDER and F. A. WYMAN have bought the Rexall store at Inman square, Cambridge, Mass. Mr. Wilder, a former president of the Central Square Business Men's Association, was for the last few years manager of the Liggett store in Central square, Cambridge. Mr. Wyman is head of a Boston advertising agency. The firm will be continued as the Lynch Drug Company. Improvements are being made to the pharmacy.

—JOHN T. MILLIKEN & Co. will devote part of the new plant being erected in St. Louis to the manufacture of absorbent cotton. The factory will be in charge of Paul A. Schultz, formerly of Columbia, S. C. The new plant is being erected at Third and Plum streets, at the river. The investment will reach about \$200,000. Four thousand pounds of absorbent cotton will be turned out daily.

—J. C. KRIEGER has been appointed manager of the Elliott Drug Company at 127 Broadway, Buffalo. This concern distributes drugs and cigars among more than 200 drug stores in Buffalo and vicinity. Mr. Krieger succeeded S. A. Grove who died recently. The concern will move to larger quarters at 99-101 Broadway about January 1.

—FRED J. EASTMAN, druggist at Brockton, Mass., 20 years ago, has been renewing acquaintances in that city. He is now located at Saskatchewan, where he has a 120-acre wheat ranch.

—C. S. PERRY, a druggist at 958 West Sixth street, Cin-

cinati, aged 63 years, was knocked unconscious recently by a negro because of his refusal to exchange a bottle of medicine. The negro was found by the police standing over Mr. Perry, and was arrested on a charge of assault and battery. It is not believed that Mr. Perry's wound is serious.

—MILES E. MIXSON, a druggist at St. Paul and Twenty-first streets, Baltimore, will shortly move diagonally across the street into a building that has been entirely remodeled, and has ordered a complete new set of fixtures and furniture, which embody some novel ideas. The equipment of the old store will be disposed of, even down to the soda fountain.

—J. W. T. KNOX, advertising manager of Nelson, Baker & Co., pharmaceutical manufacturers, delivered an address before the retail druggists and members of the local branch of the A.Ph.A. in Detroit last month. J. R. Worden, advertising manager and salesman for Frederick Stearns & Co., followed Mr. Knox with a talk on cost accounting.

—C. W. BROWN, of the H. K. Mulford Company, delivered a lecture on "The Production of Biological Products" to the Maryland Branch of the American Chemical Society, recently, at the department of chemistry, Johns Hopkins University. The lecture was illustrated with stereopticon views and the attendance was large.

—HELM WOODWARD has been appointed receiver for the drug store formerly operated by Frank Kinsinger, 17th street and Maryland avenue, Covington, Ky. The receivership followed bankruptcy proceedings initiated against Kinsinger, whose liabilities are listed at about \$3,000, with the stock of drugs as his sole asset.

—S. B. SMITH, for many years proprietor of the drug store at Bates and Main streets, Lewiston, Maine, has announced that he will soon retire from business and that the building in which he has been located for so many years will soon be torn down to make way for a new and more attractive block.

—THE RED CROSS PHARMACY, owned by Charles Kretchner, of Piqua, Ohio, has been closed by a magistrate, following the issue of a number of attachments obtained by creditors against the property. The entire stock is to be offered for sale to satisfy the creditors, it is understood.

—J. E. HENRY, druggist at Cameron, W. Va., and Miss Ellen S. Elliott, a registered pharmacist of Holyoke, Mass., were married at Holyoke. During 1914-15 Miss Elliott was a student in Massachusetts College of Pharmacy, from which Mr. Henry was graduated in 1915.

—RICHARD MCGOWAN, manager of the Riker-Regeman Drug Store, Hartford, Conn., has just returned from a trip to Bermuda. He states that on his voyage home all of the windows of the steamship were darkened at night as a precaution against submarines.

—A. MEEKING, president of the Willes-Horne Drug Company, has been on a three months' trip to Eastern cities, purchasing stock for his company, which has recently acquired the store operated by the Parker Drug Company at Salt Lake City, Utah.

—N. C. BUBIER, a member of the Massachusetts bar, former state senator and former postmaster of Lynn, Mass., has retired from the retail drug business after many years, and sold his pharmacy at Swampscott, Mass., to William F. Craig.

—L. F. RAABE, a prominent druggist of Philadelphia, was married December 5 to Miss Sallie Wiley, formerly of Baltimore. The ceremony took place at the home of Dr. R. C. Bowman, 1100 Jackson street, a brother-in-law of the bride.

—C. E. RIDENOUR, registered pharmacist of 28 years' experience in Virginia, and for 14 years manager of the Sixth Ward Pharmacy in Petersburg, Va., has opened a new store in that city. The store is located in a rapidly developing section of the city.

—E. A. SMITH, for six years manager of the Riker-Jaynes Store on Sumner street, Boston, has purchased the drug store at 34 Salem street in the Medford Theater Building, Medford, Mass., and already taken charge.

—EBEN J. WILLIAMS, a druggist of Waltham, Mass., and a republican, was re-elected as mayor of that city on December 5, receiving 2,205 votes to 1,867 polled by his Democratic opponent.

DEATHS IN THE DRUG TRADE

E. CLIFFORD NASH

E. Clifford Nash, for over 25 years a druggist at Abington, Mass., died of pneumonia, aged 60, on November 27. His father, the late Sylvanus Nash, was a druggist in Abington 50 years. On the death of his father in the early '80s, E. Clifford Nash, with the late Clifford Ramsdell, succeeded to the business. In 1883 they moved it to the new Savings Bank block, and made it one of the large pharmacies of historic Plymouth county. After a few years Mr. Nash bought Mr. Ramsdell's interest. Of late years his son-in-law, William Tribou, has been associated with him in the business. Mr. Nash was also widely known as a newspaper publisher. When a young man he issued the Plymouth County Journal, the Abington Herald and a paper at Framingham, Mass. A dozen years ago he again entered the newspaper field as publisher of the Abington Advertiser and a string of South Shore newspapers. He was 25 years treasurer of the Democratic city committee, was a charter member of Abington Board of Trade, and prominent in Pilgrim Royal Arch Chapter of Masons; Abington Council, Royal and Select Masters; John Cutler Lodge, A. F. & A. M.; Pilgrim Lodge, I. O. O. F.; the Franklin Club, and the Veteran Odd Fellows' Association. His wife, three sons and one daughter survive.

LINUS D. DRURY

Linus D. Drury, Boston's oldest druggist, who began as clerk in 1870 in the drug store at Warren and Dudley streets and finally became president and treasurer of the L. D. Drury Drug Company, owners of the store, died November 29. He spent all his professional and business life in this one store. He was graduated from Massachusetts College of Pharmacy in 1871, and in later years served the college on various committees. He was active in the N. A. R. D., a life member of the A. Ph. A., and a member of the Boston Association of Retail Druggists, Massachusetts State Pharmaceutical Association, and New England Branch of the American Pharmaceutical Association. He was also prominent in Roxbury Council, Royal and Select Masters; and Mt. Vernon Royal Arch Chapter. His home was at 45 Whiting street, Roxbury, Mass. Mrs. Drury, who survives, is one of the best known members of the W. O., B. A. R. D.

In closing up his estate, his interest in the Linus D. Drury Company, Boston, was bought by Irving P. Gammon, druggist in Boston and Roxbury. The Drury pharmacy will be continued, with P. F. Murray as manager. Dana W. Drury is now president of the company, Mr. Gammon treasurer, and Mr. Murray clerk of the corporation.

JACOB K. POST

Jacob K. Post, president of the J. K. Post Drug Co., Inc., one of Rochester's pioneer drug houses, died on November 30, at his home in that city, aged 87 years. He was born on November 11, 1829, in Scipio, Cayuga County, N. Y. He came to Rochester in 1836 and at the age of 15 years became a clerk in the store of his father in Exchange street. He was admitted to partnership in the firm in 1852. Following his father's death, he continued the business in Exchange street, later moving to the present location in Main street east. The firm was incorporated in 1906 and Mr. Post became its president, an office he held to the time of his death. He had been ill six years. While at work in his store in October, 1910, he inhaled fumes of chloride of lime. The mucous membrane in his throat and chest was burned so badly that it was thought he would die. He rallied, however. His death was due to what was declared to be a sort of cardiac asthma, incident to old age. He leaves two daughters and one brother, Willet Post.

OBITUARIES

—JOSEPH B. FARIES, a Philadelphia representative of the H. K. Mulford Company, who had been in the employ of the firm since 1902, died December 1 in the Presbyterian Hospital. Mr. Faries was born in Smyrna, Del., and graduated from the Philadelphia College of Pharmacy in 1890. He was engaged in the retail drug business at Fifteenth and York streets, Philadelphia, for a number of years and later sold his store and joined the sales force of the H. K. Mulford Company. He had always been a loyal, hard worker for the interests of the company which he represented and his sudden death came as a shock to his many friends in the various branches of the drug trade of Philadelphia.

—ALONZO LILLY, in his day one of the best known druggists in Baltimore, and member of the firm of Lilly, Rogers & Co., which conducted the most popular and extensively patronized pharmacy in the city in its time, died on November 22 at his home, 19 West Preston street. Mr. Lilly had lived in retirement since 1898, the pharmacy afterward going into the control of Dr. Ross and then closed after the latter's death. For a while Mr. Lilly engaged in the manufacture of several preparations which had gained a sale while he was a retailer. His wife, a daughter and four sons survive.

—J. SNYDER NOEL, formerly a druggist in Washington, D. C., and a resident there for the past thirty-five years, died at his late residence, that city, following a brief illness. He was born at Chambersburg, Pa., and spent his boyhood at Westminster, Md., where a number of relatives survive him. For the past ten years he had been in the employ of the Federal Government. He is survived by his widow, Mrs. Ada M. Noel, of St. Louis, Mo.; a son, Joseph C. Noel; a daughter, Catherine Noel, both of Washington, and a sister, Miss Kittie S. Noel, of Westminster.

—SAM. E. GOODMAN, 41 years of age, and for the past ten years engaged in the drug business at Beaumont, Tex., is dead. He had taken a course in pharmacy and medicine at Vanderbilt University. Shortly thereafter, when the Spanish-American War broke out, he enlisted with the Second Texas Regiment and served as hospital steward. He is survived by his mother. The funeral and interment took place at Navasota, Tex., where Mr. Goodman was born and had lived for many years.

—CHARLES C. BETTES, druggist and prominent citizen of Jacksonville, Fla., died recently in Asheville, N. C., whither he had gone in search of health. He had been a resident of Jacksonville for 40 years, having gone to that city from Canada. About a year ago, while hunting in West Florida with a party of friends, he caught cold, and immediately went into a decline from which he never fully recovered. He was 62 years of age, and is survived by his widow, two sons and four daughters.

—ALBIN MELLIER, vice-president of the Mellier Drug Co., St. Louis, died on November 27 after an illness of several months. He was 66 years of age. He entered the drug business with his father, A. A. Mellier, four years after the establishment of the firm in 1865. He is survived by two sons and four daughters. His brother, K. D. Mellier, who also survives him, is a member of the drug company named.

—FRANK HAMILTON SHURTLEFF, died at his home, West Roxbury, Mass., on December 2, aged 50 years, of heart failure. He had been in poor health but at the time of his death was anticipating a return to his business as a druggist. He was born in Somerset and is survived by his widow, two daughters and a son.

—FREDERICK HARRISON LOWELL, for many years a retail druggist of Cambridge, Mass., died of pneumonia at his home last month. He was born in Gardner, Me., in 1843.

In the late '60s he went to Boston and began as a clerk in Southworth drug store, later becoming owner of the business. Twelve years ago he retired.

—DR. WILLOUGHBY WALLING, who for a number of years and until 1885 was head of the wholesale drug firm of Walling & Co., Indianapolis, died at his home in Chicago on December 1. In 1885 he retired from the drug business to accept an appointment as American consul at Edinburgh, Scotland, a position he filled with considerable ability for three years, when he returned to this country and established himself as a nose and throat specialist in Chicago. He was 68 years of age and a graduate of the Louisville Medical College. In 1876 he married Miss Rosalind English, the daughter of William H. English, who was democratic candidate for the vice-presidency in 1880. He is survived by his widow and two sons.

—LEWIS HUNT, a native of Auburn, N. Y., died at his home in that city recently. He was born in 1839, and after leaving school was employed for some time in the drug store of Joseph Osborne, a former partner of his father, Thomas M. Hunt, who was a leading druggist of Auburn, having moved to the latter city from Springfield, Mass., about 1830. Lewis Hunt moved to Chicago in 1860 and continued in the drug business there. He later moved to Janesville, Wis., and returned to Auburn in 1880 when he re-engaged in the drug business under the firm name of Wright & Hunt.

—GEORGE G. EITEL, a salesman for the Mooney-Mueller-Ward Drug Company, wholesale druggists, of Indianapolis, died of congestion of the lungs at his home in the Indiana capital on December 15. He was sick only a few hours, his brief illness following the drinking of a quantity of cold water. Besides his widow, he is survived by his father and three uncles, two of them, Charles A. and John Eitel, being well-known Indianapolis druggists.

—BENJAMIN F. WAKEFIELD, at one time a partner in the wholesale drug firm of Tyler & Finch of New York, died last month at his home in Passaic. Mr. Wakefield retired from business about 10 years ago. He was a thirty-third degree Mason and a member of Enterprise Lodge of Jersey City. The funeral was held on Monday. Mrs. Wakefield and two children survive him.

—DR. WALTER J. DODD, aged 47, formerly dispensing pharmacist at the Massachusetts General Hospital and later instructor in Harvard Medical School, died in Boston, December 18, from injuries received some years ago from X-ray experiments.

—CHARLES H. REDDEN, 60 years of age, and for nearly 30 years a druggist of Denton, Md., died in Philadelphia on November 21, whither he had gone to receive medical treatment. He is survived by his widow.

—V. COOK, 78, a well-known druggist of Terre Haute, died at his home in that city last month. He was a native of Germany and had been in business in Greencastle and Terre Haute for more than 50 years.

—FRANK C. KEMP, for the last 30 years in the drug business at Kempton, Ill., died from a stroke of paralysis on November 20. He was 59 years of age. He is survived by one son.

—CHARLES H. SAWYER, prominent in business and banking circles and who was engaged in the drug business at Saco, Maine, for 30 years, is dead. He was 73 years of age.

—DR. JOSEPH J. PIERRON, of Chicago, and for many years a prominent druggist of Lincoln, Ill., died in the first-named city on December 14. The remains were taken to Cincinnati for burial.

—LESTER N. COBB, 40 years old, a member of the firm of Strong, Cobb & Co., wholesale druggists, Cleveland, Ohio, is dead. He is survived by a widow and two children.

—I. A. MOVITT, a veteran druggist of Chicago, died at his home in that city on December 14. He was 48 years of age and is survived by his widow.

—JOHN F. NOONAN, druggist at Waltham, Mass., died December 1, aged 29.

A. D. THOMPSON

A. D. Thompson, for thirty-eight years a druggist in Minneapolis, died on December 20 at his home, where he lived with his mother, Mrs. J. A. Thompson. He did not recover consciousness from an apoplectic stroke which occurred on December 18. Mr. Thompson was born at St. Stephens, New Brunswick in 1861. The parents, who had been married in Minneapolis, returned to that city in 1866, after the war, where Mr. Thompson attended the Washington school, and the University of Minnesota.

In 1878 he entered the drug store of A. D. Gray and J. R. Hofflin, and soon thereafter acquired an interest in the firm, which became the Hofflin-Thompson Drug Company. In 1899, after the partnership had been dissolved, he organized the A. D. Thompson Drug Company, in which he was president, and opened the pharmacy at Marquette avenue and Third street. Later, in December, 1903, he opened another drug store at Fourth street and Nicollet avenue.

Mr. Thompson practically retired from business a year ago, after having suffered a slight apoplectic stroke two years ago. He had a large acquaintance in the drug trade, and had served twice as president of the Minneapolis Retail Druggists' Association, and as president of the Minnesota State Pharmaceutical Association. He was unmarried, and is survived by his mother, three brothers, Charles W., who has been associated with him in the business; Fred H., of Minneapolis, and Clifford W. Thompson, of Monroe, Wash., and two sisters, Mrs. O. B. Gould, of Minneapolis, and Mrs. C. E. Doll, of Virginia.

DR. RUSBY RESIGNS AS PHARMACOGNOCIST

Dr. Henry H. Rusby has resigned the position of pharmacognocist for the Port of New York and as an attache of the Bureau of Chemistry, Department of Agriculture. The work of identifying and examining the crude botanical drugs received at New York was assigned to Dr. Rusby, and his resignation is due to the fact that he was unwilling to stand sponsor for the character of the drug importations unless he could have more time to make examinations. This concession, it is said, the government officials would not grant.

Dr. Rusby's time was limited to 210 hours in a year. In previous years Dr. Rusby gave 20 hours a week to the work. Last year his time for inspection and examination at the laboratory, 641 Washington street, was 420 hours.

A member of the Forestry Department has been detailed for the work temporarily.

Dr. Rusby said: "I want it understood by the drug trade that for some months past I have seen only a small part of the drugs that have found their way into the Port of New York."

McKESSON & ROBBINS, INCORPORATED

The firm of McKesson & Robbins, which was established in New York in 1833, and has continued to do business under that name ever since, was incorporated on January 1, 1917; the business was incorporated under the name of McKesson & Robbins, Incorporated.

The interests remain the same, the only substantial change being an increase of capital by the investment of more actual cash in the business by the present partners: John McKesson, Jr., Herbert D. Robbins; George C. McKesson, Irving McKesson, Donald McKesson and Saunders Norvell.

BATTLE CREEK DRUG STORES CONSOLIDATE

The Baker Drug Company and the Parker Drug Company, of Battle Creek, Mich., have consolidated and will hereafter be known as the Baker Drug Co., Inc. The officers of the new corporation are: President, Norman J. Freeman; vice-president, Harley J. Earle; and secretary-treasurer and general manager, C. P. Baker.

NEWS OF A. PH. A. BRANCHES

PHILADELPHIA BRANCH

Two members were elected at the meeting of the Philadelphia Branch of the A. Ph. A. held at the Temple College of Pharmacy on November 15. They were Miss Mabel Starr and Ivor Griffith.

Professor Julius W. Sturmer presided, and W. L. Cliffe, as chairman of the Committee on Entertainment of Visiting Pharmacists, reported that their plans were successfully carried out, and that the small deficit incurred had been liquidated by the Committee. He also moved that votes of thanks be given to Mrs. Franklin M. Apple for her splendid assistance in entertaining the ladies' section, and to the Philadelphia Chamber of Commerce and its publicity bureau, for their hearty co-operation in the matter. The motion was unanimously passed. Professor Kraemer moved that the local branch extend to Mr. Cliffe a vote of thanks for the efficient manner in which he conducted the work of his committee and this likewise received a unanimous vote.

Two letters were read from the Philadelphia County Medical Society, one of which was an invitation for the branch to appoint two delegates to co-operate with the society and to attend its meetings, and the other letter contained an invitation for the members to attend a meeting of the society to listen to a discussion of the drug habit evil, and before which a paper was to be presented by Dr. Dercum on the drug habit among the better classes and its treatment, and also one by Dr. Baldi of Moyamensing Prison on the drug habit in the underworld. The invitation was accepted and the president was instructed to appoint two delegates as requested.

George M. Beringer read an interesting paper on the "Galencicals of the U. S. P.," and Prof. Jos. P. Remington discussed the U. S. P. IX. in a general manner. A discussion of the subjects presented was developed by Messrs. Cliffe, Apple, LaWall, Kraemer, McCartney, Cook, England, Minehart and Pollard.

NEW ENGLAND BRANCH

The New England Branch of the American Pharmaceutical Association at its November meeting, elected these new officers: President, R. Albro Newton of Southboro, succeeding Fred W. Archer of Milton; vice-president, William H. Glover of Lawrence; secretary-treasurer, H. C. Muldoon of Boston; delegate to council, Prof. Elie H. LaPierre of Cambridge; chairman of committee on professional relations, C. B. Wheeler of Hudson.

As a result of a discussion on the new Pharmacopoeia in a joint meeting of the Boston Association of Retail Druggists and the New England Branch of the American Pharmaceutical Association, at the Massachusetts College of Pharmacy, November 22, these organizations are to have a joint "experience meeting" next spring, in which druggists will tell results of experiences with the new Pharmacopoeia. It was voted to hold such a meeting at the suggestion of James F. Finneran, chairman of the executive committee of the N. A. R. D., and Charles A. Stover, chairman of the finance committee of the B. A. R. D.

R. Albro Newton and Frank F. Ernst spoke on "Tinctures," and William R. Acheson and William H. Glover on "Syrups." Both organizations voted to indorse the Boston police crusade against "dope" dealing druggists. The druggists voted to co-operate with the Women's Municipal League in a war on rats, after Mrs. Albert T. Leatherbee, in a convincing address, made clear that these pests do \$1,500,000 damage each year in Boston alone.

BALTIMORE BRANCH

The Baltimore Branch of the American Pharmaceutical Association held its November meeting in Harris Hall, of

the University of Maryland. Dr. Charles C. Neal gave an interesting talk on fluidextracts, considering particularly their alcoholic variations, and a prescription clinic was afterward held, dispensing demonstrations being given and difficult prescriptions considered by Charles L. Meyer and John I. Kelly. Other members of the branch were also called upon to submit prescriptions out of the ordinary. The members of the senior and junior classes of the Department of Pharmacy, University of Maryland, and druggists generally, were invited to attend subsequent meetings of the branch. The co-operation of members of the Maryland Pharmaceutical Association is also to be freely sought, and it is expected that by a general participation in the meetings the latter can be made of far greater benefit from an educational, professional and scientific standpoint.

INDIANAPOLIS BRANCH

At the December meeting of the Indianapolis Branch of the American Pharmaceutical Association, H. S. Noel of the advertising department of Eli Lilly & Company, discussed "Retail Drug Store Advertising."

Mr. Noel outlined the fundamentals of drug store publicity by citing the necessity of a proper foundation upon which to build. The basis of all drug store advertising, the speaker said, is made up of promotion work that is costless but highly essential if proper returns are to be had from the business.

The druggist who secures the best returns from his advertising expenditures, according to Mr. Noel, must see to it that customers are sold quality merchandise; that the store is the embodiment of cleanliness; that both himself and his clerks are courteous and accommodating; that salesmanship is well developed; and that stock is kept up and properly displayed. Poor buying, slow turnover, bad accounting methods, cheap merchandise, and neglect of costless advertising opportunities were given as chief reasons for the lack of success in many drug stores. The speaker laid special stress on the importance of good window displays and called attention to their value as trade winners. He also spoke of the need of price tickets on goods in the windows and outlined in a general way the proper arrangement and selection magnets.

The value of a name was another subject that received attention, and the speaker was strong in the belief that whenever possible the druggist should feature his own first. The selection of a good selling slogan and how to capitalize on it was also advised.

Constant advertising is necessary. It has been his observation that many druggists advertise when business is dull and then claim that advertising does not pay them. Taking advantage of the national advertising that is constantly appearing, and exploiting nationally advertised goods the druggist carries is good publicity to connect with, said the speaker; the dealer helps should be used to the best advantage and made to serve the purpose for which they are intended.

In conclusion the speaker took up the matter of how much to spend a year in advertising and emphasized the importance of careful planning, the selection of ways and means, and the preparation of copy. Mailing lists, said Mr. Noel, are the most valuable adjunct the neighborhood store has. He told of the best ways of building a mailing list, of the importance of keeping it up-to-date and discussed the commercial value of personal note letters under a two-cent stamp at the same time mentioning various drug store items that could be made especially productive by means of mailing lists.

Following Mr. Noel's paper a discussion was led by E. R. Stucky. Others who took part were: H. W. Carter, E. C. Reick, Maurice Schwartz, F. R. Eldred, Edward Merrell and F. H. Carter.

GUARANTEE LABEL LEGEND LAPSES

U. S. Department of Agriculture Explains New Way for Manufacturers to Guarantee Foods and Drugs

WASHINGTON, D. C., December 18—The following legend, so familiar in the past on food and drug packages, "Guaranteed by Manufacturer, under the Food and Drugs Act, June 30, 1916, Serial Number 265,424," is disappearing from labels. A method for guaranteeing foods and drugs which will be less misleading to the public has been provided by the officials in charge of the enforcement of the Food and Drugs Act. Under the new plan manufacturers may guarantee their products on the invoice or bill of sale, or by certain other methods, but according to a food inspection decision which became effective on November 1, 1916, they may not make any statement regarding a guaranty or serial number on the labels of packages of foods and drugs which enter interstate or foreign commerce. However, labels containing the guaranty legend and serial number which were printed prior to May 5, 1914, the date on which the first notice to discontinue the guaranty legend and serial number was issued, may be used until May 1, 1918, in order to prevent the loss that otherwise would occur from the destruction of such labels.

The manufacturer, wholesaler, or other person residing in the United States and shipping foods or drugs into interstate commerce, according to the amended regulation, may print or stamp his guarantee on the invoice, bill of sale, or on any commercial paper that contains a list of the items of foods or drugs which he intends to guarantee. The Department of Agriculture does not prescribe the exact form that the guaranty shall take, but is of the opinion that the following wording will be satisfactory:

I (We), the undersigned, do hereby guarantee that the articles of food (and drugs) listed herein are not adulterated or misbranded within the meaning of the Federal Food and Drugs Act, June 30, 1906, as amended.

This statement should be followed by the signature, which may be printed or stamped if the invoice or other document is transmitted by the guarantor direct to the dealer, and the address of the guarantor.

Originally it was provided in the rules and regulations that the manufacturer or wholesaler who desired to guarantee that his products complied with the Food and Drugs Act might file a general guaranty with the Department of Agriculture to the effect that the foods or drugs he shipped into interstate commerce were not adulterated or misbranded within the meaning of that act. Upon the receipt of a properly executed guaranty the Department assigned a serial number to the manufacturer or wholesaler who filed the guaranty. The manufacturer or wholesaler was authorized to use this number on his labels to indicate that the guaranty which he had filed with the Department covered the products on which the number was used. After this method had been in operation for some time it was found that the guaranty legend on the label was misleading to the public. It was incorrectly assumed by consumers generally and some retail dealers that the guaranty legend on the label meant that a sample of the product had been examined by the U. S. Department of Agriculture and that in effect the U. S. Department of Agriculture actually guaranteed the product.

The Food and Drugs Act provides that no dealer shall be prosecuted under the provisions of that Act when he can establish a guaranty signed by the wholesaler, jobber, manufacturer, or other party residing in the United States, from whom he purchases articles of food and drugs. The guaranty should be to the effect that the foods and drugs to which it applies are not adulterated or misbranded within the meaning of the Act. The object of this provision is to make the manufacturer or wholesaler or person who knows the composition of the food and drug products responsible for their compliance with the provisions of the law. In many cases a dealer does not know the composition of the products he sells, and can not afford the expense of having an analysis made in order to determine it for himself.

RECOMMENDS ADMITTING POISONS TO MAILS

Postmaster Burleson Makes Suggestion for Amendment to Postal Laws in His Report to Congress

WASHINGTON, D. C., December 11—In his annual report for the fiscal year ended June 30, 1916, Postmaster General Burleson makes a number of recommendations to Congress for the enactment of legislation affecting the Department. Among the tentative drafts of legislation so submitted is that which would permit the transmission of poisons and medicines in the mails, for which manufacturers and dealers in drugs and medicines have long contended.

The legislation which provides that poisons and other objectionable matter shall be nonmailable also provides that the Postmaster General may permit the transmission of same in the mails, "under such rules and regulations as to preparation and packing as he shall prescribe." Under this authority the department promulgated the regulation contained in paragraph 4, section 472, of the Postal Laws and Regulations, which provides that medicines and anesthetic agents, when properly packed, may be mailed by licensed physicians, dentists, or veterinarians who prepare or prescribe these commodities. This regulation, however, has been nullified by the decision of the Circuit Court of Appeals in the case of *Bruce vs. United States* (202 Fed., 98), which holds that the Postmaster General's authority in admitting poisons to the mails is limited to prescribing regulations relating to the "preparation and packing" of such commodities and does not permit him to limit the mailing of poisons to any particular classes of patrons.

It is, therefore, desired that the words "as to preparation and packing," be eliminated from section 217 of the act of March 4, 1909 (35 Stat. L., 1131), in order that the limitation on the Postmaster General's discretion in admitting poisons to the mails may be removed.

To permit medicines composed in whole or in part of poisons or poisons and anesthetic agents which are not outwardly or of their own force dangerous, or injurious to life, health, or property, and are not in themselves nonmailable, to be transmitted in the mails from manufacturers or dealers to licensed physicians, surgeons, pharmacists, dentists, and veterinarians, when inclosed in packages in conformity with the requirements of the postal regulations, such packages to bear the label or super-scription of the manufacturer or dealer in the article mailed, amend section 217 of the Penal Code by omitting the words "as to preparation and packing," so that the section will read as follows:

All kinds of poison, and all articles and compositions containing poison, and all poisonous animals, insects, and reptiles, and explosives of all kinds, and inflammable materials, and infernal machines, and mechanical, chemical, or other devices or compositions which may ignite or explode, and all disease germs or scabs, and all other natural or artificial articles, compositions, or materials, of whatever kind, which may kill or in anywise hurt, harm, or injure another or damage, deface, or otherwise injure the mails or other property, whether sealed as first-class matter or not, are hereby declared to be nonmailable, and shall not be conveyed in the mails or delivered from any post office or station thereof, nor by any letter carrier; but the Postmaster General may permit the transmission in the mails, under such rules and regulations as he shall prescribe, of any articles hereinbefore described which are not outwardly or of their own force dangerous or injurious to life, health, or property; Provided, That all spirituous or vinous, malted, fermented, or other intoxicating liquors of any kind are hereby declared to be nonmailable, and shall not be deposited in or carried through the mails. Whoever shall knowingly deposit or cause to be deposited for mailing or delivery, or shall knowingly cause to be delivered by mail, according to the direction thereon or at any place at which it is directed to be delivered by the person to whom it is addressed, anything declared by this section to be nonmailable, unless in accordance with the rules and regulations hereby authorized to be prescribed by the Postmaster General, shall be fined not more than \$1,000 or imprisoned not more than two years, or both; and whoever shall knowingly cause to be delivered by mail, according to the direction thereon or at any place to which it is directed to be delivered by the person to whom it is addressed, anything declared by this section to be nonmailable whether transmitted in accordance with the rules and regulations authorized to be prescribed by the Postmaster General or not, with the design, intent, or purpose to kill or in anywise hurt, harm or injure another, or damage, deface, or otherwise injure the mails or other property, shall be fined not more than \$5,000 or imprisoned not more than ten years, or both.

NEWS OF THE ASSOCIATIONS

NEW YORK R. D. A. ELECT OFFICERS

At the regular meeting of the New York Retail Druggists' Association held on December 22, the following officers were elected: President, Dr. J. A. Klein; first vice-president, Pincus Herz; second vice-president, Max M. Rosenberg; treasurer, H. Sarason; financial secretary, Dr. B. Miller; corresponding secretary, A. Margulis; recording secretary, Dr. I. J. Blumenkranz; trustees, Dr. Ed. Sher, M. Halperin, G. J. Palitz, Theo. Blackman and J. Pick. The following were elected to membership: Mrs. Goldstein and Messrs. A. Rosenberg, M. Moscovitz, I. B. Kipnis, N. Glassman and B. Carmine. The treasurer's report showed a balance of \$207.54.

Peter Diamond reported on legislative matters, paying particular attention to the narcotic hearing held in the City Hall during the month. He stated that trouble was brewing for the druggists, in that the Excise Commissioner had finally awakened and that already a number of druggists had felt that official's presence. He said that the conference committee would early send letters to the druggists containing questions relating to excise matters, which would carry answers furnished by the Excise Commissioner. He recommended that the association take 250 copies of the booklet issued by the Propaganda Committee of the New York State Ph. A., these to be distributed by the members to physicians. Mr. Diamond was given a vote of thanks for his excellent report. Messrs. Peter Diamond and J. G. Palitz with Messrs. P. Herz and A. Margulis as alternates, were appointed to represent the association at the Stevens Bill hearing to be held in Washington on January 5 and 6. Various committees in charge of the Twentieth Annual Ball Cabaret and Banquet to be given on Friday evening, January 26, at Lexington Hall, 109 E. 116th St., New York, by the association, reported progress and Mr. Herz, chairman of the Journal Committee, reported big success to date.

OHIO VALLEY DRUGGISTS ELECT

Ferdinand Ott was elected president of the Ohio Valley Druggists' Association at a meeting of the organization held last month at Cincinnati, in the Sinton Hotel. Other officers elected were: Henry J. Dusterberg, vice-president; L. L. Bunnell, second vice-president; Edward Voss, third vice-president; Fred S. Kotte, secretary; Otto E. Kistner, treasurer; Joseph Schneider, Charles G. Foertmeyer, Ralph Freiberg, Victor C. Muhlberg, board of control; county directors: for Butler County, J. T. Fay; for Kenton County, E. L. Puck; for Campbell County, W. I. Blank. The election followed a hot contest between two tickets, Mr. Ott being the only successful candidate on his ticket. The association went on record as favoring the appointment of George Stier, who made such a splendid record as Federal narcotic inspector in Cincinnati, to be chief of the Bureau of Foods and Drugs of the Ohio Department of Agriculture. Charles Ehlers was named to represent the association before the Legislature. State Senator Charles F. Harding, former secretary of the association, addressed the members regarding pending legislation of interest. Retiring President Milton Franken presided at the dinner at which the new officers were installed, on December 12.

ASSOCIATION ITEMS

A whist in aid of the Women's Organization, Boston Association of Retail Druggists, was given November 23 by Colonel and Mrs. John W. Lowe at their home at Watertown, Mass. Among those present were George A. Edmands, Newtonville; Mr. and Mrs. J. Hubert Green, Newton Highlands; Mrs. Gerry Russell, Watertown; Mrs. Elie H. LaPierre, Cambridge; Mr. and Mrs. Arthur Hudson, Mrs. Fred A. Hubbard, Mrs. G. Whitney Hubbard, Newton; Mrs. W. H. Henderson, Malden; Mrs. L. W. Griffin, Allston; Mrs. Zillah Staples, C. Herbert Packard, East Boston; Mr. and Mrs. William Corner, Roxbury; Mrs. Fred W. Connolly, Dorchester.

Jacksonville, Fla., retail druggists met recently at the Chamber of Commerce in that city, where they listened to an address by Dr. L. L. Froneberger, who has charge of the enforcement of the Harrison narcotic law; and Irwin M. McKenna, representing the United States District Attorney's office of New York City. Each of the speakers set forth the obstacles encountered by the Government officials in the elimination of the drug evil, and asked the druggists for their co-operation. W. D. Jones presided at the meeting. The following resolutions were adopted:

"Be it resolved by the Jacksonville druggists in meeting assembled, that they are heartily in favor of the federal statutes regulating the sale, dispensing and use of narcotics known under the Harrison act; be it further

"Resolved, That the association favors the repeal of the exemption provided in section 6 of said act as past experience with the practical enforcement of the law has demonstrated that the exemptions provided have afforded a temptation and means in the hands of the unscrupulous to violate the spirit and intent of the act; be it further

"Resolved, That a copy of these resolutions be furnished to Deputy Collector L. L. Froneberger, with the request that he forward the same through the proper channel as the expression of the association to be used by the administrative officers of the government in making recommendations to congress looking to the improvement in the law."

CHICAGO DRUG SHOW A SUCCESS

CHICAGO, ILL., December 18—The success of Chicago's First Annual Drug Show has been pronounced all that its promoters and the numerous exhibitors expected it would be. Praise and congratulations have been lavished upon the officers and members of the Chicago Retail Druggists' Association, under whose auspices the exhibition was organized and carried through. Besides the regular editions of the C. R. D. A. News, which were larger than usual last week and the week previous, two special editions were gotten out during the week of the Drug Show, copies of which were distributed among the thousands of visitors during the week. The aggregate attendance at the show is conservatively estimated at about 100,000 for the nine days it continued. All of the exhibitors had their representatives on the job from beginning to end and a large number of orders for goods were booked, in some instances amounting to \$4,000 or \$5,000.

The Beauty Contest continued through the week and the results were announced on the closing night, December 10, by the committee in charge of this feature, which was made up of the following: John J. Chwatal, James P. Crowley, A. C. Caldwell, John J. Boehm, John Mahaffy, Joseph Forbrich, Isam M. Light, and S. C. Yeomans. The awards were as follows: First Prize, Miss May Conklin, the Melba Girl; Second Prize, Miss Adelaide Zuehlke, the Norwich Girl; Third Prize, Miss May Cronin, the Wildroot Girl. The popularity contest was won by Miss Mary Baker, the Nuline Girl, the three other prizes being taken by Miss May Conklin, Miss Adelaide Zuehlke and Miss Charlotte Templeton, the A. D. S. Peredixo Girl.

The regular monthly meeting of the Executive Board of the Chicago Retail Druggists' Association took place Tuesday, December 12, when the financial secretary submitted his report, showing a cash balance of \$2,331.02 on hand November 30. In addition to the appropriations usually provided for in the budget, approval was given to one for \$500 for U. S. P. and N. F. propaganda.

The Board of Supervisors of the C. R. D. A. also held a meeting December 12, at which recommendations were made for officers and trustees of the association who are to be chosen for the coming year. Those named by the board are the following: For president, A. C. Caldwell; for first vice-president, A. Umenhofer; for second vice-president, Harry Bruun; for third vice-president, Harry Moyer; for secretary, Isam M. Light; for treasurer, Chas. A. Storer. For North Side trustees, J. H. Riemenschneider and Frank Ahlborn; for West Side trustees, John J. Chwatal, William Smale, Henry Siwecki, S. L. Antonow; for South Side trustees, O. U. Sisson, D. P. Seibert and Charles Friesnecker.

CHARLES HOLZHAUER HEADS A.Ph.A.**Other Officers for 1917-18 Announced by Board of Canvassers**

The Board of Canvassers of the American Pharmaceutical Association met December 11 and counted the ballots cast in the annual election and have reported that the following individuals have received a plurality of the votes and are elected:

President, Charles Holzhauser, Newark, N. J.; first vice-president, Alfred R. L. Dohme, Baltimore, Md.; second vice-president, Leonard A. Seltzer, Detroit, Mich.; third vice-president, Theo. J. Bradley, Boston, Mass.

Members of the Council—Fred J. Wulling, Minneapolis, Minn.; G. M. Beringer, Camden, N. J.; Thomas F. Main, New York City.

The Board of Canvassers is composed of the following members: A. D. Thorburn, Francis E. Bibbins, Frank H. Carter, Edward W. Stucky.

A. D. F. INSURANCE COMPANY PROSPEROUS

At the recent meeting of the Executive Committee of the American Druggists' Fire Insurance Company held in Cincinnati, preliminary arrangements were made for the annual meeting of the directors and stockholders of the company, which is scheduled to take place on February 13. The quarterly report shows that for the first nine months of the year the company wrote insurance of \$14,018,676 at a premium of \$145,749.08, an increase over the corresponding period of the preceding year of \$1,776,824.11 at a premium of \$19,656.95. On September 30 the company had in force business amounting to \$18,433,729.89 at a premium of \$193,176.20, divided among 10,098 risks.

On September 30 the assets of the company amounted to \$455,025.08; reinsurance reserve \$80,738.28; other liabilities, \$3,611.46; leaving a net surplus as to policy holders of \$370,675.34. All reports indicate that the company is making splendid progress and it is stated that its savings to the retail drug trade of the country for lower premium charges in the cost of insurance will amount to nearly \$70,000 for the year 1916.

ECONOMICAL DRUG CO. GRANTED INJUNCTION

Judge Jesse A. Campbell, of the Circuit Court of Cook County, Ill., has granted an injunction to the Economical Drug Company, 112 N. State St., Chicago, against Paul Unger of the same city, enjoining him from using the name of "The Twelfth Street Economical Drug Company" in connection with his drug business. In reviewing the testimony presented on both sides, the judge stated that he had reached the conclusion that the complainant was entitled to injunctive relief. He said that he did not find it necessary to hold that the complainant could appropriate the word "Economical" in such a manner as to prevent its use, under any conditions, by anyone else; nor that the defendant had been guilty of actual fraud in respect to the matter. It is sufficient that the similarity in names is so marked as to confuse the public with respect to the identity of the business of the defendant, the evidence showing that such mistakes have occurred and are likely to recur.

The defendant has decided not to appeal and is given until January 1 to remove all signs and replace all labels bearing the word "Economical."

CRUCIBLE STEEL SPATULA FREE

The Newskin Company of New York are putting out a very attractive Special Offer on their well-known preparation. They will give free of charge to any retail dealer, \$1 worth of New-Skin, 25c size, and a seven-inch spatula—crucible steel, hand polished—with an order for \$4 worth of goods, special assortment—4 dozen small size at 75 cents a dozen, \$3; ½ dozen medium size, at \$1. All orders to go through jobbing houses. In operating the offer, the Newskin Company makes use of a premium certificate which entitles the dealer to the extra features and is obtainable through jobbing houses.

A Druggist's Advertisement in Philadelphia Newspaper in 1789

Professor L. E. Sayre, dean of the School of Pharmacy, University of Kansas, and recently elected secretary of the Historical Section of the A.Ph.A., has always been interested in anything that pertains to the development of pharmacy in this country. At the meeting of the A.Ph.A. held at Atlantic City in August, he presented a paper on "Pharmacy in New Jersey in the Sixties as Recalled by an Apprentice," in which he interestingly related some of his experiences and observations of the practical work of pharmacy in those days. In going over the archives of his family recently he found some old newspapers dating back to 1789, and in one of them found the statements reproduced below which have a pharmaceutical interest. He has kindly sent this material to the ERA in the belief that its reproduction here might be of interest to the druggists of the East.

The Pennsylvania Packet, and Daily Advertiser.
Thursday September 17 1789.

HAIR POWDER

Manufactured by
JOHN MURDUCK,

At the ROSE, No. 5, Walnut street, between Second and Third streets.

Where Merchants, Captains of Vessels, Country Store Keepers and others, may be supplied on the shortest notice, and on the most reasonable terms.

From the experience he has had in the buffinefs, he flatters himself it will be in his power to give as much satisfaction as any one in the city, and should be much obliged to those who give him a preference.

At the same shop may be had, the best feanted hard and soft Pomatum, and other Articles in the Perfumery Way, neatly put up for Exportation.

Said Murduck respectfully informs the Ladies and Gentlemen of the City and County, that he sells by Retail the following Articles.

Scented and plain air powder	Tooth brushes
Best feanted hard and soft pomatum	Shaving Boxes
Ladies tortoisehell combs.	Ditto soap
Dreffing	Wash balls
Rack	Silk puffs
Hair pins of all fises	Powder bags
Bonnet	Effence of burgamot
	Ditto of lavender
	Ditto of lemon, &c

Likewise Concave Razors and Penknives; new invented American Straps, that answer the purpose of grinding, honing and frapping, yhey would be particularly usefull in Counting houses.

Orders from the country will be thankfully received and carefully attended to.

The Pennsylvania Packet and Daily Advertiser.

Thursday September 10 1789.

A small, Frefth Parcel of Doctor Bakers
Antifcorbutic Dentifrice & Albion
Effence,

If just come to hand, and for sale at
W. POYNTELLS

Stationary, Jewellery and Cutlery Store,
In Second street, corner of Black Horfe alley, being the
only place where it is sold by Wholesale.

Notice is hereby given,

To such of the Owners of the Estates which are subject to Ground rents under 20 buhels of wheat per annum, payable to the Trustees of the Univerfity, that the subscriber is empowered to fell the fame, and will receive Propofals for the Purchase from any of the Owners of such Estates.

EDWARD FOX

attorney for the Trustees of the Univerfity.

Philadelphia, September 14, 1789.

THE MEDICAL LECTURES

will begin on Monday the fecond of November.

SCHOOLS AND COLLEGES

NEW YORK

A lecture will be given by Prof. Curt P. Wimmer at the College meeting, to be held on Tuesday evening, January 16. His subject will be "A Pictorial History of the College of Pharmacy of the City of New York." Dr. Wimmer has devoted a great deal of time to the study of this subject and has succeeded in assembling a considerable amount of historical material of interest. Pictures of the various buildings in which the College resided from time to time, pictures of men who have been prominent in the affairs of the College from its very beginning and finally pictures of publications, etc., issued or used by the College in the earlier days will be shown by means of lantern slides. These will undoubtedly serve to make the lecture one of intense interest.

With the termination of the Christmas holidays, the interest of the Faculty and student body is now centered in preparations for the final examinations, which commence April 28.

It is planned to re-organize the conditions governing the award of the Trustees' scholarships which annually provide tuition fees for two second-year students, so that there will be brought about a more general endeavor on the part of students to secure such honors.

The College Orchestra is this year under the direction of Dr. Geo. Schneider, of the Analytical Chemistry Department. Dr. Schneider has succeeded in getting together a very complete organization composed as follows: Violins, Miss Elizabeth Kish, '19; S. Jacoff, '18; S. Maser, '18; N. Castellucci, '18; Joseph Triner, '18; J. D'Urgolo, '18; 'cellos: K. Kirkland, '17; Dr. C. W. Ballard; clarinets: E. Mazzolini, '18; R. Ferguson, '18; cornets: Miss May O'Connor, '17; W. Greenberg, '18; O. J. Blosmo; special drums: David Feldman, '18; piano: P. Cagina, '18. Frequent rehearsals have been held and excellent music has been furnished at several of the student affairs.

O. J. Blosmo of the Department of Pharmacy of the University of Minnesota is doing special work with the College in the various departments. His leave of absence from Minnesota will terminate in January.

William Macsata and Frank T. Green, formerly students at the Medico-Chirurgical College of Pharmacy, are completing their courses at the New York College.

Jose Blanco, who completed three years' work at the University of Michigan, is working for his B.Sc. (Pharm.) degree.

The second year class has elected the following officers: President, D. E. Gitlow; vice-president, S. Benjamin; secretary, Miss Alma Adams; treasurer, B. Markowitz; historian, J. J. Coronel; reporter, P. D. Bloom.

The college has received a framed and enlarged photograph of the late Professor John Oehler, the gift of his widow. This will be given a prominent place in the college collection as an inspiration to those who will come after.

MASSACHUSETTS

The Massachusetts College of Pharmacy will build its new \$300,000 home at the corner of Longwood avenue and Worthington street, Boston, instead of Brookline and Longwood avenues, as originally planned. The trustees voted, December 15, to exchange the original site for the new one, where there will be 90,000 square feet in a much better location. President C. Herbert Packard announced that sufficient gifts and subscriptions have been received to pay for the new building, and that work of construction is expected to begin in a short time. The present college building on St. Botolph street, Boston, has for several years been too small.

Because of extra work connected with raising funds and making plans for a new college building, the trustees of Massachusetts C. P. have voted to postpone the New England Pharmacists' Institute that they had announced for this winter at Boston.

A portrait of the late Dr. W. P. Bolles, professor of

materia medica and botany from 1874 to 1884 and emeritus professor from 1884 till his death last March, has been presented the college by his widow.

Hugh C. Muldoon, instructor in analytical chemistry, has finished two years' work on a book, "Lessons in Pharmaceutical Latin and Prescription Writing and Interpretation," giving the rudiments of Latin that are necessary to the pharmacist. One feature is a great number of actual prescriptions taken from the files of prominent drug stores.

The award of these scholarships is announced by the Massachusetts College of Pharmacy: Massachusetts Pharmaceutical Association scholarship, Cecil L. Holden, Hudson; Eastern Drug Company scholarship, Elmer H. De Loura, Edgartown; Brewer & Co. scholarship, Miss Edith M. Follensby, Southbridge; Greenleaf memorial, Percy A. Leddy, Calais, Me.; Baird memorial, Eugene L. Sharkansky, Fall River.

UNIVERSITY OF IOWA

T. J. Long, '13, Ph.C. '14, who is with the Scallin Bros. Co., Mitchell, S. D., recently passed the board examination, ranking first in the group who took it at that time.

Homecoming week brought many visitors to the city. The 1916 class had the largest representation: E. T. Bjornstadt, Waterloo; R. R. Douglass, Postville; N. J. Nemmers, Davenport; J. C. Liek, Cedar Rapids; William Moerschel, Homestead; Clementine Hingtgen, Lamotte; Albert Hennger, Dubuque; W. F. Meads, Ames. Other visitors were C. C. Narum of Northwood, and R. W. Sylvester of Clarksville, both of the 1906 class; A. H. Kohl, '09, of Mason City; C. E. Jacobs, '14, of Fontanelle, and H. E. Rutenbeck, '14, of Lost Nation, Iowa.

The president of the senior class has appointed the following committees: Commencement, H. P. Currier, Sheffield, Ill., and J. J. Byers, Colville, Wash. Invitations, H. J. Tierney, Ft. Dodge; class breakfast, Florence I. Peterman, Iowa City; memorial, L. A. Porter, Missouri Valley; frolic, Earl Ryan, Humeston, and C. R. Marks, Eldora; senior hop, Charles Carter, Shoshone, Idaho and R. E. Stewart, Spencer; pin, E. L. Hazeldine, Selvy, S. D.; senior sing, E. J. Meister, Cedar Rapids, and N. E. Fuller, Chariton; hard times party D. T. Stanton, Ellsworth, Minn., and H. A. Stedman, Iowa City.

E. L. Boerner, professor emeritus, and son Robert, '17, spent a few days in Chicago at the time of the drug show.

Prof. R. A. Kuever and family spent Thanksgiving at Lowden, with Mr. Kuever's father and mother.

The annual banquet of the Phi Delta Chi Fraternity was held at the Jefferson Hotel, Iowa City, on November 9. Dr. C. S. Chase was toastmaster, and responses were made by members as follows: "As I Remember," Prof. R. A. Kuever; "Comradeship," Prof. H. L. Dunlap; "Our Objective," H. P. Currier; "Prospects for the Future," B. C. Rogers; "Professional Fraternities," Dean Wilber J. Teeters; "Scholarship and Relation to Success in Life," Dr. W. J. Karslake.

ST. LOUIS

Professor F. J. Wulling, Dean of the College of Pharmacy of the University of Minnesota, and president of the American Pharmaceutical Association, recently paid an informal visit to the St. Louis College of Pharmacy. The senior pharmaceutical laboratory class was at work when he arrived, but was adjourned to the lecture room after Professor Wulling had accepted an invitation from Professor Hemm to deliver a short address. Professor Wulling dwelt upon the advantages to be derived from a thorough pharmaceutical education in a first-class college of pharmacy. He then discussed co-operation among pharmacists and urged the students to join the local, county, state and national associations representing the retail drug trade. Membership in organizations of this kind broadens the field of activity of the members and their responsibility.

ties, and therefore makes them better professional men and more efficient members of their community. He begged to call especial attention to the American Pharmaceutical Association, as the one organization to which they had to look for the future uplift of pharmacy in the United States, and he invited them to join the association upon graduation, and take up their share of responsibility as well as participate in the privileges which come to every member.

Professor Wulling's address was received with enthusiasm by the students, and unquestionably his wise-counsel will spur them to the best efforts they can make toward the maintenance of the dignity of the ancient and honorable profession of pharmacy.

JERSEY CITY

At the November meeting of the College of Jersey City, President James E. Pope presented the plans for the new building which is to be erected in the Spring of 1917 on the college grounds, 96-100 Summit avenue. The plans were drawn by Mann & MacNeille, the well-known architects and represent a handsome structure in Colonial style at the cost of \$30,000. The building will be three stories high and will contain a large auditorium, two classrooms, four spacious laboratories, library, offices, lockers, student's quarters and dental clinic.

The College of Jersey City now comprises a Department of Pharmacy with thirty students and a Department of Dentistry with one hundred and fifty students. The officers of the college are: James E. Pope, president; Joseph E. Bernstein, treasurer; and Joseph A. O'Connor, secretary. The Pharmacy Department has Dr. Joseph Koppel of Jersey City as dean. Dr. Otto Raubenheimer of Brooklyn as pro-dean, and Dr. Emil Roller of New York City as secretary.

UNIVERSITY OF OKLAHOMA

Ira Parker, who was a student in the School of Pharmacy from 1913 to 1915, is a partner in the Postoffice Pharmacy, corner Third and Robinson streets, Oklahoma City.

Copy for the new Alumni directory is now in the hands of Errett R. Newby, who has charge of publishing it. He thinks he will be able to get out the directory before the Christmas holidays.

Approximately \$300 worth of apparatus has just been added to the men's gym., according to Coach R. B. Soutar. The new equipment includes five mats, one low parallel, one large scale, and one wet spirometer.

The annual dance given by the School of Pharmacy was held in Davis Hall on the Saturday preceding the Christmas vacation. It was largely attended.

Paul R. Mills, Ph.C., '14, of Tulsa, was a visitor at the university recently and the guest of Prof. C. V. Nichols. Mr. Mills was recently connected with the Standard Oil Company but resigned his position to take up private work as a leasing broker in the oil fields of northeastern Oklahoma.

The university orchestra made a tour of the southern part of the state during the first week in December, giving concerts in a number of cities. Several of the pharmacy students are members of this organization.

The work of the second semester in the School of Pharmacy will begin February 2, 1917. A large increase in enrollment is expected at that time as many of the beginning courses in pharmacy, chemistry, and materia medica will be repeated at that time.

Nearly \$600 worth of new apparatus for the pharmacy laboratories has just been received, making it possible for every student to have a complete supply of material for use in the manufacture of the various official and unofficial preparations. A considerable quantity of this apparatus will be available for those students who are doing advanced work in drug analysis and Pharmacopoeia testing.

The new wireless station of the university is now in full working order, the first message having been received December 5. This message consisted of weather reports from Arlington, Va. A message in Spanish was also received from Chihuahua, Mexico. Since that time communication has been established with several other stations, including several amateur stations at Oklahoma City, Fort Sam Houston and several Mexican stations not listed in

the university radiography directory. The Oklahoma Daily is planning to print the press report sent out from the station at Arlington, Va., for free use at 2 a.m. every day.

"The best in the world"—thus were the new chemical laboratories at the university characterized by Dr. Edwin DeBarr who maintains that he has no fear of contradiction in that statement. It takes more electricity to run the New Chemistry Hall than it does the whole city of Norman. One of the many improvements is the vacuum cleansing system. The plant, which is operated by a motor, is located in the basement, and from it pipes lead to every hall, where openings are conveniently located so that each room can be reached by attaching fifteen feet of rubber hose.

UNIVERSITY OF ILLINOIS

The School of Pharmacy, University of Illinois, was the only school represented at the drug show recently held at the Coliseum under the auspices of the Chicago Retail Druggists' Association. The exhibit of the school included a number of the new official preparations made by students, among the preparations being the elixirs of low alcohol content and the petroxolins. A series of processes of extraction and a selection of the specimens from the museum were shown, also photographs of the new college building and the laboratories showing the classes in operation and the class picture of 1916. The exhibit of the school attracted a good deal of attention and was visited by a large number of persons, including many alumni. The members of the faculty took turns in caring for the exhibit during the hours that the show was open. The school was well pleased with the result and expects to repeat this exhibit next year.

The senior class has organized and elected the following officers: President, Omar H. Whittington, Waldron, Ark.; vice-president, Dayle Snyder, Astoria, Ill.; secretary, Grant Heidbreder, Quincy, Ill.; treasurer, Mrs. Alice Pelikan, Chicago, Ill.; sergeant-at-arms, Charles Wilson, Pomona, Calif.

The women members of the classes of the school of pharmacy, of whom there are thirteen, took part in a dinner which was given in honor of Dr. Gates, the new Dean of Women of the University of Illinois. This dinner was given by the women students of the professional schools of the university in Chicago, under the direction of Miss Metta Loomis, librarian of the Quine Library at the City Club on the evening of November 20. The Deans of the Chicago schools of the university spoke as did also Trustees Mrs. Laura B. Evans and Mrs. Ellen M. Herroin. The responses for the women students were arranged as a symposium. The representative of the College of Medicine made a diagnosis of the case of the woman student and prescribed the remedy. Miss Ruth Wilson of the School of Pharmacy then filled the prescription which was handed about to the assembled guests in the form of candy pills which were contained in pill boxes, but in place of the usual directions a felicitous motto appeared on the label.

The Young Men's Christian Association is planning a building to be erected in the college district of the West Side of Chicago and where a thousand or more students may be accommodated and provided with housing facilities and social advantages. A dinner was recently held at the Union League Club and was presided over by President James of the University of Illinois at which this matter was discussed. The project is making headway and it is likely the building will be erected within the next year.

UNIVERSITY OF MAINE

Prof. Wm. A. Jarrett, of the Department of Pharmacy of the University of Maine, recently delivered an address to the physicians, nurses, and pharmacists of Portland on the "New Pharmacopoeia." This lecture was one of a series given in connection with the Educational Extension Department of the University. Other lectures announced to follow will take up commercial pharmacy, the manufacture of toilet preparations by the retailer, etc., all of them being free to those interested. The university has also distributed to the pharmacists of the State cards showing the important changes that have been made in the Pharmacopoeia.

BOARD EXAMINATIONS

PENNSYLVANIA

The Pennsylvania State Pharmaceutical Examining Board announced on Dec. 4 that 136 persons had passed the examinations for State licenses held at Philadelphia and Pittsburg last month.

Of the forty-five that took the examination for registered pharmacists, thirty passed, and of the 153 that took the examinations for qualified assistant, 106 passed. The board will hold its next examinations here next March. Following is the list:

Pharmacists—Morris L. Augenblick, Lillian Blieden, Lester Y. Brendle, John C. Cravens, Jr., Simon E. Finkelstein, Adolph A. Goldblum, Joseph R. Guarini, John R. Guarini, John W. Holloway Goldblum, Joseph R. Guarini, John W. Holloway, Albert Ikan, Rienzi James, Mary P. Peizer, David H. Prince, Alfred A. Redner, Everett J. Roberts, Samuel Rothberg, Joseph Sarlo and Aaron Simkin, all of Philadelphia.

Samuel H. Depew, Jr., Lelano; Charles R. Eckert, Du Bois; Thomas G. Miller, Grantville; James E. Stuart, Harrisburg; Albert L. Kramer, Hazelton; Le Roy O. Lohrman, Moore; William O. Meese, Nesquehoning; Harry A. Starrett, Pittsburgh; Daniel B. Nagle, Reading; Henry L. Hansell, Roxborough; Harry R. Colborn, Scranton. Thomas A. Ryan; Susquehanna; Claude S. La Dow, Wayne.

Qualified Assistants—H. Clayton Anderson, Fred R. Clark, David M. Ford, Dante A. Guinzi, John M. Hanna, Anthony A. Kobelak, David Nathanson and Max Peckersky, all of Pittsburgh.

Morris A. Aarons, Oscar Abrahamson, Albert A. Bass, Jesse H. Boyer, Robert J. Burton, Ronald Campbell, Joseph D. Cartwright, Daniel Cooperman, Maurice B. Dabney, Abraham Davidson, Solomon H. Dompf, Charles J. Evans, Jr., Cleanthes C. Evangelidis, Bessie B. Fox, James J. Flood, John W. George, Charles F. Godlewski, B. V. Heller, Benjamin H. Hofstein, Paul W. Irwin, Herman E. Leckstein, Michael Leckstein, Philip J. Lecklikner, Jr., Concett B. Lippi, Nathaniel H. Rappaport, William M. Riley, David Rosenweig, Mac Rubenstein, Mollie E. Stein, Milton Stein, William O. Seitzinger, Sarah Spout, John A. Wenner and Joseph E. Zahn, all of Philadelphia.

Charles B. Alloway, Erie; Frederick R. Pritchard, Edwardsville; Harry O. Wigle, Export; Frank X. Crockenberg, Honesdale; Albert G. Kessel, Jeannette; William K. Stimer, Juniata; John J. Esch, William L. Fleckenstein, of Johstown; Harry V. Johnson, Kane; John F. Schuey, Kittanning; Harry H. Buch, Lancaster; Leroy P. Brown and John M. Miller, Lewistown.

Albert D. Boltz, Lebanon; Lothaire E. Crouse, Littletown; Karl B. Peckman; Joseph V. O'Neill, Mahanoy City, James F. Foulk, Harold C. Reimund and Homer E. Yochum, of Meadville; Robert M. Headings, Milroy; James C. Carstater, Mill Hall; Ralph Yarnall, Mount Carmel; Harry W. Childs, McKeesport; Walter Niklewski, Nanticoke; Karleen Packard, New Albany; Gny F. Bair, New Holland; Raymond G. Heath, North Wales.

Carroll O. Barclay, Punxsutawney; Earl K. Eberly, Reading; John Carroll, Harry J. Knoepff and Mamie E. Morgan, of Scranton; Edward J. Zemaitis, Shenandoah; Clifford P. Jackson, Swarthmore. Claude R. Klingaman, Steinsville; William J. Stoneback, Sellersville; R. Raymond Hull Tarentum.

Altha R. Springer, Uniontown; Thomas J. Hughes, Washington; Merie McCaerney, Waynesboro; Noel B. Fell, West Chester; William J. Walter, Wilkesbarre; Dillea A. Bowron, Caldwell, O.; Samuel T. Richman, Mullica Hill, N. J.; Donald M. Frazer, Bellefontaine, O.; William T. Conwell, Lewes, Del.; Harold L. Blancher, Loyal, Wis.; William K. Hyer, Sutton, W. Va.

ALABAMA

The Alabama Board of Pharmacy held an examination in the city of Montgomery in October. Out of a class of 41, 26 passed as pharmacists and 10 as assistants. Their names follow:

Pharmacists: F. F. Moon, La Fayette; R. H. Scruggs, York. D. S. Whitesides, New Smyrna, Fla.; Miss Bertha Hausman, Tuscaloosa; James L. Owen, Pratt City; L. R. Stone, Atmore; R. R. Morgan, Birmingham; Homer Williamson, Pell City; E. O. Cox, Hartford; V. C. Wood, Pratt City; W. C. Reid, Atmore; W. C. Stubbs, Adian, Ga.; P. L. Fields, Decatur; Wiley Colquitt, Brewton. C. L. Brown, Creighton; Miss J. S. Kennedy, Charleston, S. C.; Miss Minnie Edwards, Cordova; L. N. Camp, Atlanta, Ga.; Z. S. Cowart, Calera; Ch. R. McCartney, Mobile; C. B. Rotton, Abanda; S. J. Guilford, Hartford; I. L. Carraway, Birmingham; O. S. Tucker, Camp Hill; P. R. Tarrant, Birmingham; C. F. Sweat, Paterston.

Assistant Pharmacists—Lee P. Watts, Lineville; G. M. Barlow, Orlando, Fla.; E. B. Thompson, Ashland; W. L. Furman, Pell City; W. B. Stanley, Birmingham; J. F. Collins, Hartford; W. N. Gillespie, Bangor; A. W. Schmidt, Macon, Ga.; Van Verry, Birmingham; C. Pace, Mobile.

A resolution requiring that a two years' grammar school attendance shall be exacted of all applicants hereafter was passed. The next meeting of the Board for examination of applicants for registration as pharmacists will be held in Birmingham on February 14.

MASSACHUSETTS

As result of the last examinations before the Massachusetts Board of Registration in Pharmacy 10 received full registration and nine were granted certificates as assistants, as follows:

Fully registered—Frank G. Braconier, Campello; Rene I. Miville, Lawrence; Forrest R. Richardson, Leominster; Oliver Bellefleur, Boston; Harry S. Berinstein, Springfield; Charles J. Dietel, Jr., South Hadley Falls; John J. Maloney, Worcester; William P.

Connor, Holyoke; Harry L. Currier, Everett; James R. Sutherland, Salem.

Assistants—Seth Hagopian, Chelsea; Bagdasar B. Goolkasian, South Boston; Solomon Kramer, Boston; Carl E. Prindle, Arlington; Charles Watson, New Bedford; Ilberman Heller, Lynn; Raymond G. Cooper, Natick; Alfred J. Peloquin, Southbridge; Joseph E. Perry, New Bedford.

ILLINOIS

At the November meeting of the Illinois Board of Pharmacy held in Chicago, 35 of the 99 applicants for registered pharmacist's licenses and 25 of the 55 candidates for assistant pharmacist's licenses passed successful examinations. Their names follow:

Registered pharmacists—V. B. Andrzelozyk, Leo H. Ayers, Edw. A. Barwig, D. Borrelli, James F. Bradley, Frank Brykowski, Wm. S. Bucke, N. J. Engels, Marvel Folio, M. Ginsburg, C. M. Hayward, H. M. Hendrickson, Harry Kanta; Emanuel Kancky, Louis Hogan, Samuel Krupkin, H. L. Landsman, S. C. Larson, N. L. Lieberman, C. M. McCord, Joseph Kaskow, Henry Kayzels, LeRoy A. Nix, Alice E. Pelikan, F. D. Person, Wm. F. Piel, R. K. Reid, H. C. Spristema, Richard VanKempema, all of Chicago and A. H. Hogard, Wilmette; S. P. Cline, Marion, V. L. Fletcher, Elgin; B. C. Crosse, Elgin; R. R. Schmitker, Chrisman; Wm. F. Vogt, Milwaukee.

Assistant pharmacists—J. E. Baxa, D. D. Benzuly, Harry R. Davis, Isaac Felsner, Richard Gordon, D. E. Hepner, D. I. Kanter, R. J. Kloff, J. E. Kostanski, R. E. Lee, Jacob Lieberman, P. A. McCauley, K. R. Magidovitz, H. V. Nichols, Theresa F. Provost, L. H. Sarnatzky, S. D. Shoollin, E. W. Smith, H. F. Stegman, Aaron Werrick, Samuel Woolf, all of Chicago and T. C. Rose, Ottawa, R. W. Migeler, Joliet; L. C. Heudrburg, Bloomington; A. J. Osberg, Rockford.

The next meeting of the board for the examination of applicants for registered pharmacist and assistant pharmacist will be held in Springfield on Tuesday, January 9.

The next meeting of the board in Chicago for the examination of applicants for registered pharmacist will be held on Tuesday, March 6. On Thursday, March 8 an examination will be conducted for applicants for assistant pharmacist.

The next apprentice examinations will be conducted on Friday, January 5, 1917.

DISTRICT OF COLUMBIA

During the fiscal year ended June 30, 1916, according to its annual report, the Board of Pharmacy of the District of Columbia held quarterly examinations for which there were 75 applicants, 30 of whom were successful and therefore licensed to practice pharmacy in the District of Columbia. Four applicants were licensed through reciprocal agreements, this making a total of 34 licenses granted during the year. Five permits for the sale of poisons for use in the arts and as insecticides were issued, and twelve which had expired were renewed.

The treasurer's report showed a balance from last annual report of \$11.21 to which was added from receipts from all sources the sum of \$754. The disbursements of the board amounted to \$763.23. Through its membership with the National Association of Boards of Pharmacy, reciprocal relations are enjoyed with 37 States.

NEW YORK

Warren L. Bradt, secretary of the New York State Board of Pharmacy, announces the following list of penalties received by the board for the months of October and November: Adulterated prescriptions, 7; junior violations, 10; adulterated pharmacopoeial products, 14; substitution, 3, and sale of proscribed drugs, 1, total 35.

MAINE

The Maine Commissioners of Pharmacy have issued certificates as druggists to thirty persons during the year 1916, their names being recorded in the office of the Secretary of State, between January 1 and September 1, inclusive. They are as follows:

Under date of February 9, Leroy M. York, Bangor; T. Richard Pye, Portland; William N. O'Neil, Biddeford; Odias Demers, Sanford; Addison N. Williams, Strong; James E. Buckley, Bangor; Ralph G. Whitney, Thomaston; April 12, Frank Irving Hargreaves, Sanford; Carol R. Staples, Norridgewock; George W. Hovey, Portland; Marian L. Fifield, South Brewer. Wm. A. Jarrett, Orono (by reciprocation); Lewis O. Barrows, Newport; June 27, Ray H. Conteman, Portland; Otis S. Dubej, Fort Fairfield; Albert E. Hardy, Farmington; Earle A. Blancher, Northampton, Mass.; Wm. J. Macklin, Millinocket; John C. Reardon, Portland; Wm. F. Quinn, Hallowell; Ralph W. Merrill, Brewer; Horace E. Grant, Waterville; Harley F. Rawson, Buckfield; Frank G. Stacey, Bridgton. Fremont B. Fletcher, Augusta; Frank G. Killigrew, Old Orchard (by reciprocation); August 9, David T. Kelley, Biddeford; George L. Baker, Orono; Irving W. Chaney, Stoneham, Mass.; September 1, Bert P. Porter, Sanford (by reciprocation).

LOUISIANA

The Louisiana State Board of Pharmacy, through Secretary Joseph T. Baltar, announces the result of the examination held in New Orleans, November 17-18, at Tulane University. Nineteen in all presented themselves for examination and eight passed as registered pharmacist and one as qualified assistant. The following passed: Registered pharmacist—Miss Rosa M. Breen, Louis Omen Bajon, Alfred S. Friel, Laurie C. LeMaire, W. W. Lear, R. Frank Thompson, Felix J. Voizin, George J. Landry. Qualified assistant—Nicholas Persich, Jr.

DENTIFRICE FADS AND PUBLICITY

The retail market is almost choked with dentifrices. Every few days a dentist discovers a new specific for pyorrhea, or a "cure" for "acid mouth," or times the flow of the saliva in the human mouth. Any such discovery is the signal for a new dentifrice, compounded to play on the latest dental fad. Many of the recent discoveries in dental research have been of unquestioned accuracy, and value to the profession. But they have been dimmed in the eyes of the public by too much publicity.

The life of such so-called curative dentifrices is in direct proportion to the amount of advertising that is given them. Ask your dentist which he considers the best dentifrice. He will give you one of two answers—he will say: "Oh, they're all good enough"—or "They're all alike—which do you like best? So-and-so's? Then use that one."

His two answers are two ways of saying the same thing, namely: that a dentifrice can do just one thing, and if it accomplishes that thing, it is a good dentifrice. It must cleanse the teeth. The dentist knows that you cannot "doctor" a simple combination of precipitated chalk, flavoring and binder so as to make it radically different from any other combination of the same bases. So he says, "They're all alike." And so each manufacturer of a new tooth powder or tooth paste or mouth wash, because he knows that his product cannot differ radically from any of the others on the market, pins his faith to the fact that he has incorporated in his formula one per cent of something or other which is supposed to be a pyorrhea specific, or to produce an alkaline reaction in acid mouths, or to outlast the saliva which obliging Dame Nature has a way of renewing every half hour so as to clear the mouth of dentifrice.

Fad dentifrices live only as long as the fad. They come and go. Any druggist, looking back at his purchases of five years ago, can find half a dozen names of tooth pastes and powders which enjoyed a brief vogue but which he now stocks only on demand. The trick dentifrices suffocate for want of advertising, and move off the shelves to make room for the brand the customer knows, and keeps coming back for. The heaviest seller in the dentifrice field today has been the most careful in its claims of medicinal value. A newcomer in the field is announcing his product as frankly "non-medicated"—a firm, by the way, with a close connection over many years with the dental profession. Its progress will be watched with interest, for it is so distinctly a plain cleanser, properly flavored, that its claims are almost faddish in their reaction to sound principles.

CHICK-CHICK EASTER EGG DYES

The Easter season of 1917 is near at hand and the ways and means by which the druggists may prepare for this occasion are set forth with great particularity and attention to detail in the attractive advertisement of Fred Fear & Co., 15 Jay St., New York, on another page of this issue of the ERA.

Chick-Chick Easter Egg Dyes have a name which appeals to the children and is easily remembered and pronounced by them. Fred Fear & Co.'s recent invention of transporting soluble dyes on specially prepared sheets which when used give up brilliant colors instantly, has revolutionized the egg dye business. The new invention means that you have no more tablets or powder dyes to break, sift, stain or spoil, making egg dyes an easy item for you to handle, and one that you can carry over in your stock for next year without having to worry whether it will be in salable condition next year or not.

Easter Sunday falls this year on April 8, and now is the time to prepare for the Easter trade and the big profit you will make in handling Chick-Chick Easter Egg Dyes. On another page of this issue is an order blank which by filling in and mailing into chick-chick headquarters, you will receive through your jobber, not only your supply of Chick-Chick Easter Egg Dyes, but a set of large heavy lithographed cut-outs with easel backs as well as other advertising matter. These cut-outs form a very attractive window display for all kinds of Easter novelties and will be sure to catch and hold the trade of the children.

WINS LAST CIRCLE A CORK CONTEST

The last (December) prize of 1000 Circle A corks in the monthly Circle A Cork competitions, was won by Thomas Reese, Jr., of Hopkins-Landquist Company, Winston-Salem, N. C. His entry deserves especial attention because he has put himself in the customer's shoes, which is the surest method of bettering business.

"In details *only* can pharmacists show their superiority, for all else belongs to the Law of Pharmacy, which admits no difference.

"Circle A Corks are in harmony with first-class prescription service."

In other words, Brother Reese believes that the public takes the pharmacist's professional methods for granted and that it is only by little service niceties that stores are raised above the average.

Other entries which brought honorable mention and 500 Circle A Corks were those of C. C. Allen, of Allen Bros., Plane, Tex., and E. L. Bedient, of the Ecker Drug Store, Corning, N. Y. Both wrote of the efficiency of Circle A Corks. This being the last of these monthly contests, the Armstrong Cork Company express their regret at not being able to use more of the many meritorious entries, which were received from time to time. Their inability to utilize them was due to the peculiar limitations of cork advertising. However, they wish to thank the authors of these for making the contest so successful.

BAYER-CAPSULES OF ASPIRIN

Many physicians prefer to prescribe aspirin in capsule form, and to meet this demand Bayer-Capsules of Aspirin, containing 5 grains each, have just been placed on the market. They are put up in boxes of one and two dozen, each package bearing the "Bayer Cross," which serves as a guarantee of their genuineness.

Bayer-Tablets of Aspirin, stamped on both sides with "The Bayer Cross," have gained the confidence of pharmacists because they feel assured that they are buying and dispensing the genuine product. Such an assurance has been absolutely necessary because of the widespread substitution and adulteration to which aspirin has been subjected, as shown by the investigations of the United States Bureau of Chemistry and the municipal health boards of many large cities.

The prices of Bayer-Tablets and Bayer-Capsules assure druggists a good profit. Artistic metal display signs in 8 colors, showing in relief the packages of Bayer-Tablets and Bayer-Capsules of Aspirin, as well as electrotypes (sizes 2x1 $\frac{1}{8}$ in., 1 $\frac{3}{4}$ x $\frac{7}{8}$ in.) for illustrating the druggist's own advertisements, will be furnished on application to The Bayer Company, Inc., New York.

SURGEONS VISIT MULFORD LABORATORIES

Surgeons attending the recent annual meeting of the Clinical Congress of Surgeons of North America, held at Philadelphia, took the opportunity while in the city of Brotherly Love to visit the Glenolden Laboratories of the H. K. Mulford Company. There were about fifty-five surgeons in the party, the members of which visited each of the important buildings of the group located at Glenolden, the manufacture of the various biological products in detail being explained by Drs. F. E. Stewart, C. P. Brown, and C. W. Brown. The visitors were greatly surprised at the magnitude of the plant and the completeness of the biological laboratories and were highly pleased with what they saw.

MODERN BUSINESS METHODS

Under the title "Business Methods for Druggists" the Oliver Typewriter Company of 1499 Oliver Typewriter Bldg., Chicago, have issued an interesting pamphlet containing many good suggestions as to how druggists can use the typewriter to advantage. Copies of this pamphlet will be mailed free to any druggist who refers to this notice.

PATENTS & TRADEMARKS

PATENTS

Granted November 21, 1916

- 1,205,200—Avery S. Turner, Butte, Mont. Bottle washing brush.
 1,205,311—Francis M. A. Wybaillic and Lena Wybaillic, New York, N. Y. Sanitary tooth-brush holder.
 1,205,493—Emil von Portheim, Prague, Austria-Hungary. Process of producing oxalic acid.
 1,205,619—Bjarne Hansen, assignor to Norsk Hydroelektrisk Kvaestofaktieselskab, Christiania, Norway. Receptacle for chemical purposes.
 1,205,659—Samuel Peacock, assignor by mesne assignments to Marden, Orth & Hastings Co., Inc., New York, N. Y. Process of producing magnesium compounds.
 1,205,723—Andrew Miller Fairlie, Copperhill, Tenn. Method of manufacturing sulfuric acid.
 1,205,724—Andrew Miller Fairlie, Copperhill, Tenn. Method of determining sulfur dioxide.
 1,205,912—Sidney R. M. Malloch, Philadelphia, Pa. Non-refillable bottle.
 1,205,924—Hugo Noerdlinger, Florsheim-on-the-Main, Germany. Process for improving the antiseptic, fungicidal, and insecticidal action of tar-oils.

Re-Issue

- 14,216—Max Dohrn, assignor to Chemische Fabrik auf Actien (vorm. E. Schering), Berlin, Germany. 2-Naphthylquinolin-4-carboxylic acids.

Granted November 28, 1916

- 1,206,063—Frank S. Washburn, New York, N. Y. Process of making nitric acid and other products.
 1,206,155—Paul A. Starke and Eric A. Starke, assignors to Standard Oil Co., Richmond, Cal. Process for the synthetic production of nitrogen compounds.
 1,206,222—Arthur Hough, Lavigne, Quebec, Canada. Production of ethylene glycol.
 1,206,273—Max Veeck and Carl E. Reichert, Philadelphia, Pa. Bottle cleaning or washing brush.
 1,206,321—Charles Hammesfahr, New York, N. Y. Tooth brush holder.
 1,206,335—Ole O. Kolstad, Duluth, Minn. Bottle.
 1,206,438—Edmund Hoffman, assignor to American Can Co., New York, N. Y. Sifter top container.
 1,206,440—Edmund Hoffman, assignor to American Can Co., New York, N. Y. Sifter container.
 1,206,641—Hans Ackermann, San Francisco, Cal. Label pasting machine.
 1,206,661—Alba C. Booth, Burlington, Vt. Closure for collapsible tubes.
 1,206,692—George Gill, Providence, R. I. Bottle cap opener.
 1,206,694—James Green, assignor of one-third to Robert W. Taylor, Bay St. Louis, Miss. Bottle

Granted December 5, 1916

- 1,207,792—Otto J. Aumuller, assignor of fifty one-hundredths to Linford S. Stiles, Kings County, N. Y. Bottle indicator.
 1,207,100—Harry L. Vaughan, Chicago, Ill. Bottle opener.
 1,207,284—Adolph Feldt and Paul Fritsche, assignors to Farbwerke vorm. Meister Lucius & Bruening, Hoechst-on-the-Main, Germany. Auromercaptobenzenes and process for making same.
 1,207,379—Frank Distler, O'Fallon, Ill. Bottle case.
 1,207,416—Ernst Kochendoerfer, Frankfurt-on-the-Main, Germany. Process for manufacturing nitrogen compounds.
 1,207,567—Henry Whiting Lamb, Portsmouth, Va. Process of making ammonia and compounds thereof.

Granted December 12, 1916

- 1,207,706—1,207,707—1,207,708—Carl Bosch, Alwin Mittasch, and Christopher Beck, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Manufacture of oxides of nitrogen.
 1,207,758—William Joseph Howe, Port Dalhousie, Ontario, Canada. Non-refillable bottle.
 1,207,798—Albert Parsons Sachs and Oscar Byron, Carnegie, Pa. Process of manufacturing sodium salts of sulfonic acids.
 1,207,802—Otto Schmidt assignor to Badische Anilin Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing aromatic amins and catalysts therefor.
 1,207,866—William R. Coppage, assignor of one-half to H. N. Brawner, Jr., Washington, D. C. Bottle washing machine.
 1,207,933—Joseph Moses Ward Kitchen, East Orange, N. J. Bottle closure.
 1,208,089—Roscoe P. Buffington, Baltimore, Md. Sanitary bottle stopper.
 1,208,212—Eugene Stanley Richardson, Philadelphia, Pa. Cap and seal for jars, bottles, etc.
 1,208,242—Clarence W. Vogt, Louisville, Ky. Ammonia generator.
 1,208,447—Cyrus Arnone, New York, N. Y. Bottle stopper.
 1,208,475—Ray Hugh Callan, Trenton, Mo. Atomizer.
 1,208,529—Fred Evans, assignor to Automatic Weighing Machine Co., Newark, N. J. Machine for securing metallic screw-caps to bottles, jars, and the like.
 1,208,615—Harvey F. Mitzel, assignor of one-half to William M. Rose, Hyde Park, Boston, Mass. Dipped rubber hot-water bottle and method of making.
 1,208,695—Karn Takemi, New York, N. Y. Dispensing closure.

TRADE MARKS

Published November 21, 1916

- 94,905—St. Claire Ransford-Gay, New York, N. Y. An antiseptic compound.
 96,610—Zauder Bros., Inc., New York, N. Y. Face powder, grease paints, dry rouge, etc.
 96,705—David Wroblewski, New York, N. Y. A liniment used for rheumatism, cramp, etc.
 96,922—96,923—Edwin J. Lipscomb, Duncan, Miss., and Memphis, Tenn. Remedy for diseases of the blood and skin, sores, rheumatism, headache, neuralgia, rheumatism, etc.
 97,608—Savannah Wallace, Augusta, Ga. A preparation for the hair, hair tonic, shampoo, etc.
 96,666—HedTone Co., Waco, Texas. A preparation for the treatment of headaches, fever, neuralgia, etc.
 97,886—Watertown Carbonating Co., Watertown, S. D. Laxative medicinal water.
 98,727—David W. Boyer, Cairo, Ill. A palliative for cancer, eczema, gangrene, etc.
 98,819—West Disinfecting Co., New York, N. Y. Disinfectants and insecticides.

Published November 28, 1916

- 93,416—Lutellus Smith, Chicago, Ill. Toilet preparations, face creams, etc.
 96,663—The Columbus Pharmacal Co., Columbus, Ohio. Medicinal preparation for coughs, croup, bronchial troubles, etc.
 96,986—Dr. A. C. Daniels, Inc., Boston, Mass. Hair tonic.
 97,804—Edward F. McKay, Oklahoma, Okla. Homeopathic preparations for the treatment of colds, grippe, fever and sore throat.
 98,025—Cassin, Ltd., Battersea, London, England. A medicated tonic nerve food.
 98,505—United Drug Co., Boston, Mass. Rubber goods, namely, water bottles, syringe bags, etc.
 98,668—The E. L. Patch Co., Boston, Mass. Suppositories for hemorrhoids.

Published December 5, 1916

- 88,947—A. Bourjois & Co., Inc., New York, N. Y. Toilet powder, rouge, solid face powder.
 91,700—Nathan Teplow, New York, N. Y. Oils used as a remedy for rheumatism, neuralgia, etc.
 95,388—Ampoule Drug Co., Inc., New York, N. Y. Aromatic spirit of ammonia, strychnin nitrate, nitroglycerin, (for medical purposes), etc.
 96,893—Janie Lincoln, Toledo, Ohio. Complexion powder.
 96,945—Leon Baron, New York, N. Y. Vermin and dandruff hair cleanser.
 96,623—Warren J. Davis, Camden, N. J. A remedy for rheumatism and kidney diseases.
 97,382—O. C. Wilson, Centralia, Mo. A medicine for the treatment of influenza and distemper among horses.
 97,568—The Armand Co., Des Moines, Iowa. Face powder, cold cream, hair wash.
 97,809—Fred. Phillips, New York, N. Y. A medicine for rheumatic pains.
 98,057—Royal Remedies Co., Waukegan, Ill. A medicinal compound for la grippe, colds, intercostal neuralgia, etc.
 98,059—Royal Remedies Co., Waukegan, Ill. Preparation for checking excessive secretions of the skin, etc.
 98,232—Martin Kaplan, New York, N. Y. Shampoos and corn remedies.
 98,307—Van Antwerp's Drug Corporation, Inc., Mobile, Ala. Preparation for the destruction and prevention of roaches and water bugs.
 98,320—E Paula M. Williams, Terre Haute, Ind. Cough syrup.
 98,383—George Collins, Pittsburg, Pa. Salve for piles, boils, burns, etc.
 98,450—The Tropical Pharmacal Co., New York, N. Y. Medicines for the diseases of women, medicinal tonics, etc.
 98,563—Solomon R. Hambleton, Memphis, Tenn. An antiseptic lotion for use after shaving, etc.
 98,800—Roscoe F. Beauchamp, Philadelphia, Pa. Salves for eczema, pimples, etc.
 99,201—Russia Cement Co., Gloucester, Mass. Cod liver oil.
 99,237—Paul Chovanec, Johnstown, Pa. A remedy for gonorrhoea.

Published December 12, 1916

- 97,582—Arthur A. Libby, Boston, Mass. Tooth cleaning preparations.
 98,279—The J. B. Williams Co., Glastonbury, Conn. Face lotions.
 98,348—A. Bourjois & Co., Inc., New York, N. Y. Face powder and rouge.
 98,618—Windfield P. Snyder, Great Falls, Mont. A preparation for cholera in hogs and chickens.
 98,659—Joseph A. Gardner, Memphis, Tenn. Tablets for use by dentists in the treatment of teeth.
 98,744—A. Bourjois & Co., Inc., New York, N. Y. Face powder and rouge.
 98,821—American Sugar Co., Ltd., Honolulu, Hawaii, Beeswax.
 98,838—The Dr. J. H. McLean Medicine Co., St. Louis, Mo. Remedies for complaints and disorders of the liver, kidneys, and stomach and bilious affections.
 98,859—Charles Green, New York, N. Y. A hair tonic.
 98,863—William A. Minick, Glasgow, Ky. A remedy for snake bites, mosquito and all insect bites, piles, and all skin diseases.
 98,877—Fruitone Co., Inc., New York, N. Y. A paste having laxative properties.
 98,887—George Nikolow, New York, N. Y. Remedy for rheumatism.

- 98,907—McDowell, Pyle & Co., Inc., Baltimore, Md. Candy cough drops.
 98,912—The Reese Co., Chicago, Ill. Breath tablets.
 98,996—The Extirpo Specialty Co., Barre, Vt. A hair tonic.
 99,010—Howard E. Long, Cleveland, Ohio. An internal treatment for sore throat, hoarseness, tonsillitis, etc.
 99,024—Richard Hudnut, New York, N. Y. Perfume, talcum powder, face powder, dentifrices, etc.
 99,029—Molo Medicine Co., Chattanooga, Tenn. A chill tonic.
 99,062—Fries and Fries, Cincinnati, Ohio. Benzaldehyde.

E. L. LILLIBRIDGE REMEMBERED BY FRIENDS

Out of the line of usual festivities held during the holidays was a surprise dinner arranged by the sales force of the Lillibridge-Weeks-Thurlow Company, manufacturers of druggists' glassware, etc., 31 Warren street, New York, in honor of E. L. Lillibridge. The function was held in the Japanese room of the Mouquin Cafe, 454 Sixth avenue, the members of the force taking the opportunity of giving tangible expression of the esteem in which they held Mr. Lillibridge, by presenting him with a silver loving cup.

The presentation speech was made by Bert Green, who was followed by M. R. Thurlow and A. W. Weeks. Mr. Lillibridge in responding expressed his gratification at the appreciation accorded to him by the force and said that the company had experienced a most successful business year. During the evening the guests were entertained with songs and stories by Mr. and Mrs. Arthur N. Green. Those present were E. L. Lillibridge, A. W. Weeks, M. R. Thurlow, B. S. Green, Jos. B. Murphy, Hugh Bride, Arthur L. Dallery, William Brooks, Richard A. Murphy, Robert T. Naser, Charles F. Ludwig, and Mr. and Mrs. Arthur N. Green.

TWENTY-FIVE YEARS OF PROGRESS

The history of the H. K. Mulford Company, Philadelphia, has been coincident with the development of the new science of immunology, a science which has practically revolutionized the practice of medicine. The main facts relating to this history are interestingly told in the recent issue of *The Mulford Digest* under the caption "Twenty-Five Years of Progress," the illustrations accompanying the text conveying to the reader much information that could not well be imparted in any other manner. The growth of the Mulford Company has been phenomenal, and in perusing this story the reader is prompted to ask what is the secret of this success? The writer of the sketch replies: "The answer is to be found in the three-fold purpose of its founders, steadily maintained from the beginning, namely: The supplying of high-grade products, the prompt adoption of suggested improvements, and the placing in the hands of physicians and pharmacists of new products resulting from original research by medical scientists."

PROCEEDINGS RECEIVED

Pharmaceutical Associations: Kansas, meeting held at Kansas City, May 16 to 18; Michigan, meeting held at Detroit, June 20-22; New Jersey, meeting held at Long Branch, June 20-23; New York, meeting held at Richfield Springs, June 20-23; West Virginia, meeting held at Deer Park, Md., June 20-23.

We acknowledge the receipt of two pamphlets, reprints of articles by Oliver Atkins Farwell, of the Department of Botany of Parke, Davis & Co., Detroit, Mich. The first of these is entitled "Contributions to the Botany of Michigan No. 14 (Michigan Novelties)," a 16-page reprint from the 17th Annual Report, 1915, and the second, "The Genus *Hippochaete* in North America," a 12-page reprint from *Memoirs* of the New York Botanical Garden, 1916.

The New York County Pharmaceutical Society elected the following officers at its recent meeting held at Aschenbradel Hall, New York: President, Herman Walter; vice-president, C. F. Dill; treasurer, Thomas Latham. Preceding the election a dinner was served to the members. The members anticipate most profitable meetings throughout the coming winter.

SATISFACTORY DRUG MILLS

While many pharmacists probably purchase ground or powdered drugs for percolation from the large firms making a specialty of this work, there are many times when a small lot of some seldom used drug is wanted in the ground form. Besides, there are many druggists who prefer to grind all their drugs for percolation or for other purposes for which ground drugs are needed. With the F4 mill made by the A. W. Straub Co., 3741-45 W. Filbert street, Philadelphia, every difficulty which has heretofore stood in the way of drug grinding in the drug store is removed. It grinds such chemicals as ammonium carbonate and copperas equally as well as it grinds roots and barks, and it will grind wet and oily substances as well as those which are dry. The problem of drug grinding is one which the thrifty druggist will look into. Full information in regard to these mills, together with prices, will be sent by the manufacturers on request.

TREATMENT OF PYORRHEA

The new booklet on Pyorrhea (Riggs' disease) and oral hygiene recently issued by the Dentinol and Pyorrhocide Company, 110-112 West 40th St., New York, is being given wide distribution by retail druggists. The booklet has a commercial side in that it emphasizes the desirability of keeping the teeth clean and the gum tissues healthy by the use of Pyorrhocide Powder. The educational features of the booklet aim to inform the lay-reader how pyorrhea may be prevented and successfully treated—things about which, the public (the druggists' customers) is becoming vitally interested. Every word written on oral health is an advertisement for the drug store.

MURRAY DRUG COMPANY TO DOUBLE PLANT

The Murray Drug Company, wholesale druggists of Columbia, S. C., established twenty-seven years ago, and a well-known member of the National Wholesale Druggists' Association, has recently purchased a plot of land 37x208 feet adjoining its present quarters. The company plans to double the capacity of its stock and sales room at 911-913 Gervais street, and the construction of new buildings will be undertaken immediately. The officers of the company are: President and manager, W. J. Murray; secretary and assistant treasurer, W. J. Murray, Jr.; cashier and assistant manager, W. A. Coleman.

CHICLE COMPANY ABSORBS STERLING GUM

The American Chicle Company announces the purchase of the entire assets and good will of the Sterling Gum Company, taking over the latter's plant at Long Island City which, the new owner announces, it expects to make the finest chewing gum factory in the world. The sales forces of the two companies will be combined into one efficient organization which will sell all varieties of the American Chicle Company's products, including Sterling gum. With the added factory equipment the company announces that it will be in a position to catch up with back orders and to take care of future business promptly.

THE MULTIPLEX HAMMOND

If you want to see an interesting advertisement look at advertising page 48, this issue of the ERA, in which is illustrated some of the work it is possible to do on the Multiplex Hammond Typewriter. These manufacturers are making a specialty of a typewriter for druggists and will be glad to send full particulars on application. Drop a postal card to the Hammond Typewriter Company, 388 E. 69th St., New York City, asking for information regarding their special typewriter for druggists.

—DR. ROBERT P. FISCHER, of the staff of the H. K. Mulford Company, delivered a lecture on "Standardized Pharmaceuticals" to the senior class of Fordham University on December 11.

THE DRUG MARKETS

CAMPHOR QUOTATIONS TENDING UPWARD

Increased Cost of Production Causes Manufacturers to Advance Prices on Strychnine Salts—Opium Higher

NEW YORK, December 20—General conditions in the market are fair, with prices in some lines advancing, although there is a tendency on the part of many buyers to restrict their purchases to current requirements only, or to quantities sufficient to carry them by the turn of the year. Quotations on many articles have been advancing during the past two weeks, owing mainly to the enhanced cost of raw materials and shrinkage in supplies. Among the items for which higher prices are asked are arnica flowers, camphor, caraway seed, chrysarobin, codeine and its salts, cumin seed, gamboge, Carthagenia ipecac, diacetylmorphine, cod liver oil, oil of rose geranium, lard oil, and Baltimore wormseed oil; opium, morphine sulphate, poppy heads, potassium permanganate, silver nitrate crystals, and sugar of milk. Declines in prices are reported for citric acid, oxalic acid, alkanet root, bismuth salts and combinations, cinchonidine and its salts, copper sulphate, bleached Irish moss, chlorinated lime, bulk, and oil of cade.

In a general way the discussion of peace prospects has not apparently disturbed the market, the changes reported being attributed to natural causes and not to speculative effort. Certain botanical drugs are reported in small supply, and there is a scarcity of caraway, poppy, anise, and coriander seeds, but it is expected that after the turn of the year, the last two articles will be in better supply, as shipments are now on the way to New York. In the market for heavy technical chemicals some interest has centered in the scarcity of sal ammoniac, which has advanced in price. Epsom salt, owing to increased demand is slightly higher; blue vitriol is also higher and oxalic acid has declined. Shellac has been inactive, although cable reports state that the situation is alarming in that no freight space will be available until some time after the first of the year.

OPIMUM—There is a strong demand for manufacturing purposes, and prices have advanced to \$14.70@15 for natural; \$17@17.25 for granulated, and \$16.75@17 for U.S.P. powdered. Cables from London report an advancing market there.

MORPHINE—Prices are tending upward in sympathy with the higher cost of opium, and jobbers are quoting \$7.90@9.20 per ounce for sulphate; in eighths, \$7.95@9.40 per ounce. Other salts are quoted as follows: Acetate, \$3.75@9; hydrobromide, \$8.80@9; hydrochloride, \$8.55@8.75, each per ounce in eighths. Manufacturers report a moderate demand for alkaloid.

CODEINE—A firmer tone pervades the market and prices are tending upward in sympathy with opium and morphine. Revised quotations are as follows: Alkaloid, \$10.45@12.95; hydrochloride, \$9.65@11.90; nitrate, \$11.65@11.85; salicylate, \$8.55@8.75; phosphate, \$8.45@10; sulphate, \$8.80@10.65 per ounce, respectively.

QUININE—No price changes have been made, but the tone of the market is firmer with prospects of active business in larger volume after the first of the year. Reports from Amsterdam state that supplies of bark there are ample for present needs, but the shipping facilities are limited and war risk rates are high. It is also stated that Russian and Italian requirements will be felt again in the near future, and that there is a good export demand for South American countries. Peace talk is not expected to have any material effect on prices and the tendency is for a firmer market. Jobbing prices are 56c@57c per ounce in 100-ounce tins; 60c@65c in 5-ounce tins; and 65c@68c in 1-ounce tins.

ACETANILID—The market is in better supply and prices are tending downward, jobbers quoting 60c@68c per pound.

ACETPHENETIDIN—American manufacturers are now supplying this synthetic in increasing quantities, and prices

have declined to \$2.60@\$2.75 for U.S.P. Prior to the outbreak of the European war, manufacturer's sales of this article were recorded at 84c per pound.

CITRIC ACID—Following a downward revision of prices by manufacturers, and increased competition on the part of second hands, quotations are decidedly lower, and jobbers are quoting 66½c@67½c per pound in kegs, and 70c@75c for less than kegs. For granulated, 75c@85c is asked.

OXALIC ACID—Increased competition between Dutch manufacturers and American makers, together with larger supplies and freer offerings, has resulted in a weak and lower market, with crystals quoted at 58c@60c, and powdered at 70c@75c.

ARNICA FLOWERS—Are in short supply and prices have advanced to \$1.90@\$2 per pound for whole, and \$2@\$2.15 for powdered.

BISMUTH COMBINATIONS—A revision of manufacturers' schedules shows lower prices, and this taken with the lower tendency of the metal has caused jobbers to mark down the following: Subcarbonate, \$3.60@\$3.80; subgallate, \$3.55@\$3.85; subnitrate, \$3.10@\$3.25; subsalicylate, U.S.P., \$5.20 per pound.

CAFFEIN—Increased competition between manufacturers and some activity on the part of second hands have caused an easier feeling among jobbers who have marked down prices to \$13@13.25 per pound for pure. Citrated is \$8.25@\$8.60 per pound.

CAMPHOR—The stronger position of the Japanese market influenced firmer and higher values on domestic refined, jobbers quoting 91½c@93½c per pound for refined in bulk, 92½c@94½c for ¼-pound squares, 96½c@98½c for powdered, and 93½c@95½c for Japanese. Advances from Japan, it is said, indicate that the camphor monopoly will advance the price of camphor 6 yen per 100 pounds on January 1, which is equal to about 3c per pound. Celluloid manufacturers are taking large quantities of camphor and the tendency in prices is upward.

CHLOROFORM—Higher cost of alcohol and other basic materials have tended to keep prices firm at 60c@65c per pound. There is a good demand for export.

CHRYSAROBIN—Is extremely scarce and prices have doubled, jobbers quoting \$1.20@\$1.30 per ounce.

COPPER SULPHATE—Offerings of jobbing parcels are held at 16c@19c for small quantities, and barrels at 14c@15c. There is only a fair demand for export shipments and the market is somewhat unsettled.

CUMIN SEED—Is higher at 40c@50c per pound.

FENNEL SEED—There is a good inquiry for ordinary at 27c@32c per pound. German and Roumanian seed are practically out of the market and quotations are not available.

FLAX SEED—Whole, cleaned, is higher at \$12.50 per barrel; ground, is quoted at 8½c@12c per pound.

GAMBOGE—Has been tending upward since the beginning of the year, owing to increased costs in the country of production and the difficulties attending importation. Stocks are low and it is said that any order representing a considerable quantity would have to be distributed among various dealers to find the supplies necessary. It is collected in the interior of Siam and distributed to the various world centers by way of Canton or Calcutta. It is gathered during the rainy season from June to October, and reports indicate that the crops this year are not up to the average. Jobbers quote \$1.60@\$1.70 for blocky; \$1.80@\$1.90 for powdered, and \$1.70@\$1.80 for select bright pipe.

IPECAC ROOT—Scarcity and increased demand has influenced a stronger feeling on the part of holders, and prices for Cartagena have been marked up to \$2.60@\$2.86 for whole, and \$2.75@\$3 for powdered. Rio continues at \$3.75@\$4.

JUNIPER BERRIES—Advices from primary markets indicate strength and prices here have been advanced by jobbers to 11c@15c per pound.

LIME, CHLORINATED—Prices have been sagging somewhat during the last two weeks and bulk is quoted at 9½c@11c per pound, according to buyer and quantity ordered. For export bleaching powder has been offered at 6c in small drums and 6¾c per pound in large drums.

OIL, CARAWAY—The market is firmer under small offerings, jobbers quoting \$3.75@4 per pound.

CASTOR OIL—Rising markets for beans in foreign countries, supplemented by higher ocean freight rates and scarcity of freight room, has influenced an upward trend in prices here. The situation is further accentuated by the fact that supplies in the hands of the crushers are nearly exhausted and unusual developments are looked for. Jobbers quote 18½c@25c per pound.

COD LIVER OIL—Recent arrivals of Norwegian have been reported in this market, although quotations are practically unchanged at \$125@\$128 per barrel, and \$4.55@\$4.60 per gallon. Newfoundland oil is in good supply, with the range of prices somewhat greater than that of last month. Jobbers quote \$2.80@\$3.10 per gallon.

OIL, CORIANDER—Prices have been cut in two and good oil is now obtainable at \$1@\$1.25 per ounce.

OIL, ROSE GERANIUM—Ordinary is very high and scarce, jobbers quoting \$18.50@\$18.75. Quotations are not available in Turkish.

OIL, LEMON—The market is firm at \$1.60@\$1.70 per pound.

OIL, JUNIPER BERRIES—Acute scarcity of juniper berries and scant supplies of oil have forced prices upward, quotations in most quarters being from \$17@\$18 per pound.

OIL, BALTIMORE WORMSEED—Higher cost of production and a smaller output coupled with scant stocks in this market caused prices to advance to \$3.85@\$4.25 a pound.

POTASSIUM PERMANGANATE—Is very scarce and high, \$3.50@\$3.75 being asked by jobbers for crystals, and \$3.80@\$4 for powdered.

RESORCIN—The lower cost of raw materials and increased production have resulted in a marked reduction in quotations by makers, and jobbers have marked down their prices to \$2@\$2.10 per ounce.

SALOL—Similar conditions have contributed to an easier market for this salicylate, which is now obtainable at \$2.75@\$2.90 per pound.

SILVER NITRATE—The higher price for metallic silver has caused manufacturers to advance their prices, and jobbers following suit have marked up crystal nitrate to 58c@63c per ounce.

STRYCHNINE—Manufacturers have advanced their prices owing to the higher cost of production, and jobbers have revised their schedules of quotations as follows: Acetate, \$1.90@\$2.07; alkaloid, \$1.97@\$2.07; arsenate, \$2.30; arsenite, \$2.30; glycerophosphate, \$3.35; hypophosphite, \$2.55; nitrate, \$2.25; phosphate, \$2.35; sulphate, \$1.65, per ounce respectively.

TAMARINDS—Notwithstanding a recent report of a decrease in stocks, this article is in fair supply and lower at \$2.40@\$2.50 per keg.

JAPAN WAX—Comparison of prices with last month's quotations shows a lower range, jobbers asking from 25c@27c per pound. The market, according to cable advices from Japan, is firmer.

SUGAR OF MILK—There is a good demand both here and abroad, and prices are higher in all markets. Jobbers quote 35c@38c per pound for powdered in bulk, and 36c@40c for powdered in 1-lb. cartons.

ERNST T. FRITZSCHE DEAD

Fritzsche Brothers, distillers of essential oils and manufacturers of chemical products, New York, on December 27 received word of the death on December 21 of Ernst T. Fritzsche in Leipzig, Germany. Mr. Fritzsche was the senior member of Schimmel & Co., Miltitz, near Leipzig, the parent house of Fritzsche Brothers. He was in his 66th year.

A SAFE AND PALATABLE LAXATIVE FOR CHILDREN

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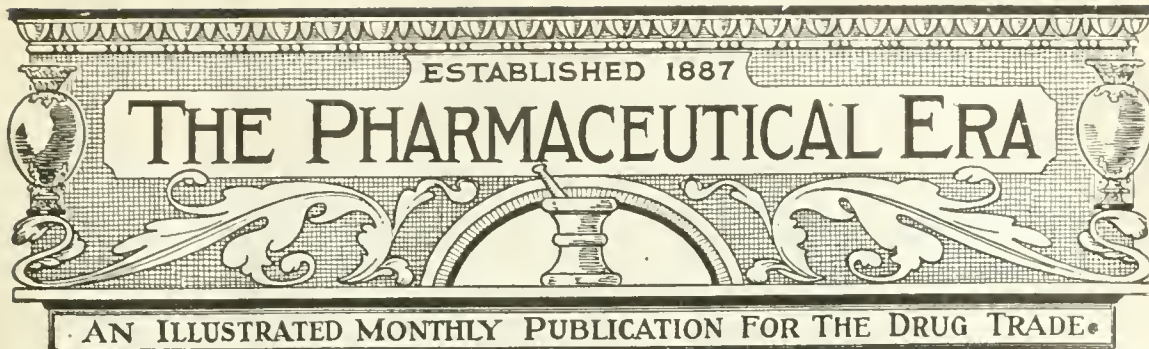
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COLLEGE OF PHARMACY ACTIVITIES

That colleges of pharmacy are taking an active interest in the real problems of the present day is evident from the news happenings reported of these institutions in almost every issue of a pharmaceutical journal. There was a time in the history of pharmacy when the tendency of such institutions was to hold aloof from general educational work relating to the drug trade as a whole, and to confine their labors to those who might elect to go to the college. But that day has passed, and the acute observer of events has no difficulty in discovering that a broadening influence has been at work, for he will find that the college is now headed toward the trade, a reversal of the old policy of aloofness and what is better, an earnest that these institutions have caught the step of progress in the evolution of modern pharmacy.

This movement of colleges of pharmacy is but one phase of the educational tendency of the present time. Universities throughout the land are sending their representatives to meet and to work with all kinds of organizations that have for their objects the general dissemination of knowledge and the uplift of the human race, and which by means of their extension courses and other agencies, are coming in direct contact with those who most need help. So far as this tendency relates to pharmaceutical work, the field is large and promising of a fruitful harvest. Pharmacy as actually practiced should have the benefit of all the resources of intellect and study that the college can bring to it, and the idea of carrying such information to the druggist, and of giving him the benefit of a scientific solution of his difficulties, is sufficient to fire the imagination and betoken a better day for American pharmacy.

In our news columns this month is told the story of the work the School of Pharmacy of the University of Tennessee is attempting to do for the pharmacists of that State, which is only a similar movement to that now going on in various other educational centers. Druggists are being invited to submit an outline of their professional problems for solution to the end that not only the individual pharmacist may be helped, but that pharmacy as a whole may be benefitted. Educational advancement is to be a most important fac-

tor in the further progress of pharmacy during the next quarter of a century, and in the fierce competitive warfare that is bound to be waged for the commercial supremacy of the future, there must be a mobilization and a correlation of all the agencies and forces that have anything to do with successful accomplishment. The Pharisaical exclusiveness of the college is a robe of the past, for the future demands that all educational institutions must don the working clothes of the intensive, never-ending present. That schools of pharmacy have caught this dominant spirit of the age and are in step with such progress is reassuring to those who believe in advancement.

PHARMACY IN ILLINOIS DISTURBED

Illinois druggists are considerably perturbed by the proposal of Governor Lowden of that State to consolidate the board of pharmacy with that of the board of registration in medicine under the department of health, his argument being that such a consolidation will tend toward economy and efficiency. Reports from the State indicate that many druggists will protest against such a transfer, for they object to being placed under the possible control of the medical profession, particularly should the officials of the new department be physicians.

The argument advanced by the druggists is that they form a self-sustaining department of their own; that they are required to pay an annual license which meets all of the expenses of the state board of pharmacy and provides a net income of something like \$10,000 annually to the State. Why then, they ask, should they be called upon to provide a fund for the enforcement of the medical or other laws, when like fees for annual registration are not demanded of physicians and practitioners in other professions? There is some justice in this claim, although it is our observation that re-registration annually or biennially is a good thing for pharmacy as a whole. It enables the board to keep track of licensees, and it tends to eliminate the misuse of certificates. If such a provision could be exacted of physicians it would be a good thing for medicine, but in either case, the State should stand the expense, the applicant for re-registration being required only to file the necessary request for the retention of his name on the official register. Certainly the State owes legitimate practitioners of any profession such protection and it should stand all of the expenses connected therewith.

The Governor meets the argument of the druggists by stating that the present working forces of the board of pharmacy will be carried bodily into the newly created department, and that the employes thus transferred will be in the classified service so that their existing legal status will not be affected and all of their rights will be preserved. The intentions of the Governor may be business-like and tend to economy, but there is always a disturbance when the status of any board of pharmacy is placed before a legislative body. The average law-maker knows about as much of pharmacy and its place in the scale of economic activities as the common laborer knows of cross fertilization or the survival of the fittest.

THE RIGHT KIND OF BOOKKEEPING

Bookkeeping as practiced in the retail drug business is a most inconstant quantity, for there are hardly any two druggists who use the same method of keeping track of items of sales and expenses or who use inventories as a basis of valuation. There are various reasons for this neglect, the main one perhaps being due to the fact that in being schooled professionally, the druggist has been compelled in many instances to imbibe his mercantile training by his own effort and as a result of his own experience. Of course, since the teaching of accounting has been seriously taken up by colleges of pharmacy, the application of the last-named allegation is not so apparent. Again, the difficulty of properly classifying the average drug store with its multiplicity of items is somewhat bewildering, so that the mere contemplation of the necessary detail to accomplish the work is generally sufficient to induce the use of any "old short cut" that looks promising. To meet these conditions has required more than ordinary ability, and as result, far too many have neglected the essentials of keeping track of the most necessary entries.

In recent years, as we have hinted, colleges have been training their students in the basic principles of accounting and have emphasized the necessity of bookkeeping as a regular part of drug store work. The enforcement of the new income tax law is likely to further impress upon druggists the necessity of keeping an accurate set of books, for the regulations issued by the authorities for the collection of such taxes, presuppose that the druggist shall be able to show by his books his net earnings for the year so that the proper tax may be assessed.

When it comes to dealing with the debtor problem, an accurately kept set of books is likely to prove more important. The fact that an unfortunate business man has kept a satisfactory record of his engagements constitutes a point in his favor in the proceedings that are sure to follow. In this direction there is something to be learned from a new bankruptcy law recently placed on the statute books of the South African Union, a paragraph of which tells what the debtor faces if he fails to keep a proper accounting system. As reported in one of the exchanges from that country we are told that:

Every trader must henceforth keep, in one of the official languages of the Union, proper books of account, and these books shall include detailed stock sheets, books showing all goods or property purchased, supported by proper and sufficient vouchers, books showing all cash receipts and disbursements and the dates thereof, books showing a daily record of all goods or property sold on credit, and the full and proper addresses of all persons indebted to the trader. Such books, proper books, not a scrap of paper or penny memoranda forms, every trader is henceforth expected to keep, and if he goes insolvent and has not such books he goes to jail.

Credit men and those interested in the study of bankruptcy law have shown keen interest in this provision of the South African law, but beyond meeting the conditions imposed by law and being thus able to keep out of jail, should not the druggist keep an accurate set of books for his own protection?

DO THE RETAIL DRUGGISTS NEED A NATIONAL BUYING CLUB?

PART ONE

When Louis K. Liggett resigned his position with the Vinol company and started out to organize his retail drug friends into a manufacturing business of their own, we do not believe that he had even the remotest idea that within a comparatively few years he would be at the head of the largest strictly drug trade corporation in the world.

Mr. Liggett was fortunate in the selection of his friends—the Retail Druggists—and he is entitled to a lot of credit for what he has accomplished for them and for himself. The formation of the United Drug Company marked an important era in the history of the retail drug trade. It has taught the druggists the value of organization and co-operation. It has developed along some lines not originally contemplated, and some of its critics say that Mr. Liggett was prompted to serve his personal ambitions when he caused the company to be so largely capitalized and when he saddled it with the big chain of retail stores. But, as a whole, the business has been successful and it is a factor in the drug trade of no mean proportions. The experience gained, too, with this company will surely help these druggists, and other retail druggists, in their further endeavors to adjust their businesses to constantly changing economic conditions which they must meet.

While on this subject of the United Drug Company, some of our readers who are not shareholders may be interested in the figures showing its financial condition.

The present corporation was organized under the laws of Massachusetts on March 29, 1916, and has an authorized capital of \$52,500,000 divided as follows:

First Preferred, 7% Cumulative.....	\$ 7,500,000
Second Preferred, 6% Non-cumulative.....	10,000,000
Common Shares	35,000,000
Total	\$52,500,000

The first preferred shares have a par value of \$50 and the second preferred \$100 a share, and recent quotations were First Pref. at \$53 to \$54; Second Pref. at \$90 to \$95 and Common at \$70 to \$75 a share. The amount of stock outstanding on June 1, 1916, was:

First Preferred	\$ 5,086,350
Second Preferred	9,109,000
Common Stock	20,050,000
Total	\$34,245,350

The company's balance sheet as filed with the Boston Stock Exchange on June 30, 1916, was as follows:

ASSETS:

Property Account (A).....	\$ 6,631,260
Patents, Trade Marks, Good-will.....	23,527,465
Cash	958,402
Accounts Receivable	2,506,666
Notes Receivable	89,135

Merchandise	8,280,900
Advance and Suspense accounts.....	494,863
Total	\$42,488,691

LIABILITIES:

Real Estate and Mortgage Bonds.....	\$ 662,500
First Preferred Stock (B).....	5,086,350
Second Preferred Stock	9,109,000
Common Stock	20,050,000
Accounts Payable	1,693,012
Notes Payable (C)	3,458,427
Capital Stock of Affiliated Co.'s to be acquired	233,825
Depreciation Reserve	1,291,553
Surplus	904,024

Total \$42,488,691

- (A)—Increased by \$460,000 to complete Buildings.
- (B)—Increased by \$2,413,650.
- (C)—Decreased \$1,953,650 by sale of Preferred stock.

There are some pertinent facts in the statement to which we would invite attention. "Patents, Trade Marks, and Good Will at \$23,527,465" is not only more than 55 per cent of the company's total assets, but a tremendous volume of "water"—it's a regular lake. If some of our large pharmaceutical manufacturers or proprietary medicine houses should value such of their assets on a similar basis, the "war brides" and automobile companies would envy their financial showings.

Then, too, the interest charges are not to be sneezed at. Six per cent. on \$42,500,000 is about \$7,000 a day for 365 days in the year; and if there are 7,000 Rexall drug stores each store, on an average, must contribute \$365 a year, or \$1.00 a day, to pay these charges. How much the overhead charges amount to we cannot even guess, and what amounts the company will be asked to contribute toward the present administration's various tax schemes, is an unknown quantity.

Just how much of the capital stock is now owned by the retail druggists who operate Rexall stores is not known to outsiders, but it is assumed that Mr. Liggett has taken good care of his old friends. If we are correctly informed a majority of the company's securities are now in the hands of outside holders, and this is why some people allege that Mr. Liggett has sold out his friends to Wall Street.

When the modern, up-to-date, frenzied-finance germ begins to get in its fine work on the fertile brain of an ambitious, American business man, there is no telling what the harvest will be, and one really cannot blame some hard working, retail druggist shareholder whose money, and work, and patronage helped to make the United Drug Company a possibility, if he occasionally says to himself—

"I suppose it's all right, Louis says it is; but these big figures are too much for me. I wish we owned it all as we did when it was first started; it sometimes makes me feel that it's getting away

from us and that we are working for some other fellows instead of for ourselves and our families."

As to the advisability of such a large capitalization and the purchase of the Liggett and Riker-Hegeman retail stores, opinions are divided. To any real friend of the drug trade, it does seem a pity that the original plans of the company as an organization "of druggists for druggists" could not have been maintained. On the other hand, if the original shareholders are satisfied with the present plans there is no reason why others should object.

The primary purpose of these articles is not to discuss the financial status of the United Drug Company. We use it as a conspicuous example of retail druggists' organizations, and one which already has many would-be followers. It is only fair to say that every druggist who is a Rexall shareholder is open to congratulations. It has made him a better business man, increased his profits, taught him how to use modern business methods—and it has shown the entire drug trade the power and value of organization when properly directed.

But there are only 7,000 Rexall druggists out of a total of 50,000 drug stores in the United States, and it is the entire retail drug trade that should be considered in any plans for its future welfare.

On the basis of 50,000 drug stores, there is one store for each 2,000 of our population, and with 300 wholesale druggists we have an average of only 160 drug stores for each jobber to supply. These figures naturally suggest, are there enough customers to support all of these distributors of drug store goods? If we are to heed the warnings of our prominent economists, the next great step in meeting economic conditions will be in the matter of distribution. The first reconstruction in the present economic era has been in production. Large combinations of capital entered the field of production and many smaller manufacturing plants have joined some combination, or have been forced to the wall. So, in the next generation, they say, many retailers will be eliminated and the number of retail stores will be greatly reduced. Professor Barnett of John Hopkins has stated that half of the people now engaged in distributing goods to the ultimate consumer should be engaged in pro-

ductive labor. The increase in economic efficiency of distribution is already forecast by the partial elimination of the jobber and the rapid development in department stores, chain stores, and particularly in the mail order houses.

In confirmation of this we can draw upon our own experience. During the fall and winter months our subscription department is in touch, through the mails, with practically all of the retail druggists, and this correspondence brings forth a very large number of letters from retail druggists in all sections of the country. These letters frequently refer to some conditions which prevail in the druggist's business, and during the past few months so many druggists have mentioned that they wish to sell out their drug stores that it has repeatedly called forth special comment. In many cases these druggists have been long established and have had a successful business, as shown by their financial ratings. And this is but one of several indications which have been brought to our attention, as proof positive of the changing conditions in the retail drug business.

It is such facts that propel us to do something out of the ordinary to assist these dealers to employ new methods and readjust their businesses to meet new economic conditions which are slowly but surely being forced upon them. And when some of our wholesale friends, or those manufacturers who distribute their products exclusively through the jobbing trade, have occasion to comment upon what the ERA is saying or doing, we trust they will keep in mind that our first obligation is to the retailer. It is our duty to meet this obligation with the best advice and the most helpful plans that our judgment and foresight will enable us to suggest, and to back up our suggestions with all the assistance we can render in the execution of any plans which promise to be helpful to the retail druggists.

It is a condition and not a theory that confronts the retail druggists, and if necessary they must discard old and established customs and employ aggressive, perhaps radical methods, if they are to prevent the trade which is rightfully theirs from passing into the hands of other, and most powerful interests.

(To be continued)

GRAPE CROP SMALLEST IN YEARS

Except for 1915, Last Season's Volume of Unfermented Juice Pressed in Chautauqua Smallest Since 1908

With a total grape crop in the Chautauqua district less by 2,765 carloads than last year, the volume of grape juice pressed is considerably under the average production. Figures gathered by *The Grape Belt* give the total 1916 crop as 4,307 carloads, of which about 1,000 cars were pressed into wine and unfermented juice. The same paper estimates the grape juice production at 2,055,560 gallons.

Although the grape crop was less in volume high prices brought its value to the growers \$65,178 higher than 1915, and set the record making total of \$2,344,653. Among the juice pressers Armour and Welch paid the highest prices. At the close of the season Armour bought a considerable quantity of fruit at \$65 a ton, a new high price. Welch's best price was \$60, or \$5 above the market average. It is said that some of the wine makers brought

California grapes to their presses, the lower price of the fruit making up the transportation charges.

Detailed figures from the other grape juice districts are not yet available, but it is estimated that the Lake Michigan belt produced about 1,500,000 gallons and the Ohio belt close to half of this total.

BAY STATE COLLEGE ALUMNI DINNER

The Massachusetts College of Pharmacy Alumni Association, January 17th, elected these new officers at its annual meeting and banquet at the Crawford House, Boston: President, Dr. Howard H. Smith, '85; vice-presidents, J. E. Stacy, '99, Miss Jennie Sumner, '95, A. M. DuPaul, '15; secretary, G. L. Burroughs, '99; assistant secretary, Leon A. Thompson, '08; treasurer, Prof. Elie H. LaPierre, '80; council member, Frank F. Ernst, '90. John J. Tobin, chairman of the Massachusetts Board of Registration in Pharmacy, was elected an honorary member. Mr. Tobin was a guest, and the principal speaker.

A Pioneer Drug Store in Wisconsin

Exhibition in Wisconsin Library Museum Stirs Imagination and Dates Back to 1837 when First Stock of Drugs Entered the State

One name and address on bottom of bottle,
One glance into the bottle,
One pasteboard bottle with wooden cover,.....

from paper to tin marked an improvement in the container, for the tin protected the powdered drugs from the deleterious effect of moisture and air.

ENTWINE about these three actualities a small amount of relevant imagination, and you have an interesting realistic story, of which O. Henry would justly be proud. The bottle can be found on the top shelf of the historical drug store in the museum of the Wisconsin historical library in Madison, and the name you will see on the bottom of the bottle is that of W. A. Thraysen, a pioneer druggist of New London, Wisconsin. In this container, as is evidenced by the bright red lining of its interior, Mr. Thraysen kept his stock of vermilion, which he supplied to the Northern Wisconsin Indians, who used the vermilion to bedaub themselves in anticipation of the ancient war-dance. If this bottle were able to speak, it could, no doubt, relate innumerable thrilling and fascinating tales.

Every article shown in the historical drug store, from the tiny liver pill to the butter-nut wood fixtures, were at one time used in some Wisconsin drug store or used by a dispensing physician. Inasmuch as Wisconsin drug store history dates back to 1837, when the first stock of drugs was added to that of a general stock by the Armstrong, Ward & Bassett firm of Green Bay, a number of the objects have withstood the ravages of time for nearly three-quarters of a century. Twenty-one years elapsed however, from the introduction of drugs into the general store until the establishment of the first retail drug store, dealing exclusively in drugs. I. N. Norton is given credit for being the first retail druggist in the state of Wisconsin, having set up in business in Milwaukee in 1858.

Successive steps in the progress of pharmacy in this state are indicated by various means, one of which is by the transition from one style of bottle container to another. The different styles of bottles appear upon the shelves of the Historical drug store, arranged as you may see bottles now in some of our present-day pharmacies. The bottle to first serve the needs of the pioneer druggist was made of paper, with a wooden base and cover. The transition



Interior of Historical Drug Store

facture of pharmaceutical containers was the invention of the ground-glass stopper, which made the glass bottles impregnable to moisture and air, and added materially in the preservation of the crude drugs.

Below the bottle shelving, encased in the butter-nut wood wall fixtures, are the conventional sliding drawers, which served as repositories for the many forms of coarse crude drugs and chemicals. The names upon the drawers impart to one a singular knowledge of the drug plants that grew wild within the boundaries of the state. The crude drugs, such as Columbo, Ginseng, Dandelion, Spigelia, Senega, and Gentian were gathered by members of the pioneer druggist's family, or else they were bought from the Indians, who made a business of drug-gathering. Tapioca and Sago, now grocery stock, were also at one time, common articles of sale in the drug store.

Who can recollect the days when druggists sold the small, flat, red-colored letter seals? Some charitably inclined old druggist of the nineteenth century has bequeathed to the collector of pharmaceutical relics a bottle of the wax seals, a number sufficient to seal several hundred letters. On the same shelf with the bottle of seals, amid an assortment of old-time patent medicines, I found, during my tour of inspection, a bottle of Tippecanoe, a strong favorite among the Indians for other purposes besides medical. Tippecanoe was manufactured before the enactment of any reformatory drug laws; consequently there is no statement as to the percentage of alcohol it contained. It is



Exterior of the Old Store

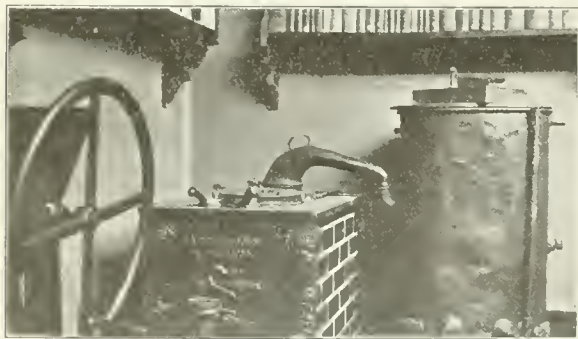
asserted, however, that Tippecanoe contained about eighty-five per cent of alcohol.

Placed upon the wrapping counter is a package of carbolated gauze, which was made by Schorse & Company, manufacturing pharmacists of Milwaukee. According to the records at the museum, this gauze is distinctive in that it is one of the first articles manufactured by Schorse & Company, who opened their plant in 1854 or 1855. A precursor of the modern popular cash register is at once recognized in the crude looking change-maker, which had its origin in Louisville, Kentucky, in 1883. It was used in the store of Mr. Salisbury of Mazomanie, Wisconsin, who contributed the change-maker to the historical collection a number of years ago.

Those persons who have had the opportunity to view the Historical drug store will perhaps remember the large furnace and still in one corner of the room. It is constructed on the order of a range with various sized openings on the upper surface, in which repose earthen-ware pots, accommodated with handles. The furnace, forty, fifty, and even sixty years ago, was a profitable investment for the druggist, because, the druggist, in those days, was obliged to prepare all his own ointments, cerates, decoctions, pills, and the like, for he had no manufacturing houses to provide him with this or that article by return mail. The still is an inseparable part of the furnace and consists of a two-gallon retort, placed in the rear of the furnace and provided with a vapor tube, extending from the still to a metal condenser. Dohmen, Schmidt & Company, of Milwaukee, after having used this furnace for nearly fifty years, discharged it from active service in 1898.

The pioneer druggists had no show windows for the display of merchandise, for they dealt exclusively in drugs. So instead of seeing an attractive and orderly arrangement of candy or stationery, as we pass the Historical drug store, we must gaze upon the conventional colored show-globes and leech jar. Colored show-globes and the leech jar still prevail in many of our present-day pharmacies, but they are relegated from the prominent position they held forty years ago.

The drug mill was an important unit in the equipment of the pioneer store, because the crude drugs had to be



Drug Grinder and Still

reduced to a coarse powder before being acted upon by solvents. The mill in the Historical drug store is constructed on the principle of a coffee grinder and is of unfinished workmanship. Other important and interesting articles that are on exhibition in this now famous drug store are the indispensable iron mortar and pestle, used for cominution and powdering; a copper scales, brought from England in the early part of the nineteenth century and used by its donor, Dr. Joseph Green of Whitewater; a small wooden mill for the sifting of very fine powders, contributed by the Allcott drug store of Milwaukee; and a pill-coating machine, almost an exact miniature of the large coating machines now in use in manufacturing plants. The coating machine was used in the store of Dunning & Sumner in Madison, for coating pills and tablets with gold and silver leaf, a common practice in former days. The butter-nut wood fixtures are a gift of T. H. Spence of La Crosse.

Without some comment upon the prize relic of drug store antiques, this story would be incomplete, therefore allow me to introduce to you "Chlorinium," probably the first commercial disinfectant put in the market. This article is considered by the collector a greater treasure than any other article in the historical collection in



Window Display In Store

virtue of its service at Camp Randall during the Civil War. Chlorinium is another contribution from Dunning and Sumner of Madison.

The Wisconsin Pharmaceutical Association, an organization of more than a thousand retail druggists and clerks of the state, is deserving of inestimable praise for the work it has accomplished in providing the state museum with one of its most interesting exhibits. The Pioneer drug store has crystallized out of an act of that association, creating in 1898 a committee on historical pharmacy, of which Professor Kremers, director of the school in pharmacy at the University of Wisconsin, was made chairman.

As a direct result of his appointment, students in the school of pharmacy, through daily association with Professor Kremers, became sympathetic and willing toilers in the search for pharmaceutical relics, and mainly through their later influence as members of the Wisconsin Pharmaceutical Association, has it been possible to bring together into one collection a large variety of articles that are thoroughly representative of primitive Wisconsin pharmacy.

NEW QUARTERS FOR VAN VLEET-MANSFIELD DRUG CO.

The Van Vleet-Mansfield Drug Co., wholesale druggists, Memphis, Tenn., have now under construction a building at Second st. and Gayoso ave., that city, which they will occupy on completion and which it is said will be the equal of any wholesale drug house in the country. The building will be seven stories in height and built of brick, stone and re-inforced concrete. A covered drive is provided to protect trucks in the process of being loaded, and from cellar to the top floor modern devices will be installed and the building will be as near fireproof as can be made. The cost of the building will be about \$75,000.

COLUMBUS DRUGGISTS ELECT

The retail druggists of Columbus, Ohio, met on January 6th and elected the following officers for the coming year, President, D. H. Fobes; Vice-President, H. L. Beck; Secretary, O. C. Wilson; Treasurer, H. D. Westervelt; Board of Control, L. W. Funk, William Kaemmerer, P. R. Barnes, Harry Dingman and A. W. Kiler.

Plans were discussed for the entertainment of the Ohio Pharmaceutical Association which will be held in Columbus during the summer.

The Biologicals of the U. S. Pharmacopoeia

How Vaccines and Antitoxins are Officially Treated

By F. E. STEWART, Ph.G., M.D., Phar.D.*

(Continued from the January, 1917 *Era* Page 11)

Tetanus Antitoxin

THE bacillus of tetanus is widely distributed in Nature. It has been found by Nicholaier and others to occur in the superficial layers of the soil. "The earth of cultivated and manured fields seems to harbor this organism with especial frequency, probably because of its presence in the dejecta of some of the domestic animals.† The vegetative forms are not more resistant against heat or chemical agents than the vegetable forms of other microorganisms. "Tetanus spores, however, will resist dry heat at 80° C. for about one hour, live steam for about five minutes; five per cent carbolic acid kills them in twelve to fifteen hours; one per cent bichlorid of mercury in two or three hours. Direct sunlight diminishes their virulence and eventually destroys them.‡ Protected from sunlight and other deleterious influences, tetanus spores remain viable and virulent for many years. Henrijean§ has reported her success in producing tetanus with bacilli from a splinter of wood infected eleven years before."

While the bacillus tetanus is generally described as an obligatory anaerobe, i. e. organisms for whose development the presence of free oxygen is directly injurious, yet anaerobic conditions may be dispensed with if tetanus bacillus be grown in symbiosis with some of the aerobic bacteria. When the simultaneous presence of two bacterial species within the same environment favors the development of both species, the condition is spoken of as symbiosis. It is well known to bacteriologists that tetanus spores will not develop in healthy tissues. The experts of the Bureau of Hygiene, Washington, D. C., have demonstrated this fact by adding tetanus spores to vaccine and then inoculating animals with the mixed vaccine, without in any instance producing tetanus, or lockjaw. A similar experiment was made by Dr. A. P. Hitchens of the Mulford Laboratories, upon the horse, an animal peculiarly susceptible to tetanus infection. But when tetanus spores are mixed with staphylococci or streptococci (pus producing microorganisms) they readily grow in symbiosis and produce tetanus.

Distribution of Bacilli

"The comparative infrequency of tetanus infection is in marked contrast to the wide distribution of the bacilli in Nature. Introduced into the animal body as spores and free from toxin, they often fail to incite disease, easily falling prey to phagocytosis"—the destruction of the bacilli by the leucocytes and other body cells—"and other protective agencies before the vegetative forms develop and toxin is formed. The protective importance of phagocytosis was demonstrated by Vaillard and Rouget** who introduced tetanus spores inclosed in paper sacs into the animal body. By the paper capsules the spores were protected from the leucocytes, not from the body fluids. Nevertheless, tetanus developed in the animals. The nature of the wound and the simultaneous presence of other microorganisms seem to be important factors determining whether or not the tetanus bacilli shall be enabled to proliferate. Deep, lacerated wounds, in which there has been considerable tissue destruction, and in which chips of glass, wood splinters, or grains of dirt have become embedded, are particularly favorable for the development of these germs. The injuries of compound fractures and of gunshot wounds are especially liable to supply these conditions, and the presence in such wounds of the common pus cocci, or of other more harmless parasites, may aid materially in furnishing an en-

vironment suitable for the growth of the tetanus bacilli. Apart from its occurrence following trauma, tetanus has been not infrequently observed after childbirth,† and isolated cases have been reported in which it has followed diphtheria and ulcerative lesions of the throat.‡

A definite period of incubation elapses between the time of infection with tetanus bacilli and the development of the first symptoms. In man this may last from five to seven days in acute cases, to from four to five weeks in the more chronic ones. Experimental inoculation of guinea-pigs is followed usually in from one to three days by rigidity of the muscles nearest the point of infection. This spastic condition rapidly extends to other parts and finally leads to death, which occurs within four or five days after infection."*

Prevention of Tetanus

The above are important points in considering the relation of the tetanus bacillus to emergencies constantly occurring not only in the experience of physicians and pharmacists, but the general public as well. The fact that tetanus may be readily prevented by the prompt use of tetanus antitoxin immediately after the infection of a wound, the character of which predisposes to the growth of the tetanus bacillus, is one of the most important facts in the science of immunology. It is well exemplified by the wonderful record attending the use of tetanus antitoxin in the armies of the conflicting nations fighting on the fields of France, where the soil of the cultivated and manured fields harbors these microorganisms with especial frequency. In a lecture delivered by Maj. Robert Patterson of the Medical Corps of the United States Army and head of the Red Cross Society, Washington, D. C., at the Mulford laboratories, Glenolden, Pa., this distinguished authority said "We haven't any reliable figures, but I do know this about tetanus antitoxin, which is probably the product which has been sent abroad in greater quantities than any other product,—there are no statistics, but I have been reliably informed that when tetanus antitoxin has been used, the contrast between those who received and those who did not, is unbelievable. Before they got tetanus antitoxin there, the number of cases that developed among wounded men was very alarming. So it is now a routine at any emergency hospital, as soon as the patient is received he gets a dose of tetanus antitoxin. No case of gunshot injury is considered as being properly treated until he has received a prophylactic dose of this agent." I have been informed that the usual routine is to repeat the dose after an interval of seven days and when indicated several doses are used. Under this method of prevention, tetanus has been practically banished from the armies of the combatants.

I am also informed that it is a rule of large establishments where hundreds of horses are used for various purposes, such for example as the hauling of delivery wagons and the running of street cars, etc., to immediately inject 500 units of tetanus antitoxin whenever the feet of these animals suffer a penetrating wound. Under this treatment, tetanus rarely, if ever, develops.

Tetanus Versus Smallpox

It is important for pharmacists to know that tetanus (lockjaw) is not caused by vaccination against smallpox. It has been my duty to investigate this subject in a number of cases ascribed to "poisonous virus" by the newspapers. In every case with which I have been brought in contact, not only the physician who did the vaccinating but also the

* Director, Scientific Department, H. K. Mulford Company.

† Hiss & Zinsser. *A Text-Book of Bacteriology*. New York and London, D. Appleton & Company, 1911.

‡ v. Eislner und Pribram, in *Levaditi, Handbuch*, etc. Jena, 1907.

§ Henrijean, *Ann. de la Soc. Med. Chir. de Liege*, 1891.

** Vaillard and Rouget, *Ann. de l'inst. Pasteur*, 1892.

† Baginsky, *Deut. Med. Woch.*, 1893.

‡ Foges, *Wien. Med. Woch.*, 1895.

* Hiss and Zinsser.

pharmacist who sold the vaccine, manifested unfortunate lack of information on this subject. Much opposition is being directed against the compulsory vaccination laws by the anti-vaccinationists and all cases of tetanus following vaccination are used by them as stock arguments against vaccination as a preventive of smallpox. In these cases the newspapers are generally full of sensational statements in which the case is ascribed to "impure virus." I have already referred to the experiments of the Bureau of Hygiene in this connection.

The results of extensive investigations of this subject by Dr. John F. Anderson, Director of the Hygienic Laboratories of the United States Public Health Service, are set forth in Public Health Report, vol. xxx, No. 29, July 16, 1915. The evidence is of a most exhaustive and convincing character. Surgeon Edward Francis, of the Division of Pathology and Bacteriology, working under Director Anderson, conducted experiments to determine the possibility of infecting guinea-pigs and monkeys, which are susceptible to both vaccinia and tetanus, by inoculating with a mixture of vaccine and tetanus organisms. All experimental animals failed to develop tetanus, neither did the living tetanus germs establish themselves in the vaccination sores, nor were there any symptoms of poison from tetanus toxin, which would have been the case if the germs has been able to grow in the sores. In other words, as stated by Dr. Anderson, "It is difficult, if not impossible, to produce tetanus in susceptible animals by vaccination with virus containing large numbers of tetanus organisms which have been purposely placed therein."

It is pointed out by Dr. Anderson "that this conclusion is strengthened by the rarity of such cases, only 41 being recorded among over 31,000,000 vaccinated subjects during 1904-1913, inclusive."

This view was further strengthened by the failure of the Bureau of Hygiene to demonstrate tetanus organisms in a large amount of vaccine virus, specifically examined for that purpose.

Production of Vaccine Virus

The production of vaccine virus is conducted by the large propagators under government license, issued by the Bureau of Hygiene. No vaccine is permitted to enter into interstate commerce except under the inspection of the Bureau. The inspectors are always alert and are constantly examining the facilities of the manufacturers and testing their products by purchasing vaccine virus on an open market and examining the same for tetanus spores and other contaminating microorganisms.

In conducting the work of the Bureau, samples of vaccine virus sufficient for 2,000,000 vaccinations, obtained from the various propagators, have been examined, and not in a single instance were tetanus spores discovered in the vaccine. Dr. Anderson, therefore, further concludes, "that, in view of the failure to demonstrate tetanus organisms, in the large amount of vaccine virus specifically examined for that purpose, it seems exceedingly improbable that vaccine virus, as sold in the United States, contains organisms."

If the vaccine virus of the United States had been at fault during the time in which the production has been under the observation of the Bureau of Hygiene, many more cases of tetanus should have followed vaccination.

Further, no cases of tetanus following vaccination were reported in the United States Army and Navy during the ten years between 1904 and 1913 among the 585,000 persons vaccinated, although the lymph used came from the same stocks as were used by the civil population. This, Dr. Anderson states, "is an argument in favor of the contention that the cases of tetanus following vaccination in the country at large were not due to infection contained in the virus."

Analysis of Cases

The average period from vaccination to onset of symptoms of tetanus in 83 cases of tetanus following vaccination was 20.7 days, while the average mortality of 93 cases was 75.2 per cent., this being slightly higher than the mortality of cases of tetanus due to other causes with an incubation of ten days or less.

Therefore, as concluded by Dr. Anderson, "cases of tetanus, occurring 15 or 20 days subsequent to vaccination, do not receive their infection through the vaccine virus. In all probability the infection is received about the tenth day."

As stated by Dr. Anderson, "the infection with tetanus is received by a contamination of the vaccination wound, such as may occur in the infection of any other surgical wound not properly cared for. No matter how carefully the physician cares for the wound produced by vaccination, infection may occur, because it is impossible to keep the patient under continuous observation. While it is true that it is difficult, if not impossible, to produce tetanus by injecting the tetanus germs into healthy tissues, yet a suppurating wound, owing to the lowered resistance of the tissues, resulting from the growth of pus-producing organisms, is particularly susceptible to infection by tetanus germs derived from the soil or possibly blown in the dust by a passing wagon or automobile."

Distribution of Vaccine Virus

It should always be remembered that the occurrences of tetanus not following vaccination are far more frequent than post-vaccinal cases. For example, in 1909 the total vaccine virus distributed by the Health Department of Philadelphia, as recorded by Dr. Wadsworth, the Coroner's Physician, was 40,400; the total cases of tetanus investigated by the Health Department during the same year were 25, of these only three were post-vaccinal. In 1910, 65,000 packages were distributed; total cases of tetanus reported, 30 (post-vaccinal, 4). In 1911, 44,133 packages were distributed; total cases of tetanus reported 24 (post-vaccinal, 3). In 1912, total virus distributed by Health Department, 40,844; total cases of tetanus reported 24 (post-vaccinal, 2).

In these four years the city distributed 190,427 "vaccinations," and Dr. Wadsworth estimates that private firms sold at least double this amount, making more than one-half million vaccinations in the city. Tetanus followed in only 13 cases, while there were 90 cases of tetanus having no relation to vaccination. This would certainly seem to demonstrate that tetanus following vaccination can be accounted for in the same way as tetanus following any other wound presenting proper conditions for the reception and development of tetanus spores.

SERUM ANTITETANICUM, U.S.P.

Antitetanic Serum

Ser. Antitetan.—Tetanus Antitoxin

A fluid having a potency of not less than 100 units per mil, separated from the coagulated blood of the horse, *Equus Caballus* Linne, (Fam. *Equidae*), or other large domestic animal, which has been properly immunized against tetanus toxin. It must be kept in sealed glass containers in a dark place, at a temperature between 4.5 degrees and 15 degrees C.

A yellowish or yellowish-brown, transparent, or slightly turbid liquid with sometimes a slight granular deposit; nearly odorless, or having an odor due to the presence of the antiseptic used as a preservative.

Antitetanic Serum gradually loses in potency, the loss being greater at higher than at lower temperatures. The Serum must come from healthy animals, must be sterile, must be free from toxins or other bacterial products, and must not contain an excessive amount of preservative (not more than 0.5 per cent. of phenol or cresol, when either of these is used), and the total solids must not exceed 20 per cent. Serum of a lower potency than 100 units per mil must not be sold or dispensed. Only such Sera may be sold or dispensed as have been prepared and propagated in establishments licensed by the Secretary of the Treasury of the United States.

The United States law requires that each container of Serum sold or dispensed by licensed establishments shall bear upon the label, in addition to the name of the Serum, the name, address and license number of the manufacturer and the date beyond which the contents cannot be expected to yield its specific results. The label must also contain the laboratory number of the Serum and the total number of antitoxic units claimed for the contents of the container.

The standard of strength, expressed in units of antitoxic power, shall be that established by the United States Public Health Service.

Average Dose—Hypodermic, 10,000 units. Protective, 1,500 units.

SERUM ANTITETANICUM PURIFICATUM, U.S.P.

Purified Antitetanic Serum

Ser. Antiten. Purif.—Antitetanic Globulins; Concentrated Tetanus Antitoxin; Refined and Concentrated Tetanus Antitoxin; Tetanus Antitoxin Globulins.

A solution in physiological solution of sodium chloride of certain antitoxic substances obtained from the blood serum or plasma of the horse *Equus Caballus* Linne (Fam. *Equidae*), or other large domestic animal, which has been properly immunized against tetanus toxin. After the serum or plasma from the immunized animal has been collected, the antitoxin-bearing globulins are separated from the other constituents of the serum or plasma and dissolved in water; and sufficient sodium chloride is then added to make a solution containing from 0.6 to 0.9 per cent. of the salt. It has a potency of not less than 100 units per mil. It must be kept in sealed glass containers in a dark place, at a temperature between 4.5 degrees and 15 degrees C.

A transparent or slightly opalescent liquid, with sometimes a slight granular or rosy deposit; nearly odorless, or having an odor due to the presence of the antiseptic used as a preservative. The liquid is sometimes more or less viscous. The serum must come from healthy animals, must be sterile, must be free from toxins or other bacterial products, and must not contain an excessive amount of preservative (not more than 0.5 per cent. of phenol or cresol, when either of these is used), and the total solids must not exceed 20 per cent. Serum of a lower potency than 100 units per mil must not be sold or dispensed.

Purified Antitetanic Serum must comply with the requirements for loss of potency, control, labeling and standard for potency under *Serum Antitetanicum*.

Average Dose—Hypodermic, 10,000 units. Protective, 1,500 units.

SERUM ANTITETANICUM SICCCUM, U. S. P.

Dried Antitetanic Serum

Ser. Antiten. Sicc.—Dried Tetanus Antitoxin

Dried Antitetanic Serum is obtained by the evaporation of either Antitetanic Serum or Purified Antitetanic Serum in a vacuum, over sulphuric acid or other desiccating agent, or by passing over it a current of warm air freed from bacteria. It has a potency of not less than 1,000 units per gramme. It must be kept in hermetically sealed amber-colored glass containers, free from air, at a temperature between 4.5 degrees and 15 degrees C., preferably in a dark place.

Dried Antitetanic Serum is either in the form of orange or yellowish flakes or small lumps, or a yellowish-white powder, without odor. The serum is soluble in nine parts of distilled water, but the solution is opalescent and slightly viscous; it may be dissolved more readily in larger amounts of distilled water or physiological solution of sodium chloride. For use, the serum must be dissolved in recently boiled and cooled distilled water under the most rigid aseptic conditions. The solution must be used immediately and, if there should be any serum or solution remaining, it must be discarded. Dried Antitetanic Serum if kept as directed does not lose in potency, as does the liquid serum. It is sometimes used as a dusting powder or for local application to infected wounds.

It must comply with the requirements for control and labeling under *Serum Antitetanicum* and the standard of strength, expressed in units of antitoxic power, shall be that established by the United States Public Health Service.

Average Dose—Hypodermic, 10,000 units. Protective, 1,500 units.

Preparation

The production of tetanus antitoxin is analogous in every way to that of diphtheria antitoxin. The tetanus toxin for use in producing tetanus antitoxin is obtained by cultivating the bacilli upon bouillon for eight or ten days at incubator temperature. The bacilli are afterwards separated from the bouillon by filtration through Berkefeld filters and the toxin preserved in liquid form by the use of an antiseptic, or it may be preserved in dried state after precipitation by ammonium sulphate.

After previous standardization to determine the strength

of the toxin, it is used for immunizing healthy horses in the same way that diphtheria toxin is employed in the production of diphtheria antitoxin. The antitoxic serum is then obtained by bleeding from the jugular vein as in the case of diphtheria antitoxin. It is then standardized and preserved with an antiseptic.

As stated above, under *Serum Antitetanicum Purificatum*, the serum may be prepared by separating the antitoxin-bearing globulin from the other constituents of the serum or plasma, dissolving same in water and adding sufficient sodium chloride, making a solution containing from 0.6 to 0.9 per cent. of the salt. The process employed for separating the antitoxin-bearing globulin from the serum or plasma is similar to that employed in the preparation of *Serum Antidiphthereticum Purificatum*. The method of preparing Dried Antitetanic Serum is sufficiently described under *Serum Antitetanicum Siccum*.

NEWS OF THE A.P.H.A. BRANCHES

BALTIMORE BRANCH

The Baltimore branch held its annual meeting January 24th in the University of Maryland buildings with Louis Schultze presiding. The continuance of the Journal and Year Book were the subjects discussed during the first part of the meeting and it was finally decided to wait until the result of the referendum vote is known before proceeding further.

Drs. Caspari and Kelly discussed the U.S.P. VIII and it was decided to consider it legal until it was proven otherwise.

Among those who took part in the discussions were Messrs. Hancock, Lentz, Lowry, Schultze and Ware.

The election of officers resulted as follows: President, H. A. B. Dunning; Vice-president, Francois Lentz; Secretary and Treasurer, B. Olive Cole; Council Member, Herman Engelhardt, Membership Committee, Charles H. Ware; Professional Relations, C. L. Meyer; Science and practice of pharmacy, E. F. Kelly; Educational, Charles Morgan.

CHICAGOANS DISCUSS FORMULAS

The regular monthly meeting of the Chicago Branch, American Pharmaceutical Association was held at the College of Pharmacy building, 701 S. Wood street, December 15th. The subject of the evening was the A.Ph.A. Recipe Book and a large number of formulas were presented for discussion, including especially formulas for ointments and photographic materials. Wm. Gray and I. A. Becker, both members of the Committee on A.Ph.A. Recipe Book, took leading parts in the discussion.

Professor Day called attention to the action of the Association in providing for the publication in the December Journal of an index to the formulas so far submitted and which would provide a basis for further constructive efforts.

The Chicago Branch expressed to the committee its appreciation of the work already done and offered its co-operation to bring to an early completion this next great publication of the A.Ph.A.

PHILADELPHIA BRANCH

The monthly meeting of the Philadelphia Branch saw several important business motions passed. Among them were the following, that process patents only be granted; that the original patentee receive royalty from subsequent patents; reciprocity with other nations as regards manufacture in this country; extension of the Paige bill to include all chemicals; exclusion of generic names from copyrights. The president appointed a committee of three to confer with the American Chemical Society on the last subject.

Late in December the branch passed resolutions on the death of Martin Inventius Wilbert who died in Philadelphia in December. Representatives of the branch also attended the services held in Philadelphia by representatives of friends. That service was held in the Philadelphia college of pharmacy and forty-one representatives of societies and organizations attended.

The Pharmacist and the State^{*}

Are Certificate Renewals a Necessity?

By C. F. NELSON

A GREAT deal has been said concerning the state and its relation to the individual citizen—so much so, in fact, that I doubt, if anything that is really new can be brought forward here. And yet there are phases of the state's attitude towards certain of its citizens—decidedly discriminating in character—which have been neglected for so long a time that it seems eminently proper to bring them up at this time for your attention and discussion.

We all like to think of the state as something large and powerful, as it, of course, truly is; as a protector of the poor, the weak, and the helpless; as the guardian of the men and women who live within its boundaries. But above all else we like to feel that it stands for absolute justice, for equality of all men and women before the law and for the fullest measure of righteous action and impartiality. And so we come to feel the reality and the strength of this immaterial power which finds its embodiment in the capitol building. As the years go by, the citizens of the state come to experience more and more the reality and the unity of this spiritual entity. To most of us, then, the state stands as the embodiment of power, of law, of order, and pre-eminently, of justice and equality, without fear or favor.

The particular phase of this question immediately before us, however, and to which I desire to invite your attention concerns the relationship of a particular group of citizens to the state. To make the matter more simple, let us place this group within a larger group to which they belong and ask this question: "What relations do professional men and women have toward the state in which they live and labor and in turn what is the state's relationship to them?"

Pharmacy a Specialized Calling

It seems at the outset obvious that the professional man or woman bears a different relation to the state from that of the average citizen. The professions represent specialized callings, so highly specialized, in fact, that for the welfare and protection of its citizens the state has found it necessary to subject the men and women of this group to special tests of fitness; to require of them years of preparation and study before it is willing to permit them to practice the particular calling which they have chosen. These requirements are imposed for public safety and not for any benefit or monopoly in favor of those within the profession. The doctor, the lawyer, the pharmacist, the veterinarian, and now the teacher must satisfy certain requirements, pass certain tests, show evidences of fitness before being allowed to do the work they have prepared themselves to do, and this for the sake of public welfare and for that alone.

What, then, in brief, is the present conduct of the state concerning the treatment of the groups upon which the restrictions mentioned above are put? How does the state in turn treat the doctor, lawyer, pharmacist, dentist, teacher? Do they all receive the same treatment or are certain of them discriminated against, and if so, how can this matter be corrected?

The usual practice in our states consists in requiring candidates who desire to engage in the above callings to present themselves for examination at stated intervals before examining boards usually appointed by the governor of the state. The examination successfully passed and other matters, such as educational requirements, personal record, length of service, etc., being satisfactorily met, the candidate is issued a license to practice his calling for life. In the case of school teachers this is not exactly the procedure, a certificate usually being first issued for three years and at the end of that time, if the candidate has taught two of the three years, this certificate is extended

without examination for life. These conditions obtain in medicine, veterinary medicine, law, dentistry and teaching.

Pharmacist Should Have Life Certificate

Now by some curious fate or anomalous set of conditions the pharmacist does not at all enjoy the same treatment from the state that his professional brethren do. To be sure, the state asks that he, too, take examinations, not only one, but three; that he give evidence of certain preliminary education, as well as four years of apprenticeship. The younger generation is, in addition urged to attend a school of pharmacy for two, three or four years. After all these conditions are complied with, the candidate is issued a license to retail and dispense drugs, poisons and chemicals for twelve months, after which his license expires and he is no longer a pharmacist. By paying an annual due within a certain length of time he can, it is true, be reinstated, but should he neglect this for six months or a year, he automatically ceases to have any right to follow the calling which he has spent years in order to master. Why doesn't the state try this scheme on the doctor, the lawyer, the dentist? Why should the pharmacist be the only one discriminated against in this way? Can there be any possible reason why he should forget more about his business if he remained out of it for a few years or ceased paying annual dues than other professional men would? There can be only one right way to handle this matter and that is by issuing a life certificate with proper restrictions to the pharmacist.

Professional Tenure and Yearly Dues

We are at present much concerned with reciprocal registration—with trying to unify requirements in the different states so that examinations passed in one shall be valid in all of the rest. This propaganda is exceedingly valuable for pharmacy in this country and should be pushed with all the vigor we possess. But along with it it seems we should also strive for a permanent professional status in pharmacy. What if we do have reciprocal registration? We are still professional vendors as long as we must each year pay an annual tax, as a punishment, it sometimes seems, for having spent years in learning a profession. Why not once a pharmacist, always a pharmacist? This condition obtains in all of the other professions. A doctor takes but one examination and the state permits him to practice medicine for life. The same is true of the dentist, of the lawyer, of the veterinarian, and also even of the grade school teacher. What logical reason is there that the pharmacist should be assessed yearly dues? Why should he annually help to support a state board of pharmacy which the state needs to protect its citizens and which the governor of the state appoints? We need boards of pharmacy and I am not arguing for a single instant against maintaining them. Their members should, if anything, be better paid than they now are. They should as well have a high-salaried secretary or president who devotes his entire time to this work. But these expenses should be borne by the state, which secures protection to its citizens from the rules and regulations that the Board of Pharmacy passes. We feel, moreover, that we have a right to be treated like other professional men, to pay a fee for examination and registration and then if we passed the examination successfully, to be registered for life as the other professional men now are. Can there be anything more humiliating to the profession of pharmacy than to have written on our statute books as a part of the rulings of our state board that if, after three months or a year, a pharmacist has not paid an annual due, he is automatically no longer a pharmacist? All the years of his professional training have been swept away in an instant. He must go back and satisfy the board by another examination that he knows his business before he can become a pharmacist

* Proceedings of the Kansas Ph. A., 1916.

again. It would be far better that his property were sold to pay for this tax than to have his professional standing so easily set at naught. How can the pharmacist ever hope to add dignity to his calling so long as his "professional tenure" is so uncertain?

Any Tax Not Imposed On All Alike Unjust

The amount of money involved in satisfying the annual dues that the pharmacist has to pay is, to be sure, very small. Some might even argue from this, why not pay this small amount and keep still about it? Isn't it worth a dollar or a dollar and a half to you to be registered as a pharmacist for twelve months? To which there is but one reply, yes, and many dollars, if pharmacy is a monopoly which exists only to protect the pharmacist. If, however, the state has seen fit to impose certain standards for the protection of its citizens, to insure the accurate and intelligent retailing and compounding of drugs and chemicals, then it is the state's duty and privilege to maintain the state board of pharmacy and to furnish the funds for prosecuting violations of the pharmacy laws; and any tax, however small, which is not imposed on all professional men alike, is unjust and lowers the dignity of the calling which is discriminated against.

Pharmacists should be alive to this question. It may seem small and insignificant to many because the amount involved is so little and yet if pharmacy is to come to its own as a profession, we may have as high ideals as we will; we may set standards for the practice of pharmacy higher than they have ever been before; we may have high school or college entrance requirements; we may have reciprocal registration and all that, but until the state is willing to treat us in the same way and place us in the same position with reference to this matter of permanent registration as it now does the other professions, we are without the first and most fundamental step in gaining the public esteem and respect which our calling ought to have.

Once a Pharmacist Always a Pharmacist

Now it is undoubtedly true that in this country the discriminations we have spoken of have been in no way intentional or deliberate on the part of the legislature of any state. They have merely been a part of each state's growth, dating back to a time when the pharmacist's calling was so insignificant and vague and when the standards for requirements for practice were so low that no one paid any attention to him as a professional man. But that is all changed today. The educational requirements, professional training and years of actual experience which are now required of the pharmacist demand that he be treated like other professional men. Pharmaceutical associations should take up this matter with their state legislatures. The time is ripe for us to come into our own in this respect. Let our slogan be "Once a pharmacist, always a pharmacist," and not "Once a pharmacist until the 31st of December or 1st of July a pharmacist" as our certificates now read. We ought to be recognized by the state and by the public as being bona fide professional men. We should have the permanent professional tenure which the doctor, the lawyer, the teacher, the dentist, and the veterinarian now have. As matters stand today, the pharmacist is grossly discriminated against, unintentionally, however. It seems certain that no state legislature would refuse to remedy this condition, once the matter is presented to them.

I have chosen to present this paper to you at this time because I feel sure that you are interested in the matter I have spoken of. I am also mindful of the fact that you live in a state whose slogan is, "Kansas leads, where others follow." I am further convinced that Kansas men and women have amply demonstrated that they dare to change an old order of things whenever they feel that by so doing they may benefit themselves and help others. There are about 2,300 regular physicians registered in the State of Kansas this year and about 3,050 of all kinds. There are registered veterinarians. There are about 2,000 pharmacists registered in the State of Kansas at the present time. Last year the state legislature appropriated \$4,442.86 for maintaining the state board of medical examiners for the biennium, 1916-17. \$1,883.50 was appropriated by the same legislature for maintaining the state board of veterinary examiners. About \$1,800 was received by the secretary of the state board of pharmacists for the

renewal of pharmacy certificates during the past year, dues which no other set of men has to pay. It seems certain that the governor and the legislature of this state, if informed of this condition, would be only too glad to give the pharmacist due justice in this respect; would be glad to change the pharmacy law to make it conform in this particular with that governing the practice of other professions mentioned. The small sum needed by the state to support the state board of pharmacy, if annual renewals were discontinued, would be insignificant indeed. The justness and fairness which would result would be inestimable.

NEW NEW YORK SANITARY CODE

The Board of Health of New York has added a new section to the city's Sanitary Code, which deals with drugs. Under the provisions of the article, drug stores will be inspected regularly just as restaurants, grocery stores, confectioners' stores and such places of retail business are.

The new article reads as follows:

Sec. 129. Condemnation and Destruction of Drugs Authorized—Upon any drug or medicine being found by an inspector or other duly authorized representative of the Department of Health in a condition which renders it, in his opinion, unfit for human use, externally or internally, or in a condition or of weight, quality, or strength, forbidden by the provisions of the Sanitary Code, such inspector or duly authorized representative of the said department is hereby empowered and directed to immediately seize the said drug or medicine and affix thereto a label bearing the words "Seized by the Board of Health." Such drug or medicine when so labeled shall not be touched, disturbed, sold, offered for sale or given away, but shall be released, destroyed, or otherwise finally disposed of, as the Board of Health shall direct.

Stripped of legal verbiage, the new order means that there is to be a close inspection of drugs, by drug inspectors. No provision has been made for inspection by men who know drugs, and none will be made for a few months. However, says Dr. Lucien S. Brown, head of the drug department for the Board, there are several inspectors already employed who have studied drugs, and they will be used in the new inspection.

The theory of the article is the same as those governing food stores. Inspectors will make periodical visits and will examine whatever appears to them suspicious. A complaint system will be used for drug stores in the same way that it is for the other trades. That is, citizens may telephone or report to the Board of Health any drug store of which they are suspicious and it will be inspected at once.

"We do not mean this law as a hardship," said Dr. Brown, "but merely as a preventive. We will inspect druggists to a certain degree but we will also watch them through our complaints. The law was placed in the code merely to give us a control over drugs that we didn't have before. It should work out as well in that trade as it has in all others."

COAST DRUGGISTS FALL OUT

Trouble is reported in Washington over the 1917 convention of the state druggists. Spokane planned for it, and the druggists chose that city. Now the coast druggists have demanded that the convention be held on the Pacific's shores and both divisions are angry.

There is talk that the Eastern druggists may break away from the state organization unless the convention goes to Spokane. Coast druggists, however, continue to insist on a coast convention in spite of the threats. There is only an outside possibility that the situation will be peaceably settled unless Spokane gets the convention.

PURITAN DRUG CO. DISSOLVES

Organized only six months ago, with a capital of \$300,000 and an announced intention of establishing a series of chain stores throughout Florida, the Puritan Drug Company, early in January announced its dissolution. The dissolution was announced through an attorney for Caryl F. Spiller, who was instrumental in promoting the concern. Mr. Spiller left Florida immediately after the announcement had been made. The attorney said that the majority of the stock holders wanted the dissolution. Mr. Spiller will become a member of a large firm in the central west.

BOOKS REVIEWED

A MANUAL OF MATERIA MEDICA AND PHARMACOLOGY comprising all organic and inorganic drugs which are or have been official in the United States Pharmacopoeia, together with important allied species and useful synthetics, especially designed for students of pharmacy and medicine, as well as for druggists, pharmacists, and physicians. By David M. R. Culbreth, Ph.G., M.D., professor of botany, materia medica, and pharmacognosy in the Maryland College of Pharmacy, University of Maryland, 6th edition, thoroughly revised, 492 ill. 8 vo., 1001 pages, cloth. \$5.25. Philadelphia, Lea & Febiger.

In this new edition the author has covered the field outlined in former editions, with such additions of new material as have been necessary to bring the work up to date and in consonance with the new revisions of the United States Pharmacopoeia and National Formulary. The arrangement of the drugs remains the same as that followed in previous editions, being based upon the principle of associating as nearly together as possible those substances, organic and inorganic, which have a common or allied origin, allowing those next related to follow in regular order, the basal or parental source being kept paramount. The volume opens with a discussion of the materia medica and the physiological drugs, the forms in which medicines can be used, the avenues by and through which they enter the human system, the means by which they are transmitted through the system, conditions which modify their action, dosage, etc. Then follows an outline of the classifications of medicines, as arrangements by alphabetic sequence, by chemical constituents, by morphology and anatomy, and by therapeutic effect. Thus, as we have indicated, the vegetable drugs are taken up in botanic sequence, beginning with the more simple and gradually approaching the more complex. Similar treatment is accorded the various animal drugs.

Worthy of notice in this volume are the various "recapitulation tables" introduced at various points, and which give in condensed and "chart" form the principal facts relating to drugs, as the name of the family or natural order to which the plant from which the drug is derived belongs, its botanic source, the part official, habitat, constituents, official preparations, medicinal properties, medicinal uses, doses, etc. The same procedure is followed with animal drugs, thus placing before the student in one place all of the salient facts of each drug he studies. Another feature of this work is that indicating the pronunciation of words more or less troublesome to the average student, and we are sure that if more study was devoted to this art there would not be the wide diversity in the pronunciation of scientific terms that prevails at the present time. The book has been reset and recast throughout and a number of new illustrations have been added, making this practically a new edition. For the pharmacy student it is one of the best manuals extant on the subject, its use in many colleges of pharmacy as a prescribed textbook being evidence of this fact, while as a reference work for pharmacists and physicians along the line of synonyms and condensed information it will prove highly serviceable.

REPORT OF THE PRESIDENT OF THE BOARD OF HEALTH of the territory of Hawaii for the twelve months ended June 30, 1916. Honolulu, Hawaiian Gazette Co., Ltd.

This report covers the activities of the Hawaiian Board of Health for the period named, including reports of the local U. S. Public Health officials, pure food bureau, and much information relating to the leprosy investigating stations, treatment of the disease, etc. According to Dr. W. J. Goodhue, resident physician of the Leper Settlement at Kalaupapa, Molokai, the remedies of proved value in the treatment of leprosy are narrowed down to chaulmoogra oil in some of its various combinations. In his opinion, important and necessary adjuvants are the various nervines, such especially as strychnine, the elixir of iron, quinine and strychnine phosphates, and especially the phosphates nucleinated. At the end of the fiscal year there were 138 licensed physicians in the territory, divided as to nationality as follows: American 74, Japanese 41, British 13, German 4, Chinese 4, Portuguese 1, and Norwegian 1.

MYCOLOGICAL NOTES. By C. G. Lloyd, Cincinnati, Ohio.

We are in receipt of five issues of this interesting publication, viz., those for December, 1915, and February, March, June and September, 1916, completing the series for the period named. Each number is fully illustrated, the front cover of each bearing a full page portrait of an eminent mycologist, the following being thus reproduced: The late Prof. J. B. Ellis, a leading American mycologist; W. G. Farlow, professor of cryptogamic botany at Harvard University; Prof. H. C. Beardslee, Asheville, N. C.; Fred J. Seaver, a graduate of Iowa University, and a rising young mycologist; and the late George E. Morris, of Waltham, Mass., who died on July 5, 1916. Botanists who specialize in mycology will appreciate the contributions that Mr. Lloyd has made to the literature of this interesting field of knowledge.

ADVERTISING IN MOVING PICTURES. By Ernst A. Dench, The Standard Publishing Company, Cincinnati, O. 255 pages, \$1.50 net.

There is always room for a little more publicity. It really makes no difference what the line is you want to advertise or what purpose you have in view, you can always find some way to strengthen your sales by advertising. Naturally, with so much advertising throughout the country there is a pronounced desire for new things.

In no sense can Mr. Dench's book be called a discussion of new methods of advertising, for in some ways, the motion pictures have been used in publicity campaigns as long as they have been used other ways. But Mr. Dench has presented ideas which are of value, and many of them are new. Many of them are important in that they really have been used by large concerns and have been proved successful.

From the viewpoint of the retailer, whether he be a druggist or grocer, the book has little value. Its suggestions are certainly too extensive and entirely impractical to be of any use whatever. From the jobber's viewpoint, however, there is much to be gained, and the only possibility of help to retailers is found in that department. Advertising on the scale suggested by Mr. Dench, however, is not for the retailer unless he can use films taken and arranged by the jobber. It is too costly.

LORD & THOMAS' POCKET DIRECTORY OF THE AMERICAN PRESS.

This directory contains a complete list of the newspapers, magazines, farm journals, religious papers, foreign language publications and other periodicals published in the United States, Canada, Porto Rico, Hawaiian and Philippine Islands, together with such information as frequency of publication, figures indicating circulation, etc., printed alphabetically under the various towns in each State, their population, etc. The directory contains more than 800 pages of closely printed matter, is nicely bound in morocco and of a size that can be easily carried in the pocket. It is published by the well known firm of Lord & Thomas of Chicago and New York, and aims to place before the advertising space buyer all the information he needs in his effort to obtain publicity.

PROCEEDINGS OF THE AMERICAN ASSOCIATION OF PHARMACEUTICAL CHEMISTS. Ninth annual meeting held at Cedar Rapids, Iowa, May 29 to June 1, 1916. 8 vo., 210 pages, cloth.

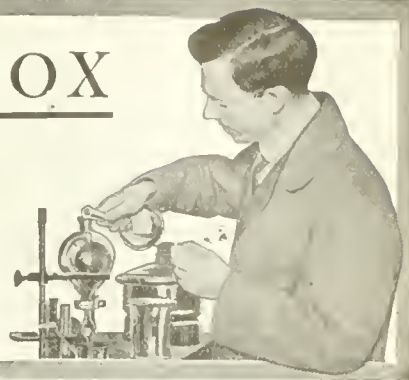
This volume is one of the most interesting and valuable of the various annuals published by this association, and judging by the discussions and the reports presented, the meeting at Cedar Rapids must have been a most profitable one to all concerned. The reports of the committees on credits and collections, on standardization and drug testing, and on efficiency and waste, exhibit careful study and are highly illuminating to all manufacturers whether they belong to the association or not. The association now numbers more than forty manufacturing concerns in its active membership, and eight as associate members. The 1917 meeting is to be held at Atlantic City with the understanding that the members have consented "to cut out all special entertainments, including the banquet."

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Removing Cigarette Stains

(E. P. P.)—Sodium perborate has been recommended as a skin bleach for the fingers, and we suggest you try it. The dry perborate may be applied by means of a dampened brush, or the fingers may be immersed in a little water in which a small quantity of the perborate has been dissolved.

The following formula has been published for a preparation in powder form: Finely powdered castile soap, 30 parts; finely powdered pumice stone, 3 parts; China clay, 45 parts; sodium perborate, 22 parts. Mix.

Cigarette smoke contains, beside nicotine, various pyridin bases and other etheral products of the combustion of the tobacco and paper wrapper of the cigarette. The stains on the fingers are caused by the tobacco becoming moistened with the saliva coming in contact with the skin.

Wine of Cod Liver Oil

(Exporter)—The preparation usually exploited under the above title does not, (as its name would indicate,) contain cod liver oil, but is prepared from gaduol (morrhual), a so-called alcohol-soluble extract which is said to contain the alterative principles of cod liver oil (iodine, bromine, phosphorus and alkaloids). Here are three formulas, the first being taken from "Pharmaceutical Formulas":

(1)

Morrhual (gaduol)	80 grains
Fluidextract of licorice.....	3 fl. ounces
Glycerin	2 fl. ounces
Syrup of wild cherry.....	4 fl. ounces
Liquid extract of malt.....	8 fl. ounces
Compound syrup of hypophosphites.	4 fl. ounces
Fullers' earth (in powder).....	240 grains
Sherry wine to.....	40 fl. ounces

Mix the morrhual with the glycerin and triturate with the fullers' earth; add the fluidextracts and syrup of wild cherry, allow it to stand for twenty-four hours, agitating occasionally, then filter and add the syrup of hypophosphites; lastly add sufficient sherry wine to make 40 fluid ounces.

(2)

Gaduol	64 grains
Soluble iron phosphate.....	128 grains
Alcohol	4 fl. drams
Glycerin	4 fl. ounces
Port wine, enough to make.....	4 drams
.....	64 fl. ounces

Mix the gaduol with the alcohol and add the fullers' earth; triturate well and add the glycerin and wine. Let stand a day or so, shaking occasionally, and add soluble iron phosphate, previously dissolved in 1 ounce of hot water; then filter, passing sufficient wine through the filter to preserve the volume. Color with caramel.

(3)

Gaduol	64 grains
Soluble iron phosphate.....	128 grains
Alcohol	4 fl. drams
Fullers' earth.....	4 drams
Port and claret wine, of each equal parts, to make.....	16 fl. ounces

Mix as directed in the preceding formula. An elixir can be similarly made by using simple elixir in place of the wine.

Haines' Test Solution

(J. E. K.)—This test is employed to indicate the presence of sugar in urine, being a modification of that known as Trommer's test in that it has the advantage of making use of a solution that remains stable almost indefinitely. The solution consists of pure copper sulphate, 30 grains, distilled water, 1 ounce; when a perfect solution is made pure glycerin, ½ ounce, is added; then after thorough mixing, 5 ounces of solution of potassa are added. Of this solution 1 to 2 Cc. are gently boiled in a test-tube. Then 6 to 8 drops of the urine are added and the upper part of the solution is boiled gently for a second or two only. Presence of sugar is indicated by the formation of a yellow or yellowish-red precipitate.

Denatured Alcohol

(J. E. K.)—"What is added to alcohol in the production of denatured alcohol?"

The substances used to denature alcohol vary with the special purpose for which such denatured spirit is intended; in some cases methyl alcohol only is added, in others methyl alcohol and benzin or pyridine bases, and in still others methyl alcohol, castor oil, caustic soda lye, etc. The law permitting the denaturing of alcohol went into effect on Jan. 1, 1907, the operation of the same being placed under the direction of the Internal Revenue Department. Under the provisions of the Department persons who use denatured alcohol in any manner except as expressly authorized by the law, will be held to be liable for double the amount of the tax on all the alcohol so used, in addition to the penalties, civil and criminal, expressly provided for by the Act. The Internal Revenue Department has published about twenty formulas for denaturing alcohol, all of which may be found in the official bulletin issued by the department, a copy of which you can obtain by addressing the Commissioner at Washington. The bulletin also contains regulations and instructions concerning denatured alcohol as it relates to the various industrial applications, etc. In 1912 the Commissioner issued a series of seventeen formulas for the preparation of denatured alcohol to be used for general antiseptic purposes in hospitals and sanitariums, and exempting such alcohol from tax. The denaturants named in these formulas are alum, camphor, carbolic acid, formaldehyde, zinc sulphate, bichloride of mercury, hydrochloric acid, oil of cajuput, tannic acid, extract hamamelis, compound solution of cresol, etc., in most cases mixtures of these substances being employed. For further particulars you should consult the bulletin referred to above.

Solubility of Oils in a Prescription

(T. & M.)—"We cannot mix the following prescription without having the oil separate, Menthol, 0.25; oil of eucalyptus, 1.50; oil of gaultheria, 1.50; sodium carbonate and sodium borate, of each, 4.50; glycerin, 20; distilled water, 120.' What is the difficulty?"

This prescription is a combination or modification of the formulas for Dobell's solution and the antiseptic solution of the National Formulary, and the principal difficulty is due to the fact that the quantity of oils pre-

scribed is too great to be dissolved in the mixture of distilled water and glycerin employed as the vehicle. Our method of compounding would be to dissolve the sodium carbonate and sodium borate in about 70 mls of water previously mixed with the glycerin; let the mixture stand for half an hour until effervescence has ceased, then add the menthol and oils previously dissolved in about 5 mls of alcohol and 20 mls of distilled water. Mix both solutions and add about 2 grams of purified talc, let the mixture stand with occasional agitation for a day or so; then filter, returning the first portions of the filtrate until it passes through clear. Finally add enough distilled water through the filter to make the whole measure 120 mls. In this way you will at least get a saturated solution of the oils, and that is about the best one can do with the formula. It can be diluted for use by adding the desired quantity of water moderately warm.

Oak Bark Tanning

(O. T. & T. Co.)—We are not familiar with the practical details of tanning, the particular method employed and the exact treatment of the hide preliminary to the use of oak bark depending upon individual experience and other conditions. However, here is a formula for tanning by the use of oak bark, which we take from Spon's "Workshop Receipts:"

"Take 1 cwt. of the limbs or branches, and $\frac{3}{4}$ of a cwt. of oak sawdust—the sooner the latter is used after being made the better—and $\frac{1}{4}$ cwt. of the root; boil in 80 gallons of water, till reduced to from 50 to 60 gallons. Draw off the decoction, and put it aside for use. To the materials left in the copper add 60 gallons of water and again boil until reduced to from 30 to 35 gallons. The liquor produced by this second boiling is to be employed in the first stage of tanning hides after they come from the beam; and afterward the decoction first produced is to be employed. The skins or hides having undergone the before-mentioned processes, add as much oak bark or tan liquor, or both, to the respective decoctions as is necessary to complete the tanning. The quantity of each will vary according to the strength of such decoctions; which strength will depend upon the age and size of the tree, and other circumstances."

For more specific information we suggest you refer to such books as those by Bennett, "Manufacture of Leather," (\$4.50); Fleming, "Practical Tanning; a Handbook of Modern Processes, Receipts, and Suggestions for the Treatment of Hides, Skins and Pelts of every description," \$4.00; and Watt, "Art of Leather Manufacture," a practical handbook in which the operations of tanning, currying, and leather dressing are described. (\$4.)

Books on Embalming

(G. W. T.)—The following books on embalming have been recommended:

Barnes, Art and Science of Embalming, Descriptive and Operative.....	\$5.00
Clake & Dhonan, Official Textbook on Embalming	2.00
Dodge, Practical Embalmer.....	3.00
Eckels, Practical Embalmer.....	3.50
Myers, Champion Textbook of Embalming	5.00
ing	5.00

A periodical called *The Embalmers' Monthly* covering this field is published by the Trade Periodical Co., 608 S. Dearborn st., Chicago, Ill.

Percentage Solutions Again

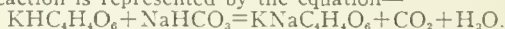
(J. B. H.)—The Era Dose Book and other reference works give tables showing the quantity of substance and solvent to be employed for making the more common percentage solutions, most of these tables being calculated for solutions requiring q. s. distilled water to make 1 pint, the *per cent* meaning so many *hundredths* of the finished solution by *weight*. In practice, to obtain a solution measuring, say 4 fl. ounces, it is necessary to ascertain what 4 fl. ounces of distilled water will weigh. This weight we find to be 1825.4488 grains (456,3797 gr. x 4). To make a 5% solution of silver nitrate measuring about 4 fl. ounces we can do one of two things; we can make 1825.4488 grains the weight of the finished solution one twentieth of which will be silver nitrate. The amount of

silver nitrate necessary for this purpose we find to be 91.27 grains to which we add distilled water until the solution weighs 1825.4488 grains. By the other method we can assume that 1825.4488 grains is 95% or 19-20ths by weight of the solution desired and to which we add silver nitrate sufficient to make the whole weigh 20-20ths. Thus, if 1825.4488 grains is 19-20ths one twentieth will be $\frac{1}{19}$ th of 1825.4488 or 96.07 grains; if this weight of silver nitrate be taken and added to the water it will make a solution weighing 1921.5188 grains, 5% of which is silver nitrate. By the first method the volume of finished product is slightly less than 4 fl. ounces, while by the second method the volume is slightly in excess of the quantity named. This is due to the fact that 1 grain of the salt does not occupy the same space as 1 minim of water.

Many druggists get around problems of this character by taking as the *weight* the nearest *round number* that is likely to yield the full volume of solution. The nearest round number to that expressing the weight of a fluid ounce of water is 500, and calculating 500 grains to the fluid ounce we should require 50 grains of silver nitrate and 450 grains of water to make a 10 per cent solution. The reason for this procedure is because we do not know exactly how much the salt when dissolved will increase the volume of the finished solution. Four ounces will require four times the quantity. In measuring the solution thus made, the volume will fall a little short of four fluid ounces, but it will represent a true 10 per cent solution. A little "mental arithmetic" is all that is usually required to work out most of the problems. The table in the Era Dose Book will give you the factors for the usual percentage solutions, but with its use or the use of any table for a similar purpose, the principles outlined must be considered.

Reaction in Cream of Tartar Baking Powder

(W. H. L.)—When cream of tartar and sodium bicarbonate, the usual constituents of baking powder, react in breadmaking, the products are carbon dioxide, Rochelle salt, and water. Cream of tartar is acid potassium tartrate; Rochelle salt is sodium potassium tartrate; and the reaction is represented by the equation—



The carbon dioxide when released lightens the bread, and the Rochelle salt formed is not present in sufficient quantity to have any untoward effect. The author of "Pharmaceutical Formulas" states that the ideal baking powder is one consisting of cream of tartar (100%) 69 parts, sodium bicarbonate 31 parts, with amylaceous diluent up to half the combined acid and alkali. Cream of tartar is said to be better than tartaric acid for two practical reasons, which substantially are one in theory: first, powders containing cream of tartar keep their properties longer, and, second, in the dough the carbon dioxide is evolved more steadily and slowly than is the case with tartaric acid. The same authority gives in the following list the quantities of acid substances commonly used in making baking powders which neutralize the stated quantity of sodium bicarbonate.

Sodium bicarbonate, NaHCO_3 , 1 av. ounce (437.5 grains) neutralizes:

Acid phosphate of ammonium ($\text{NH}_4\text{H}_2\text{PO}_4=115$), 300 grains.

Acid phosphate of calcium [$\text{CaH}_2(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}=252$], 330 grains.

Acid phosphate of potassium ($\text{KH}_2\text{PO}_4=136$), 354 grains.

Acid phosphate of sodium ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}=158$), 418 grains.

Acid sulphate of potassium ($\text{KHSO}_4=136$), $1\frac{1}{2}$ ozs., 42 grains.

Acid sulphate of sodium, dried ($\text{NaHSO}_4=120$), 1 oz., 188 grains.

Alum, dried [$\text{Al}_2(\text{SO}_4)_3 \cdot (\text{NH}_4)_2\text{SO}_4=468$], 428 grains.

Citric acid ($\text{H}_3\text{C}_3\text{H}_5\text{O}_7 \cdot \text{H}_2\text{O}=208.5$), 380 grains.

Cream of tartar ($\text{KHC}_4\text{H}_4\text{O}_6=186.75$), 2 oz., 120 grains.

Tartaric acid ($\text{H}_2\text{C}_4\text{H}_4\text{O}_6=148.92$), 390 grains.

In each case a slight allowance is made for impurity natural to the substances. Complete neutrality is not obtained with calcium phosphate when used in baking powder, the reaction being:



Commercial calcium acid phosphate contains from 2 to 50 per cent. of calcium sulphate, and for baking powders it is customary to use two parts to one part of sodium bicarbonate.

Fadeless Hair Dyes Impossible

(J. M. W.)—It is practically impossible for us to name a hair dye that is "fixed and will not fade," nor can we name a manufacturer of such a dye. The reason for this must be obvious: As you will readily comprehend, the dyeing of growing hair upon the head is an altogether different proposition from that of dyeing wool in the manner you seem to indicate. Hair on the head is continually growing at a rate estimated by physiologists to be about eight or ten inches per year. When it is considered that this new growth has never been touched by dye, it is easy to understand why subsequent and repeated coloration is needed to keep the hair somewhere near a uniform shade, however "permanent" the particular dye employed may be claimed to be. If the hair be removed from the head, no particular difficulty obtains in giving it a permanent color. The hair structure does not change after the hair is removed from the head, and the problem of dyeing it is similar to that of dyeing wool which has been shorn from the back of the sheep. But if you were to attempt to dye wool on the sheep the same difficulty as to permanency would be encountered. The new growth of hair or wool, as the case may be, by the appearance of new filaments that have never been dyed, gradually eliminate the color. It can thus be said that all hair dyes, however successfully they may have been employed, require frequent applications to keep the hair near a uniform tint.

Hair dyes containing silver are generally conceded to be the most permanent, the salts of this element tending to blacken by oxidation on exposure to the light, the color remaining so long as it is not superseded or rather eliminated by a new growth of hair. Here is a standard formula:

Bottle No. 1

- Pyrogallic acid ½ dram
- Sodium metasulphite 10 grains
- Water 2 ounces

Bottle No. 2

- Silver nitrate 20 grains
- Stronger ammonia water q. s.
- Water, enough to make 2 ounces

Dissolve the silver nitrate in ½ ounce of water, add the ammonia water until the precipitate is redissolved, and make up to 2 ounces with water.

Apply with short-handled tooth brushes of black and white bristles, as follows: Cleanse the hair from all grease by washing it with warm water having a little washing soda dissolved in it, and dry with a towel. Next pour a little of the fluid in bottle No. 1 into a saucer and apply with the white-haired brush; immediately after use a little of the liquid from bottle No. 2 in the same way with the black brush, avoiding as much as possible touching the skin. Wipe the parts around the hair receiving the dye with a damp sponge, and do not wash or grease the hair for several hours after applying the dye. Preferably the dye should be applied at night. For other formulas see August, 1916, ERA, page 318.

Salicylic Corn Remedy

(G. O. S.)—A typical formula for a corn remedy containing salicylic acid will be found in the National Formulary under the title "Compound Salicylic Collodion." The formula given in the last edition of the work named differs slightly from that employed in previous editions, the new formula calling for fluidextract of cannabis instead of extract of Indian hemp. The synonym "corn collodion" has also been dropped. The new formula reads as follows:

- Salicylic acid 11 grams
- Fluidextract of cannabis 10 grams
- Flexible collodion, a sufficient quantity to make 100 grams

Dissolve the salicylic acid in 75 grams of flexible col-

lodion in a tared bottle. Add the fluidextract of cannabis and finally enough flexible collodion to make the product weigh 100 grams. The corn remedy is frequently put up in small bottles closed with stoppers (rubber) to which a camel-hair brush is affixed. The usual directions given are to apply the collodion night and morning, the feet being bathed in warm water every second or third night, and as much of the corn scraped off as may be readily detached. This is followed by another application of the collodion which may be repeated if necessary. The product tends to thicken on evaporation of the ether of the collodion. This condition may be remedied somewhat by additional ether to make up the loss.

THE PLASTER SEASON

Ring a bell, ring a bell, the plaster season is here, and yet there are heaps of people in the retail drug business who don't know it. From this time of year on coughs, colds, rheumatic pains, and numerous other ailments calling for plasters, will be prevalent.

Get out your plaster stock and study up what each one is especially recommended for. A kidney plaster has a legitimate use but isn't intended to be used for a strengthening plaster or a toothache plaster. Many mothers whose children are troubled with respiratory troubles will be glad to know of the efficacious spice plaster and will feel safer to have something of this kind in the house. Capsicum plasters have a definite use when a strong counter irritant is needed, and are especially recommended in case of asthma, bronchitis, sciatica, spinal disease, rheumatism, pleurisy, neuralgic pains, backache, lumbago, chest pains, and coughs. As a usual thing the medication is belladonna and capsicum, both of these excellent for an exterior application in the cases mentioned.

It is a splendid time to cash in on mustard plasters and if you have them in different strengths, be familiar enough with your goods that you know which to offer without laboriously studying out the directions before your customer. Be able to tell just how they shall be applied, both in pressure of blood to the head, in local congestions, in sleeplessness, in affections of the chest, in stomach troubles, nausea, and seasickness, in abdominal troubles, and to the feet. Remember that there is a whole lot you can learn just about mustard plasters. Then, if you talk about them in your advertising, other people will think you know and will be ready to pay you for your knowledge.

There are people who are continually troubled with nausea when traveling. Tell them about your spice plasters, also how useful they are in case of cholera morbus. There are other plasters which will only be dispensed upon the prescription of a physician, but many times physicians are like housekeepers who make one kind of cake and dessert for a long time and then forget all about it until they meet the same excellent viands on some one else's table.

Bring back to your doctor's attention the efficacy of an aconite plaster, or a good, reliable cough plaster, or a mercurial plaster, a rhus tox plaster, a salicylic plaster, or one made of salicylic acid and cannabis indica.

Oh, there are lots of others, for the feet, and many people are troubled with their feet in cold weather. There are dental plasters as well as others of well-known therapeutic value.

Be prepared to tell people that plasters apply the medication to the exact spot needed; that they offer a continual and gentle massage to the affected part; and that their use does not interfere with one's regular business in any way. The value of plasters has long been known to the medical profession. They offer a protection to the diseased area against changes of temperature. They stay in place, do not soil the clothing, and exert an influence upon the nerve endings, and therefore aid in the alleviation of pain.

Push plasters! There is money in them! Every person in your locality is very liable to need a plaster before the season is over. Many will not know that a plaster offers the help and relief they would welcome. It is up to you to tell them about it!

The educational committee of Louisville (Ky.) Chapter is planning to raise money by a sale of waste paper. At present prices this should bring in quite an amount of money.

NEWS OF THE ASSOCIATIONS

ST. PAUL ASSOCIATION MEETING

St. Paul retail druggists, at an association meeting January 18 at the Commercial Club, elected officers for the ensuing year. Pursuant to custom, there were two nominees for each office, the balloting being for the following: For president, E. A. Otto, incumbent and F. W. Smetana; for first vice president, C. F. Clough and S. B. Barnett; second vice president W. H. Sears and O. C. Reder; secretary, H. Martin Johnson, incumbent, and M. A. Karras; treasurer, Wesley St. Clair and A. B. Kellam; executive committee, Charles Geissel, M. A. Lillis and Gustav Dickman.

Representative Albin E. Bjorklund, St. Paul attorney, is chairman of the public health and pure food committee in the Minnesota House of Representatives. He is from the thirty-seventh district, and is secretary of the Martin Johnson Drug Company. Pharmacists are a rarity in the legislature, now in session, but Representative L. D. Brown is a drug store owner at Little Falls.

The St. Paul Retail Merchants' Advisory association, composed of representatives of the druggists, cigar makers, hardware dealers, meat dealers and grocers, has elected a Legislature committee to look after legislation proposed or pending during the present session. President E. A. Otto of the druggists association and Secretary Johnson, represent the pharmacists, J. H. Trost and Julius Perlt, the grocers; Percy Nash and O. C. Klimenhagen, meat dealers; H. C. Hertz and J. C. Stuhymann, hardware dealers; J. Danchertsen and R. R. Roberts, cigar dealers.

RHODE ISLAND PHARMACISTS ELECT

Nicholas F. Reiner of Providence was re-elected President of the Rhode Island Pharmaceutical Association at its 43rd annual meeting on January 10th. In addition to the election of officers, the state druggists heard reports and addresses.

President Reiner made the opening address, speaking about the illegal traffic in drugs, a topic that is interesting druggists all over the country. Prof. John E. Groff of the Rhode Island College of Pharmacy gave a talk on the changes in the new Pharmacopoeia and Louis K. Liggett, of the United Drug Company, spoke on the "Evolution of a Drug Store." The officers, beside Mr. Reiner, elected at the meeting were:

Vice-president, Charles E. Keller, Arctic Center; secretary, Owen E. Barrett, Providence; treasurer, Earl H. Mason, Providence; Executive Committee, Edward T. Colzon, Providence; M. H. Corrigan, Providence; and A. J. Johnson, Pawtucket; life honorary member, Prof. John E. Groff.

KINGS COUNTY HEARS DR. ANDERSON

Dr. William C. Anderson, Dean of Brooklyn College of Pharmacy spoke to the members of the Kings County Pharmaceutical Society in the college hall at the January meeting. The speaker discussed the new bills which affect members of the association and which are now pending before the city, state or national government. He was particularly clear in regard to the proposed New York Board of Health measure which allows the sale of bichloride of mercury tablets to the public if they are shaped in such a way as to make them exceedingly difficult to swallow. Dean Anderson pointed out that the amendment would help both physicians and druggists and that with a small amount of care the citizens of New York would also be protected from a danger which has found them often of late.

He also told the meeting that the new state laws on narcotics would limit the sale of those drugs even more closely than the laws at present in force. All of the subjects discussed by the speaker were further discussed by the twenty or more members who were present at the meeting.

CHICAGO DRUGGISTS AGAINST CONSOLIDATION

On Tuesday evening, January 16th, the Executive Board of the Chicago Retail Druggists' Association held a special meeting, at which the following members were present: Messrs. Riemenschneider, Bruun, Sisson, Light, Seibert, Chwatal, Friesnecker, Umenhofer, Caldwell, and Antonow. President A. C. Caldwell presided. Julius H. Riemenschneider was elected chairman of the Executive Board for the coming year and the following Committee on Publication was chosen: Isam M. Light, A. C. Caldwell and J. H. Riemenschneider. One question discussed with warmth was the proposal now under consideration by Governor Lowden to consolidate the State Board of Pharmacy with other state boards, such as the medical, dentist, barber, etc. It is understood that Chicago pharmacists are greatly opposed to the proposed action and will use their influence to prevent it from being taken.

GUILFORD PRESIDENT FOR THIRD TERM

The Rochester Pharmaceutical Association, at a recent meeting, re-elected Harry B. Guilford, owner of the two Guilford drug stores here, president for the third consecutive year. David H. Moore was elected vice-president and E. H. Gram secretary and treasurer. Business conditions were reported good and the general outlook for continued prosperity favorable. William F. Esterheld, chairman of the Entertainment Committee, submitted a pleasing program and Elmer E. Chilson, president of the New York State Pharmaceutical Association, gave an interesting talk on narcotic legislation and the benefits to be derived therefrom by the general public. President Guilford was given a rising vote of thanks for a successful administration during the past year.

MILWAUKEE P.H.A. PLEDGES CO-OPERATION

The Milwaukee Pharmaceutical Association held its annual meeting on January 18th, and passed a resolution pledging the co-operation of the society to the state dairy and food commission in keeping drug preparations up to the standard required by law. George Weigle, state dairy and food commissioner, attended the meeting.

J. J. Possehl was re-elected president of the association. Other officers elected were: Vice-president, Otto Hackendahl; secretary, William Kaiser; treasurer, Louis H. Kressin; members executive committee, George H. Kasten, A. R. Eberle, Sol. A. Eckstein, H. E. Kraft, F. L. E. Drozniakiewicz, Peter Glysz and William Kaiser.

The reports of the officers showed the association is in excellent standing and healthy condition. During the past year ninety-five new members were added to the roll, bringing the total membership to 202. Plans for the state convention of the Wisconsin Pharmaceutical Association, to be held in Milwaukee, June 25th to 29th, were discussed. The entertainment feature of the convention is in the hands of the Wisconsin Pharmaceutical Travelers' Association, which recently entertained the members of the executive board at a mid-year banquet at the Maryland Hotel. C. A. Baumbach, president of the travelers' organization, was toastmaster, and Secretary M. H. Pritchard, chairman of the arrangements committee. W. F. Pfeuger, J. J. Possehl, E. G. Raeuber, Sol. Eckstein, J. F. Sugden, George H. Kesten, L. G. Mack and William H. Reese were among the speakers. The music was furnished by Horlick's quartet, of Racine.

The Louisiana State Pharmaceutical Association will hold its thirty-fifth annual meeting at the Hotel Grunewald, New Orleans, on May 8th to 10th inclusive.

The Oklahoma Pharmaceutical Association has completed arrangements for its first mid-winter convention which is to be held at Oklahoma City on February 13th to 15th. The Lee-Huckins Hotel has been selected as headquarters, and addresses by Stanley A. Dennis on "Cutting Down the Business Death Rate," and W. T. Goffe on "Salesmanship" are included.

WOMEN IN PHARMACY

Conducted by Emma Gary Wallace

Planning a Mid-Winter Sales Campaign

Featuring Rubber Goods, Electric Pads, Stoves and Spices

February Specials

THE first week in February may be appropriately devoted to promoting the sales of *winter rubber goods, flash lights, electric heating pads, and quick heat stoves*. These things all have a relationship. They have to do with keeping things warm, relieving pain by heat, and making it convenient to use these articles day or night.

We usually have our coldest weather in February, and so hot water bags for aged people, babies, those who have neuralgia or localized pain, and electric heating pads, are all timely. Mothers of young children appreciate a quick heat stove like a solid alcohol one which can be used at night by the bed side.

Window displays, newspaper advertising, and special appeal letters will all bring trade at this time. It will be no trouble to secure the names of the mothers of young children from the Birth Registration list and to send to them and to families likely to be interested on account of ample means or sick people, a special letter concerning cold weather comforts. It may be a good plan to make special sales offers on rubber goods, allowing 25c for each old bag brought back in exchange. Emphasize the thought that when these articles are wanted, *they are wanted at once and wanted badly*.

It is better to push a certain group of related articles for a short time than to spread one's energies over too long a time. It is a case of firing at a target and hitting it, or using a lot of powder only and aiming at a whole flock of birds.

Coughs and Colds

Coughs and colds will be prevalent and there will be many inquiries for plasters, cough medicines, and poultices. The druggist will win lasting gratitude by being able to explain just what sort of a plaster is needed or how to make a good poultice. One successful physician directs a flaxseed meal poultice to be made by taking seven (7) tablespoonfuls of the meal and one of mustard. These are mixed together with water and cooked about ten minutes. Care should be taken the mixture does not burn. It is then spread between layers of cheesecloth, cooled until it can be borne, and applied. Even children will bear this nicely. The mustard keeps the flaxseed from becoming clammy and cold, and the flaxseed is soothing and does not dry out in a few moments and get stiff and hard like mustard.

This is the season of the year for emulsions of linseed and cod liver oil, for the use of reliable but simple cough formulas such as N. F. Syrup of White Pine Comp., for croup remedies, and atomizers and sprays to relieve the catarrh left by colds, and to keep the throat in a healthy condition.

A good deal of educative work can be done in a solid week by a drug store force and its publicity. People may read and not need to apply the information at once, but sooner or later they will remember that Blank's is the place for this sort of thing.

The Third Week

During the winter time we can digest heavier food and the appetite craves that which is more highly seasoned. This is the time to push olive oil as a food product. Now as a matter of fact, many people do not know how to make a good mayonnaise dressing, and a first-class selling scheme is to have several hundred recipes struck off, giving exact directions how to make mayonnaise dressing. If you can get the formula of some well-known

cook in your own locality, and she will permit her name to be used in connection with the recipe, the sales plan is better yet. Sometimes the gift of a couple bottles of olive oil will make a cateress or good cook willing to permit this. If not more than fifty or a hundred recipes are wanted, they can be run off on the typewriter by means of making carbon copies, or on a mimeograph, but the expense of the printed ones is not a great deal. Of course, a recipe is not given away except with a bottle of the olive oil.

Spices should be pushed at this time of the year, for most people will be out of them after the holiday cooking, and this is an excellent time for the druggist to call attention to the superior nature of his or her wares. It is a good plan to have a demonstration and this is not difficult to arrange. A table spread with a white cloth placed near the front of the store with an attractive, young woman in charge will make a good beginning.

Have a display of spices to be sold and also the extracts to correspond with these spices, or flavoring oils for candy making. The young woman demonstrator in charge should be able to tell just how each spice is prepared, where it is grown, and some of the points of particular care with which these goods are made. Thus, a spice may be not only pure, but full strength—that is, may be ground in a mill wholly devoted to the use of that one particular flavor in place of a number of different spices being ground in the one mill. In fact, there is a lot of interesting material to dig up. Sometimes it is permissible to take cheaper grades of spices which should be *unnamed* and to display them side by side with the better quality to show the difference and not for the purpose of knocking any one's goods.

Tarragon vinegar is another material which may come in side by side with the other goods and if novelties in any line are carried, it is a good idea to stock a number of French dressing bottles in decorative styles for this week. There are two firms at least which make very choice table bottles for French dressing with the exact proportions marked on the bottle. In order to show how attractive these bottles look when filled, have one prepared for table use to show.

A Running Mate Sale

Let the fourth week be a Running Mate Sale—that is, articles which naturally go together so combined and offered at a special price. The Running Mate Sale may be arranged by days or the same schedule used for the whole week—a package of emery boards, a jar of nail polish, a buffer, and a couple of orange sticks; a tooth brush and a tube of tooth paste; a hair tonic and a scalp pomade; a cake of soap, a sanitary wash cloth, and a box of talcum powder, etc., etc. A very interesting list may be made up and this sort of a sale has the advantage that articles are suggested to people which they would not think of actually needing. If the sales can be increased in volume and more articles sold to each person, a considerable gain will have been made.

A representative of a firm of chain drug stores claimed in a recent periodical that sufficient customers were served in the different stores that if each one could be sold one cent's worth more than the previous year, it would total a \$100,000 increase. In smaller places a much greater increase should be made per person by means of having a definite sales plan for every week and by concentrating one's selling energies, advertising vim, and good judgment on the articles in question.

THE PHARMACIST AND HIS HANDWRITING

To be sure, this is largely the day of the typewriter, but there are still many druggists who address their labels by hand. It is unfortunately true that some well-educated and competent people, write a wretched hand, but the fact remains that clear, firm, business-like handwriting, invariably establishes confidence, where a scraggly, child-like sprawl arouses question and doubt.

Almost any one can cultivate a good business hand if he will but take the time.

A young man came into a drug store to gain his practical experience. His handwriting was that of a boy of ten. He was really a fine fellow of promising mind. He had not been in the place long before the proprietor said to him:

"George, I want you to buy a copy book and to start in and learn to write. We have a typewriter here, to be sure, and prescriptions are copied upon it and our labels written upon it, but no one who aims to be a druggist can afford to write like that! Now, I know you've got it in you to stick to this simple requirement until you master it. When you go to college and when you write your examinations, such handwriting as yours will count against you."

"I don't see why," retorted George, "If I've got the facts in my head."

"I'll tell you why," answered his employer, "such crazy looking writing does not show organized thought or a proper control of the muscles of the arm and hand. To be a good druggist, you must be a good thinker, and have a steady eye, brain, muscle, and nerve. Go to it, boy, and overcome your handicap."

George saw the point and before long a marked improvement was observable. Only recently he passed the State Board, and in announcing his success to his first employer, he asked the question, "What do you think of my handwriting now?"

It was like copy plate—clean, fine, strong, and without hesitation—a handwriting to inspire confidence and respect.

AROUND THE CIRCUIT

Chicago Chapter W. O. N. A. R. D. held a most successful Christmas Party at the Hotel LaSalle, Friday afternoon, December 29th. It was arranged primarily for the children but the older people seemed to enjoy it just as much as the younger ones. Over five hundred people of all ages were present. Mrs. Louis Diddier wrote a play entitled "The Christmas Spirit," especially for the occasion, trained the children and staged it. It was a great success. Among the children and older people who took part were the Misses Helen Froit, Bernice Hoelzer, Bernice Golden, Louise Ackley, Amy Widder, George and Dorothy Burhop, Charles and Ruth Walgreen, the Lehman boys, Lucia, Maria and Leona Kuflewski, Hally, Kenneth and Russell Alexander, Esteline, Louise and Joseph Forbrick, Lucetta Light, Alta Christensen, Nancy Grubb, Donald Wulz and Louis Haering. Mrs. Maude Corken took the part of the Christmas Spirit. There was a gift for each child and a treat of ice cream, cake and candy. Of course there was a Christmas tree and a sure-enough Santa Claus who looked remarkably like Albert Hoelzer. The Chapter is to be congratulated upon such a splendid affair.

The January meeting took the form of a Birthday Party to celebrate the eleventh anniversary of the organization of the Chapter.

The regular December meeting of the W. O. C. R. D. A. dealt particularly with household problems. Mrs. John Bley was the principal speaker. Some attention was given to charity work and educational methods. There was a goodly attendance which was somewhat surprising considering the fact that the week before had been a strenuous one, owing to the popularity and success of the Chicago Drug Show.

Indianapolis Chapter, No. 20, is progressing nicely under the able leadership of Mrs. Edward Ferger, who sent greetings to the membership and best wishes for a happy New Year.

A Ladies' afternoon was given January 19th, by the Chicago Drug Club Bowling League, at Bensingers Alleys on Randolph street. There were regular bowling contests among skilled players which the ladies watched with enthusiasm. After that, the ladies themselves entered the lists and bowled for some very lovely prizes in the way of choice perfumes, donated for the occasion by John Blocki & Son. Refreshments were served and after this, a theatre party was enjoyed by a number of the guests.

Miss Sophia Louise Avery, daughter of Mr. and Mrs. Charles Hamilton Avery, was married on Thursday evening, December 28th, to John Gurney Burt. The wedding took place at the University Congregational Church of Chicago. Mr. Avery is a former successful druggist of Chicago, having sold out his business to assume the presidency of the American Druggists Fire Insurance Company. Mrs. Avery was the first National Treasurer of the W. O. N. A. R. D. and served as first president of the Chicago Chapter. The best wishes of hosts of friends follow the young couple in the voyage of life.

Mr. and Mrs. S. A. Eckstein of Milwaukee, Wis., remembered many of their W. O. friends with a charming acrostic card of greeting:

"New Year greeting friend of mine
And happiness to you;
Roseate days for thee and thine
Dawn this whole year through."

Cincinnati Chapter, No. 5, W. O. N. A. R. D., held its Christmas meeting at the home of the President, Mrs. Otto Katz. There was a program of music and every lady received the gift of an ivory fan from Mrs. Katz. The ladies played cards, voted a Christmas gift of \$5 for Bethesda Hospital and had a delightful time generally. A committee of ladies assisted Mrs. Katz in the entertainment. Among these were Mrs. Charles Ehlers, Miss Blesi, Mrs. McElhany, Mrs. D. E. Murphy, and Mrs. L. Lutterman.

The January meeting of the W. O. B. A. R. D. was held at the Hotel Brunswick. A delightful afternoon was enjoyed. Mrs. Mabel J. McKay gave a brief lecture on "Columbia." There were several musical numbers and refreshments.

Women pharmacists are pained to learn of the death of Miss Ella A. Nelson who was proprietor of the Regal Pharmacy, Portland, Oregon. Miss Nelson was a sufferer from the White Plague, although she worked until the last, the end coming at the close of her day's labor.

The December meeting of the Louisville Chapter was held at the Main Library. As everyone knows, Louisville is the home of Alice Hegan Rice, author of "Mrs. Wiggs of the Cabbage Patch." There is a settlement house in that city known as "The Cabbage Patch Settlement House," and Dr. Annie Veech holds a clinic there twice a week. She was the main speaker at this meeting and gave information concerning the benevolent work done. Mrs. James Leech one of the board of directors of the General Federation of Women's Clubs, was there and gave a report of the Biennial held in New York in the spring.

Mrs. Nellie Florence Lee, financial secretary of the W. O. N. A. R. D., has been suffering from a recent indisposition. Her many devoted friends everywhere trust that she will soon be entirely recovered.

Philadelphia Chapter, No. 6, gave a delightful Christmas Party for the children. Members who had no children of their own, were privileged to invite a child, and a number of children from a nearby Settlement House were entertained as guests. Gifts of toys, books, and clothing were made to these children. The children of the members entertained royally and treated to refreshments and candy.

Saved Time Means Saved Profits

Business kept Moving Brings Trade and Money

THIS is a story of time and the relation it bears to profits. Systematic checking of time means profits and there is a druggist in New York, with whom the question of minutes is becoming more and more important, who has corralled Father Time to his own satisfaction, at least.

This druggist has no desire to go into the actual amount of his profit, but he is willing to go into his method of roping and tying the veteran gentleman around whom the entire universe is supposed to move. Lord is the druggist's name, William Henry Lord, and he maintains his store at the upper end of Manhattan Island, almost where the real city fades away into The Bronx.

Along with the discussion of time, and what it has meant to the druggist, there is a question of stock, and how he has turned it over. There are a few authorities who claim that the average chain drug store turns over its stock 12 or 14 times a year. Mr. Lord hasn't been able to reach that average yet, but he does turn over his stock 5 or 6 times. Efficiency experts, as well as real business men, are always willing to go on record with a statement that judicious turning over of stock means profit.

To begin with time, and the influence it has on turning over of stock.

Mr. Lord believes in advertising, and he believes that those druggists who disagree with him are very poor business men. But, Mr. Lord is a druggist in the largest city in this country and there are one or two competitors. Also the sectional newspapers of New York are not far famed as advertising mediums for his sort of publicity. The city papers, of course, are out of the question. Of what use would a Coney Island reader of a morning paper find an advertisement of a drug store at the very upper end of Manhattan?

Mr. Lord advertises with mailing cards and with slides in the local motion picture house. He is a firm believer in his little business notices—which are sent out each month and which are always different—but he feels the motion picture advertisement is not as successful as it ought to be. In any event, Mr. Lord's advertising policy has brought him customers and that is where time steps in.

Early in his effort to turn over his stock as often as possible, he adopted a policy of selling at lower prices. He took a small profit, but hoped to take it often. When the cards first had an effect and customers came to the store, he found that as many as six or seven would be there at once. And with six or seven customers in a New York store, the owner can afford to take no chances. If he cannot wait upon them, they will gather up their money, and like the Arabs, slip away into the night and another store.

Too Many Customers at One Time

Mr. Lord could not take care of them. Some of them did go away. Even with himself and two clerks trying their best to wait upon everybody. That was when the druggist began to consider time, and what it meant to save it. His simple idea was that if he could save steps and work for the salesmen, they could apply what had been saved on the next customer who was waiting to be served.

The druggist called upon his common sense and watched a clerk gather in an article from the top shelf. The clerk had to climb upon a lower shelf to get it and lost three or four minutes in that way.

Customers have often wondered just why it was that drug stores persisted in putting stock that is often called for, either way at the rear of the store, or under the show case, or on the top shelf. In a majority of drug stores these days, the lower shelves are filled with bottles of medicines or preparations that should not be there. Up above them is the place for the stuff that is needed and every time the clerk wants to reach that he has to stretch.

Mr. Lord wondered in the same way. He was puzzled as to just why he had done it. Then he went out and

purchased some tables. He got some new show cases and changed his store. The goods that were wanted most frequently were placed on the table, easy to reach. There were not many of them placed there, more were in reserve. Talcum powder, tooth paste, brushes, rubber goods, boxed articles, stationery, in fact everything that is asked for by the customer who "just drops in" found a place on the tables in the centre of the store.

The drugs, bottled medicine and things which might break were put back of the counters, but on a lower shelf. The bottles, so necessary to a pharmacist, found a resting place a little higher up. They might be heavy to lift, reasoned Mr. Lord, but for every time he had to lift one bottle he would have had to stretch up for five cans of talcum powder.

Saves Time in Serving Trade

When everything was in readiness to save time, and the advertising cards were out again, Mr. Lord again began to watch his clerks. With six or seven women in the store at once, the clerks were able to work with more speed. They served one woman, wrapped up her parcel and served another in the time it took them to partially serve one before the change. Mr. Lord had succeeded in saving time, and time meant profits to him. For the women returned to the store, the men came too, and business grew.

The arrangement of the tables and the counters in the Lord store is as simple as possible. Instead of the long counters which boast an entrance at either end, he has arranged counters with three entrances along the side of the store. That allows the clerks to move fast in going from one place to another, and it saves steps for them, which is also saving time.

His tables are in the center of the floor with space for the trade to walk around them. Shoppers who have that fatal habit of picking up articles and handling them can do it if they wish. Some of them, and the number is increasing, help to save time by going to the table, getting their articles, and carrying them to a clerk for him to wrap up.

In the advertising cards, Mr. Lord has made a point of the service. The last card, for instance, said:

"You can get what you want, get it right, and get it in a hurry at the Lord Pharmacy."

One of the things he does not want to talk about is the exact amount of his profits. He doesn't mind saying that he is making more money out of his store now than he did under the old slower system, however.

"I don't try any selling schemes," he says, "other than my card advertising and now and then a slide. I have a 'leader' each week and try to force that, but I have merely tried to work up an efficient business which will save the shopper's time and will also save mine. It has proven a success."

Double Checking System, Too

Saving time is not all that has happened as a result of the policy adopted, however. At first, the druggist had no system of checking his stock. He could not tell exactly what lines were making him money and what were losing. As so often happens in a retail drug store, no effort was made to systematize the entire business. There was no division of lines, and consequently the buying was poor.

Speed had been achieved in the Lord store, but he was not getting anywhere, merely because he didn't know exactly what he was doing.

So he introduced the duplicate checks on counter sales. These aided in the general effort to get profits, and also saved a little time. Whenever a sale was made, two checks were made out, one going to the customer and the other being kept for stock reference. And by using those, Mr. Lord keeps tabs on what he is doing.

By a reference to the sales slips, in checking up the day's work, and by a record of those references, he controls his

stock. He knows just what goods are selling and what goods are not. From that knowledge it is easy to figure out the percentage of profit that should be had from the selling goods, to give a gain on the idle stock. Mr. Lord's system, itself, is simple, and does not go much further than the knowledge. But there are ramifications and developments possible that would give a druggist a positive knowledge of just where he fails and just where he wins.

If Mr. Lord were to carry his scheme to its natural end, for instance, he would know:

1. If the percentage of profit on the stocks which sell is great enough to make those which do not sell profitable buys.
2. If it is safe to carry stock that does not sell rapidly.
3. How much the overhead on storage room eats the profits made on the goods which do sell frequently.
4. What goods sell and what goods do not. Therefore, how to buy correctly.

Must Know Stock Conditions

In the druggist trade, as in any retail trade, it is necessary for the proprietor to know exactly, not by guess work, how his stock stands or turns over, and why. The New York druggist has made an approach towards that end but he has not gone far enough. It is perfectly possible to systematize buying, and to control stock in every detail.

One development of the duplicate checking system keeps a record of the daily transactions. At the end of the week he knows that he has sold 25 toothbrushes, 10 bottles of a certain brand of cosmetics and 20 cans of shaving soap. But he has sold only 3 bottles of another cosmetic and candy doesn't seem to sell at all. There are several candy stores in the neighborhood.

To the druggist, once he studies his sales slips, it is clear that one brand of cosmetics is more popular than the other, and he cuts down in his purchase of the second grade. Proving that candy is not a big seller in his store, he buys less of it. And in the case of other stock, he follows the same procedure. That which clearly doesn't sell is cut down, while "push" is put on that which does sell. In that way, the druggist finds himself with no large stock of goods which are not good sellers for his trade. He might purchase five cases of writing paper and five of candy. The writing paper might sell three times as fast as the candy. The druggist merely buys one third the amount he usually gets when he purchases his candy.

Buying and selling are so closely identified that they can be equalized. Stock is the method. If you are running a small profit, practically a cut rate store, you must keep your stock moving. There are an hundred and one ways of doing that, perhaps, but conservation of time and an accurate knowledge of stock are necessary. "Leaders" help, putting pressure on any selling feature is of great assistance, but very little profit is going to be shown by a store that wastes time. Mr. Lord has found one method of saving time and his store is showing a profit.

DRUG TRADE SECTION ELECTS OFFICERS

The Drug Trade Section of the New York Board of Trade and Transportation held its annual meeting and election of officers at the Drug and Chemical Club, 100 William street, New York, Wednesday, January 3. One of the principal features of the meeting was the report of the Committee on Legislation, which urged that the amendments to the Boylan law be pushed at Albany.

A report of the executive committee showed that the committee was satisfied with the recommendations of Postmaster Burleson on Congressman Griffin's bill to permit the mailing of medicines containing poisons and the bill will not be pushed.

The election of officers resulted as follows: Chairman, Burton T. Bush, Antoine Chiris Co.; vice-chairman, Howell Foster, Schieffelin & Co.; treasurer, William A. Hamann, Roessler & Hasslacher Chemical Co.; representative of section on board of directors, Frank L. McCartney, retiring chairman.

Executive Committee; Torrens C. Currens, chairman, Norwich Pharmacal Company; Frederick E. Watermeyer,

Fritzche Brothers; John T. Barry, D. D. Williamson & Co.; Charles C. Bruen, Bruen, Ritchey & Co.; Herbert D. Robbins, McKesson & Robbins.

PATENT MEDICINE REGULATION

A proposed law has been offered to the State legislature of New York that has all the essentials of the so-called Goldwater ordinance which was passed in New York City last year. It provides that all proprietary medicines shall be registered with the State Board of Health and that the names of their ingredients, and the claims made for those ingredients shall also be filed. Violation of the proposed law is to be a misdemeanor. Assemblyman Fertig of New York County introduced the measure.

U.S.P. CONVENTION RESOLUTION REJECTED

Secretary Houston of the Department of Agriculture has notified Dr. Harvey W. Wiley, president of the United States Pharmacopoeial Convention, that he does not consider the request of the convention for an act of Congress providing for the recognition of the new Pharmacopoeia necessary or proper. Prof. Joseph P. Remington, Dr. J. H. Beal and Dr. Wiley had submitted to Secretary Houston and Dr. Alsberg a form of resolution to be brought before Congress with the view of aiding in prosecutions by preventing the question of jurisdiction being raised at trials on the ground that the standards established by the Pharmacopoeia were set up subsequent to the passage of the Food and Drugs Act. Secretary Houston said in his letter to Dr. Wiley:

"It is highly improbable, in the opinion of the Department, that if the resolution were presented at the opening day of the session, Congress would act on it before January 1, 1917. Action on or after that date, of course, would defeat the purposes of the resolution."

Large Exhibition of Chemicals

One of the largest, if not the largest, chemical display ever gathered in this country was shown in the American Museum of Natural History in New York during the last week in December in connection with the annual convention of the American Association for the Advancement of Science. Seventy-four of the eighty-five known elements were shown. Explosives formed one portion of the exhibit, but in another were shown chemicals as developed for every purpose.

DRUG CLERKS FORM UNION

The drug clerks of Salt Lake City, Utah, have organized a union in that city, and will soon submit a demand upon the proprietors for uniformity of hours and a scale of pay that will give registered drug clerks a better standing and more financial consideration. It is claimed that in some of the stores, the clerks work ten hours one day and nine hours the next, while in stores of equal standing they work eleven and even more hours a day. The clerks desire to have the hours adjusted to a maximum of ten hours a day. The registered clerks also want more salary than is paid to the unregistered clerks. The new union expects that the proprietors will grant most of its requests.

The Boston Druggists' Association, the veteran dining organization, opened its season with a dinner at Young's Hotel, Tuesday evening, November 28, with E. L. Patch presiding and 85 present. Prof. S. M. Gunn of Massachusetts Institute of Technology, the principal guest, spoke on "How to Live a Little Longer."

Dental week was observed in Chicago beginning December 2. This is an idea that could be used to good purpose elsewhere, the drug stores concentrating their advertising and window displays upon tooth brushes, tooth pastes, tooth powder, dentifrices and mouth washes, dental floss, and other things for keeping the teeth clean and in repair. Dental Week was set aside by the Chicago Board of Health to call attention to the importance of conservation of the teeth and the health in general as it is dependent upon the condition of the teeth.

Druggists' Profits Only 5.5 Per Cent

Statistics Show Stores Failed to Rank With Other Retailers in November Sales

A LONG with the increase in sales, advertising and profits that was found all over the United States in November, 1916, over the same month of 1915, the drug trade showed a slight increase. Its average, however, was below that of other retail lines, and in sales it fell off a rather large amount when compared to the business of other retailers. Associated Advertising, which has prepared a series of charts and has published them in its current issue, shows that the druggist had an 11.6 per cent gain against 15.9 per cent for other retailers.

"It is interesting to note," continues Associated Advertising, "that the druggist made the smallest increase in advertising, excepting only the grocer. The druggist gained 3.1 per cent which is more than 2 per cent below the average gain in advertising in all lines.

"The druggist failed to apply selling forces as vigorously as did merchants in some other lines, and so some of the trade that might have come to him went elsewhere. The biggest increase in drug sales was in the Philadelphia district, with 26.4 gain, and the same district showed a gain of 7.4 per cent in drug store advertising. It is quite likely that increased advertising was both cause and effect of the bigger sales there."

Dividing the country into Federal Reserve Districts, the magazine has given a table to show where there were gains, and how much. Reprinted here, it shows just how the small general average was made.

F.R.D. 1—(Boston)	20.3
F.R.D. 2—(New York)	15.9
F.R.D. 3—(Philadelphia)	26.4
F.R.D. 4—(Cleveland)	18.6
F.R.D. 5—(Richmond)	9.9
F.R.D. 6—(Atlanta)	13.8
F.R.D. 7—(Chicago)	15.8
F.R.D. 8—(St. Louis)	11.7
F.R.D. 9—(Minneapolis)	17.5
F.R.D. 10—(Kansas City)	20.7
F.R.D. 11—(Dallas)	21.4
F.R.D. 12—(San Francisco)	20.9
General Average	16.9

Drug Stocks Show Slight Increase

As for drug stock gains, those, too, showed a slight increase. Few articles were exceedingly high in price and Associated Advertising points out that it "would not be logical to credit a great deal of the increase in value to the higher prices of drugs. Also, because the druggist carries some stock for a rather long time, it appears that in November, 1916, he was carrying a larger stock than he was in the same month of the preceding year."

The general average gain in stock was 10.2 but in the Atlanta district they were increased 35 per cent while the central west, the Minneapolis district could show a gain of only 2.7. Philadelphia ranked second in the general increase with 16.1 while New York could show but 8 per cent.

Concerning profits there is another disappointment. The general average was only 5.5 per cent, and the Richmond district showed a loss of 5.5.

"The druggist," says Associated Advertising, "like the grocer, found himself between the demands for higher prices on the part of the manufacturer and jobber on the one hand, and the decided disinclination of the public to pay more for goods on the other, to the end that his profits increased only 5.5 per cent.

"If the druggists of the country had made as good a net profit on things sold in November, 1916, as in November, 1915, there would have been a much larger increase in profits, of course. In ordinary circumstances, net profits should increase disproportionately as sales go up.

"It is interesting to note that the New York district with a 15.9 increase in sales made the biggest increase in net profits, and it would seem that druggists in other

sections might have done better than they did in the light of their increased sales."

The table of profits, by Federal Reserve Districts, as printed in the Associated Advertising statistics, is as follows:

F.R.D. 1—(Boston)	1.6
F.R.D. 2—(New York)	17.1
F.R.D. 3—(Philadelphia)	9.6
F.R.D. 4—(Cleveland)	8.4
F.R.D. 5—(Richmond)	—5.5
F.R.D. 6—(Atlanta)	3.8
F.R.D. 7—(Chicago)	5.3
F.R.D. 8—(St. Louis)	5.0
F.R.D. 9—(Minneapolis)	7.2
F.R.D. 10—(Kansas City)	3.3
F.R.D. 11—(Dallas)	13.3
F.R.D. 12—(San Francisco)	13.2
General Average	5.5

The table for other lines, in sales, advertising and profits is as follows:

Line	Sales	Ads	Profits
Clothing	20.3	3.9	14.12
Grocery	18.8	2.8	5.9
Hardware	21.5	6.7	8.4
Jewelry	22.4	3.7	10.9

No effort is made to compare the trades in any sections except on the percentage system, and aside from comment on the selling by drug stores, Associated Advertising has made no effort to show "the why" of conditions. But it is interesting to note that in the face of the biggest difficulties, and the highest price asked for necessities and stock, the jeweler showed the biggest sales increase. Jewelers also did very little advertising.

NEW BAY STATE COLLEGE

George R. White Donor of Building

George R. White, head of the Potter Drug & Chemical Corporation of Boston, has offered to give the Massachusetts College of Pharmacy its new \$500,000 college building to be erected at Longwood avenue and Worthington street, Boston, to replace the present college building on St. Botolph street. The new structure will be ready for occupancy December 1, 1917, and will be the finest home of any pharmacy college in the country, according to the plans.

It will occupy a site covering 75,000 square feet, with a 300-foot frontage on Longwood avenue and 250 feet on Worthington street. The exterior will be of renaissance design, with an imposing central Ionic portico of six columns of limestone, each 28 feet high, approached by a heavy flight of granite steps. The lower story will be built entirely of heavy rusticated limestone and the two upper stories of red brick laid in broad joints. A walk 80 feet long, paved with large slabs, will run to the street.

On the first floor will be two laboratories, each accommodating 400 students; and on the second floor will be two lecture rooms each accommodating 300, and offices for the instructing staff, together with a homelike library and separate quarters for the men and women students. The main staircase will lead to George Robert White hall, seating 500, and finished and paneled in chestnut, with a stucco ceiling and great stone chimneypiece. On this floor also will be a buffet, three classrooms, an alumni room and the materia medica and biological libraries.

Concrete exit stairways will run in towers from top to bottom. An air washer, fan ventilating system, and indirect lighting will be among other conveniences.

George R. White, who gives the new building, is Boston's largest individual tax payer. He lives at 285 Commonwealth avenue, Back Bay. Over 30 years ago he began work with the old-time drug firm of Weeks & Potter

as a paste boy, pasting up the firm's advertisements. At the age of 26 he was made a partner, and later formed the Potter Drug & Chemical Corporation, which manufactures the Cuticura preparations.

Mr. White is an art critic, a student of music, and owns a fine library. He has a summer home at Manchester, on the North Shore, that is one of the show places of that watering place.

N. Y. R. D. A. HOLDS MEETING

The regular monthly meeting of the N. Y. R. D. A. was held at the Dakota Club, on Friday evening January 19, 1917. In response to the invitation sent by the Bronx Co. Pharmaceutical Association a representative delegation of this association will attend their "Get-Together" Dinner. In answer to the request sent by the New York Branch of the A.Ph.A., that the druggists be well represented at the joint-meeting of the physicians and druggists, all members, who can spare the time, will be present.

The association went on record as disapproving of the practice of the giving out of Calendars and Souvenirs during Christmas and New Years. Mr. Diamond reported that the Anti-Narcotic Committee had held a meeting and that hardly any change would be made in the present Boylan Law that would be detrimental to the druggists. The Alcohol matter is in abeyance and the Stephens Bill Hearing in Washington was taken up seriously. Several bills regulating the pharmaceutical profession have already appeared at Albany, to wit: Assembly Bills Nos. 50, 108 and 115 by Assemblymen Fertig and McNab, and Senatorial Bill No. 63 by Senator Hefferman, amending the tax law, providing for a tax on the sale or transfer of any goods when accompanied by a trading stamp, coupon, rebate ticket, etc. This association favors supporting this bill, also wishing to have included the following: that the actual giving of souvenirs or tickets for such souvenirs, with a sale or transfer of goods, be taxed in the same way as provided for in this bill.

EASTERN DRUG CO. MEETING

The annual meeting of the Eastern Drug Co. Employees' Mutual Benefit Association, was held at the office of the Eastern Drug Co., Thursday evening, January 25, 1917, and the following officers were elected for the ensuing year: President, Wm. H. Quinn; vice-president, E. Barton Thompson; treasurer, John F. Miller; secretary, Russell Spurr; executive committee, Esther M. Hopkins, Frank Harris, John E. Reardon, Orrin A. Barnard, Jr., Robert W. Hearn.

Preparation was started for the annual entertainment which is to be held during the Spring, and assurances were extended by all that a bang-up show would be presented to their many friends.

TRAVELING MEN'S DINNER

The Traveling Men's Auxiliary of the New Jersey Pharmaceutical Association held its third annual dinner at Colaizzi's, 37 West 24th street, New York City, on Saturday night, January 20th, 1917.

A large private banquet room had been obtained for the occasion and thirty-seven members of the Auxiliary together with Mr. Garret Byrnes, President of the parent Association and Mr. C. J. McCloskey, Ex-President sat down at a long table decorated with pink carnations.

After dinner President Geo. F. Whiting asked Mr. Geo. W. Buckens to act as Toastmaster and he in turn called upon both Mr. Byrnes and Mr. McCloskey for addresses. Speeches were also made by different members and all voted the affair a big success. A special vote of thanks was given the Dinner Committee, Messrs. Ben. S. Isaacs, A. J. Stephens and J. A. Sangston.

TWIN CITIES COMPANIES TO MERGE

ST. PAUL, MINN., January 27.—Though official announcement has not yet been made, a deal is being concluded here which will bring about the merging of the Minneapolis Drug Company and the St. Paul Show Case & Fixture Company, 43-45 West Water street, St. Paul. The latter concern is a manufacturer of store fixtures and

show cases, Frank VanDuyne being president and Rhoda Temple, secretary and treasurer.

C. R. D. A. COMPLETES SUCCESSFUL YEAR

Officers were elected for the ensuing year by the Chicago Retail Druggists, at a meeting held on January 9th, the so-called Supervisors' ticket being successful in the contest: President, A. C. Caldwell; 1st vice-president, Adolph Umenhofer; 2d vice-president, Harry Brunn; 3d vice-president, Harry Moyer; secretary, Isam M. Light; treasurer, Charles A. Storer.

Trustees: North Side, Julius H. Riemenschneider and Frank H. Ahlborn; West Side, John J. Chwatal, Henry Siwecki, William Smale and Samuel Antonow; South Side, Charles Friesnecker, D. P. Seibert and O. U. Sisson.

The president's annual report recently submitted by the retiring president, John J. Chwatal, stated that the year just past was the most active and successful in the history of the association. The retiring president recommended that \$1,000 of the funds in the treasury be invested in approved securities, which would make, he said, a total of \$5,000 of the association's funds now profitably invested. The amount cleared by the Drug and Chemical Show held under the auspices of the Association at the Coliseum, December 2 to 10, 1916, netted \$708.44 for the association, and he recommended that the officers be authorized to make the necessary arrangements to hold a single show some time during the fall of 1917.

The annual report of Julius H. Riemenschneider, chairman of the Executive Board of the Association, showed that the year 1916 brought a larger increase in membership and therefore a greater gain in dues collected than that of any previous year, the amount of dues collected from new members being more than \$600. The expenditures for 1917 are estimated, he said, at about \$2,500 more than last year, part of this being \$500 added to the appropriation for the use of the U.S.P. and N.F. committee and \$135 additional dues to be paid the N.A.R.D.

N. W. D. A. ANNUAL MEET IN CHICAGO

Arrangements for the annual convention of the National Wholesale Druggists' Association, which is to be held this year in Chicago, are now under way. Some days ago representatives of the wholesale drug trade and allied interests of Chicago, met and selected Chas. E. Matthews, manager of Sharp & Dohme's Chicago house, as chairman of the Committee on Arrangements and Entertainment, along with an Executive Committee composed of the following well-known gentlemen: G. T. Bauer, Frank M. Bell, Frank A. Blair, A. R. Brunker, William Buss, L. J. Freundt, A. J. Horlick, F. Keeling, Jr., A. S. Levis, Jas. W. Morrisson, Harold Sorby.

Chairman Matthews has appointed a number of committees and later information relating to hotel headquarters, date of convention, as well as other particulars will be announced.

BOSTON RETAIL DRUGGISTS ELECT

The Boston Association of Retail Druggists elected John J. Tobin, Chairman of the Massachusetts State Board of Registration in Pharmacy, president, January 10th, to succeed Joseph T. Waterhouse, whose health does not permit him to serve another term. Mr. Tobin had declined the nomination, but received unanimous election. Other officers elected were: W. H. Pierce, S. V. Rintels, Leon Thompson, vice-presidents; Charles H. Davis, secretary; L. W. Griffin, treasurer; P. J. Cuddyer, S. V. Rintels, W. H. Pierce, John H. Dorsey, John R. Sawyer, Arthur C. Morey, Charles A. Stover, George E. Grover, Frank H. Salisbury, C. Herbert Packard, C. W. Freeman, J. E. O'Connell, W. H. Glover, Sherman N. Sears, executive committee; Frank F. Ernst, James F. Finneran, Prof. Elie H. LaPierre, Charles A. Stover, Arthur C. Morey, publicity committee. The annual dinner, free to paid up members, was served at the Quincy House before the annual meeting.

E. A. Otto was re-elected president of the St. Paul Retail Druggists' Association at the recent annual meeting, held in St. Paul, Minn.

Business Catchers

What the Pushers Are Pushing. . .



A BOX of cards is an innocent looking bit of equipment for any sort of a business house. It is, perhaps, more innocent looking in a drug store—there are some druggists who may think it so innocent that it is entirely out of place. In New York, however, there is one pharmacist who thinks differently on the subject of a box of cards and who also has a sense of supreme modesty. He has a fine store on 125th street but shrinks from the light of publicity. Here's what he says about the box of cards.

"I don't claim I've built up a big business on that box of cards, nor even that I have built up the present business entirely through its potency. But I do claim that it has been a big aid and that every day it is getting to be more and more of a necessity.

"About two years ago the thought came wandering into my mind that the layman or purchaser might have ideas on my business that I had overlooked. So I set out to get those ideas, figuring that if they were of any use, and I put them to that use, the man who had the idea would feel an interest in its development and so buy goods from my store.

"I got a cheap card index. Box and everything. Then I asked two or three men who had been coming into the store to give me some ideas. When I got the first one I put it down under a title in the index. It was a simple little idea—that I should put my telephone number on my prescription labels. I did, and it helped.

"Of course the idea grew slowly into a full fledged plan until now many customers come in and from a majority of them I get a suggestion.

"I have even placed a suggestion box in the store and some of the customers drop little notes in there telling me how I could improve my business. I have noticed that those who make the most suggestions are my best customers and they often come in, when I am not busy, and talk over their suggestions.

"The same man who thought it would be a good scheme to put my telephone number on my prescription labels also suggested that I should have a private telephone for my prescription department, not one that was in use taking orders for other things in the store. I utilized that suggestion and although there was considerable difficulty the first day or two in getting my clerks and customers accustomed to the two phones it has worked out very well. Now my prescription phone is used only by those who want prescriptions filled in that way and it is a success.

"Another suggestion I have in my little box of cards has brought me outside trade—the transient sort. A lady said she didn't like the sameness of windows. I ought to change mine frequently, said she. Now I change the window display every three days, and always have one central idea in it. Today it may be talcum powders, three days from now, hot water bottles. I have tried to make the windows inviting, and think I have succeeded because I have noticed persons look into the window and then come in to purchase. Which, after all, is what we are all wanting to see."

This particular druggist didn't want his name used because of the publicity of it, he said, but his idea could not be hidden behind such a modest front.

F. W. Ryer, a Brooklyn druggist, whose well stocked and inviting store is near the Church avenue station of the Brighton Beach "L", uses a small circulating library

as an advertisement and trade bringer for his store. He makes no claim that the idea is new, but he keeps his books new, and that makes it a stronger advertisement.

"There are many stores that have circulating libraries," says Mr. Ryer, "but I have noticed that in many of them the books are old. In some libraries I have found that books printed three and four years ago are on exhibition and the readers don't pay any attention to them.

"I try to keep abreast of the literary times with my libraries. I do not beat the newspapers, perhaps, but new books are in my library very soon after they appear, and I often get my books ready before the public libraries. Having new books on hand all the time, means that readers come in to get them because they are new, and come in often to see the new assortment. Of course that brings trade, and I think it brings me more trade than if I kept a dull and old assortment. If customers find new books they will believe I carry the latest in the drug line, which I do."

DRUGGIST BOOMS TRADE WITH "MOVIES"

An Indianapolis druggist has decided that a good way to boom his business is to draw trade into his section through a motion picture house. J. A. New, of the drug firm of Binkley and New of College avenue and Forty-Second street, got several retail store owners of his district together and formed a stock company.

The owner of the building in which Mr. New had his store then built a motion picture house and the newly formed company manages it. Favorite plays for the "movie" fans, by well known actors and actresses are featured throughout the district and the "Nordland" is already making a success. The retailers who formed the company, of course, use the playhouse for advertising purposes and thereby catch their trade "going and coming." New homes have been built in the section, not perhaps because of the playhouse, but they have all helped in the development. The section was a new one when the drug firm started its work, but it is now leaping up in long bounds.

ST. JOSEPH'S TROUBLES

The *St. Joseph Journal* says that drug stores are becoming restaurants and that there is a great deal of difficulty in distinguishing which is which. The following incident is said to have occurred in St. Joseph, although that Missouri town has always seemed quite normal.

A man hurried into a drug store there and asked for some pills and castor oil. He was told the concern was just out of those things.

"Where's a good restaurant?" he asked.

"We can feed you," responded the druggist.

"I don't want feed," said the man as he left, "but I want to see if I can get pills and castor oil in a restaurant."

Middleboro, Mass., is to have an endowed drug store when certain provisions of the will of the late David C. Pratt, once a member of the Governor's council, become effective. The establishment, the will provides, is to be in charge of a registered pharmacist and supplies are to be furnished free to "deserving and needy persons." The estate is valued at \$276,000, one-third of which, on the death of his widow, is to be set aside for the purpose named.

WHOLESALE GIVE ANNUAL DINNERS

The Western Wholesale Drug Co., Los Angeles, Cal., recently tendered a banquet to its officers and employes at the Athletic Club in that city. L. D. Sale, president of the company, was toastmaster, and responses were made by L. Schiff, J. E. Sullivan, A. T. Johnson, A. V. Nelson and N. E. Walthal. After the banquet all present went to the theatre as the company's guests.

The salesmen and department heads of the Blumauer-Frank Drug Co., Portland, Ore., closed a three days salesmen's convention with a banquet in the Crystal room of the Benson Hotel in that city. R. G. Persell served as toastmaster and many tributes were paid to the president and manager, H. J. Frank, and other officers of the company.

The third annual banquet of salesmen and department managers of the Yahr & Lange Drug Co., wholesale druggists, Milwaukee, Wis., held at the Maryland Hotel recently, was epoch making in that various speakers reviewed past successes and made suggestions for the good of future methods of business. L. A. Lange was toastmaster and the speakers were C. G. Foster, M. P. Rosenthal, Fred E. Yahr, John Dummer, of Milwaukee; Stanley H. Knight and Ira Davis, of Chicago; William J. Faxe, Escanaba, Mich.; C. A. Laefelbein, Madison, Wis.; A. G. Reichenbach, Detroit, Mich.; A. E. Arial, New York, and J. Wildermann, Chicago.

The Decatur Drug Company, Decatur, Ill., entertained its employes in that city on New Year's Day with a turkey dinner, which a local reporter described as being like "an immense family affair when all of the children came back to spend the holidays with the home folks." Fifty-five of the company's employes gathered around the table and five turkeys were carved. The dinner was followed by a social hour during which H. C. Burks acted as toastmaster and called upon various individuals for short talks.

Members of the Calvert Drug Company and their guests to the number of about 75 attended the annual dinner and exhibition arranged in the Roof Garden of the Emerson Hotel in Baltimore Dec. 14. A display was arranged in the same apartment. Every member was asked to bring one or more druggists of the city, who are not members of the company, which operates on the co-operative plan. The idea was to give every one an adequate conception of the lines handled by the Calvert Company, of which R. E. Lee Williamson is general manager.

SQUIBB GET-TOGETHER MEETING

The "Squibb Get-together" was one of the features of the after-holidays in New York. Salesmen, department heads, branch managers and everybody else was present at the meeting and it was one grand good time, aside from the business value it held for everyone concerned.

The company invited its men to New York to discuss things with them. It not only invited them, it paid their expenses. And after it got them here it put them up at a nice hotel and paid for everything there. From January 13th, the men were guests of the company and each day went to classes in salesmanship, science and to examinations. Written "exams" were held and the men were put through a rigid course of sprouts after officers and department heads had made speeches to them and explained things.

On January 19th there was a banquet at the Astor. Directors and officers of the company spoke and everybody had a good time. It was a real banquet with exhibitions of dancing and music thrown in to help enliven the evening.

The E. R. Squibb & Sons Company spent a large sum on the gathering but officials say that it was well spent. It taught the men a great deal and it helped the officials to further understand their men.

Fifty persons connected with the McCoy-Howe Co., manufacturing pharmacists, Indianapolis, Ind., attended a banquet on January 2d at the German House in that city in honor of Louis Engelking, for twenty-five years connected with the sales department of the company. Mr. Engelking was presented with a gold watch in recognition of his long service.

WANTS LOCAL NARCOTIC LAW IN D. C.

In his annual report to the Commissioners of the District of Columbia, Inspector of Pharmacy R. A. Sanders recommends that Congress be appealed to "for a local law that will cover the shortcomings of the pharmacy and Harrison laws, making any violation of the same an indictable offense, with a maximum penalty, a \$2,000 fine or five years, or both, in the discretion of the court.

"It is alarming to note the terrible evils of the drug habit, and almost impossible to estimate its enormous proportions, as it is fostered in secrecy, and its responsibility for a large portion of the crimes against the community. The illegal traffic and use of narcotic drugs can not be eradicated by the mere regulation or prevention of open sales. The very essence of it is secrecy and it is only by arbitrary measures that we may hope to cope with the situation.

"The provisions of our local pharmacy law are not adequate for the suppression of this dangerous traffic, and the United States Supreme Court held that the Harrison law was a registration and taxing act and not a police measure."

As the result of the quarterly examination held in January, licenses to practice pharmacy were granted to six applicants, one of whom was Sister Mary Constantine. The next examination of the board will be held on April 12th and 13th.

NORWICH BOOTH AT DRUG SHOW

There were many interesting booths at the Chicago Drug and Chemical Show held recently in the Coliseum in Chicago, but one of the best was that exhibited by the Norwich Pharmacal Company. The Norwich beacon, placed 28 feet above the floor, a miniature lighthouse, threw its rays all over the show floor and attracted many druggists to the booth.

Inside, the Norwich general line was displayed. "Un-guentine," "Norwich Dental Cream" and other specialties were exhibited strongly and a pleasing impression was given by the entire booth. During the show, hundreds of samples of the dental cream were given away by salesmen, assisted by Miss Adelaide Zuelke "the Norwich girl."

EULOGIZE THE LATE DR. M. I. WILBERT

The District of Columbia Pharmacists' Association, on December 27th held a memorial meeting at which members of both the pharmaceutical and medical professions paid tribute to the memory of the late Dr. Martin I. Wilbert, who recently passed away in Philadelphia. Resolutions were adopted, copies of which were forwarded to the family of Dr. Wilbert and the American Pharmaceutical Association, of which he was also a prominent member. Dr. Murray Galt Motter, Dr. A. Chestnut, Louis Flemer, W. H. Bradbury, M. A. Pozen and S. L. Hilton made short addresses in eulogy of the deceased.

At a business meeting earlier in the evening, Dr. W. W. Stockberger was elected to serve the organizations as president during the ensuing year, the other officers chosen being S. L. Hilton, first vice-president; Dr. W. S. Hubbard, second vice-president; H. C. Fuller, secretary, and Louis Flemer, treasurer.

MULFORD ANNIVERSARY PARTY

The H. K. Mulford Company celebrated its 25th anniversary by a conference of salesmen which terminated with a banquet in the Union League Club of Philadelphia on December 29th. Among the speakers were H. K. Mulford, Dr. John D. McLean, Milton Campbell, E. T. Hahan, F. L. Christman, Prof. Joseph P. Remington, Howard B. French, Dr. E. G. Eberle and Edward J. Cattell, City statistician who represented the Mayor of Philadelphia.

The Ohio State Board of Pharmacy elected the following officers at its annual meeting recently: President, Edward Voss, Jr., Cincinnati; treasurer, A. L. Flandermeyer, Cleveland; executive secretary, M. N. Ford, Columbus.

PHARMACEUTICAL PERSONALS

CELEBRATE DIEKMAN'S 25th ANNIVERSARY

Under the auspices of the Alumni Association, the Board of Trustees and the Faculty of the New York College of Pharmacy, a testimonial dinner was tendered to Prof. George C. Diekman at the Drug and Chemical Club, New York, on the evening of January 23d, the occasion celebrating the twenty-fifth anniversary of his services as a teacher in the college, which is now an integral part of Columbia University. The friends and guests present numbered more than two hundred, and among them were a large number of his present and former colleagues on the faculty and the New York State Board of Pharmacy, his membership in the last named organization extending over a period of twenty-two years.

Samuel W. Fairchild, a former president of the New York College of Pharmacy, had been selected to preside at the dinner as toastmaster, but owing to ill-health he was not able to be present. His place was taken by Prof. Charles F. Chandler, who in spite of his eighty years, proved himself a pastmaster in the art of college "reminiscing" and of discharging the duties of an up-to-date toastmaster. Caswell A. Mayo started the program by reading a letter from Dr. William H. Carpenter, provost of Columbia University, who was to have responded to the toast "Twenty-Five Years as a Teacher," but was unable to be present. Prof. Chandler followed with a very interesting talk on "Diekman and the Board of Trustees," and related that at the time Dr. Diekman was invited to join the faculty, the only criticism raised was that based on the fact that Diekman was "from Brooklyn," but he (Chandler) took the view that such experience should qualify the young professor for work on the faculty, for having resided in Brooklyn, and having acquired a knowledge of the sharp methods practiced over there, Diekman could no doubt give the New Yorkers some points they really needed.

Other speakers who responded to toasts were Dr. H. H. Rusby, who spoke on "Diekman and the Faculty;" Thomas F. Main, honorary president of the Alumni Association, on "Diekman and the Alumni;" and Pasquale Guerrieri, "Diekman and the Fraternities." As tangible tokens of friendship and regard, Dr. Rusby, on behalf of the faculty, presented Dr. Diekman with a silver loving cup; Earle T. Keenan for the third year University class presented a beautiful cane, and Thomas F. Main, on behalf of the Alumni Association, presented a set of elaborately engrossed resolutions testifying to Dr. Diekman's great work as an educator in pharmacy.

Dr. Diekman graduated from the New York College of Pharmacy in 1888 as a member of the famous "blizzard class," and in 1892 became a member of the faculty, serving until 1895 as an instructor, when he was chosen professor of pharmacy, a position he has since held. He holds membership in the A.Ph.A., the National Association of Boards of Pharmacy and the New York Ph.A., while he has been a member of the New York Board of Pharmacy for twenty-two years, serving as its president in 1910.

—H. J. HOUGHTON, the pioneer druggist of Englewood, Ill., for more than thirty years a druggist at 6600 Wentworth avenue, Chicago, has sold out to Paul Kepner and will retire from active business. Mr. Houghton is sixty years old and has had a successful career, being the owner of the building in which his store is located. He is a charter member of the Chicago Retail Druggists' Association.

—A. M. KOPKINS, of Cincinnati, O., has resigned as Secretary of the Dow Drug Company there.



G. C. DIEKMAN

CHARLES A. WEST CELEBRATES JUBILEE

Charles A. West, vice-president of the Eastern Drug Co., Boston, Mass., and a former president of the National Wholesale Druggists' Association, on January 1st celebrated the fiftieth anniversary of his entry into the drug business. He has spent his whole business career in the wholesale trade, including every station from errand boy to the manager of the drug department of the largest wholesale concern in the New England section of the country. His membership in the N. W. D. A. covers a period of thirty years and during that time he has been a regular attendant at the annual conventions of the organization. He has served on many important committees, and for a number of years was chairman of the Legislative Committee of the association.

Mr. West is a native of Boston and was born in 1850. After graduating from high school, he entered the employ of Reed, Cutler & Co., wholesale druggists in Broad street, as office boy. He continued with the company for twenty years, sixteen of which he spent on the road as a commercial traveler, his territory covering at various times all of New England and New York State. In 1887, with Bernard Jenney, Jr., he formed the wholesale firm of West & Jenney, a concern which thirteen years later was one of the four wholesale houses that merged into the Eastern Drug Co. Upon the organization of the new corporation, Mr. West was made vice-president and given charge of the drug department, a position he has since continuously held.

Mr. West, apart from his connection with the Eastern Drug Co. and the American Camphor Refining Co., of which he has been president, has served the drug trade in many capacities. He is a charter member of the Massachusetts State Pharmaceutical Association, and has served as a trustee of the Massachusetts College of Pharmacy. In 1892 he was president of the Boston Druggists' Association. He also holds membership in various clubs and societies, and it is safe to say that in all of his long experience he has given to the trade with which he has been identified the best thought of a resourceful mind, backed by the energy of a successful business man.



CHARLES A. WEST

PERSONAL BREVITIES

—H. BITTNER of the Bittner Drug Store in Saginaw, Mich., was a swindler's victim recently. He was asked to send a package costing 43 cents to a house and was told to send the change for \$10 with the messenger. A man met the messenger, gave him a "fake" envelope, took his package and change, and has not been seen since.

—J. A. WILKERSON and THOMAS B. CHAMBERS, managers of St. Louis stores of the Johnson-Enderle-Pauley company will be married in June to Miss Mary Meadth and Miss Elsie Bauer, respectively. It will be a double ceremony, a double honeymoon, and then the two couples will live near each other.

—EDWARD G. KENNEDY, inspector for the Illinois Pharmacy Board has resigned. He will enter the drug business with a Chicago concern.

—SAMUEL BIENSTOCK, druggist of Hartford, Conn., was endorsed by the druggists of his city as a candidate for State Pharmacy Commissioner at a January meeting.

—H. H. WHYTE, general sales manager of the H. K. Mulford Company, returned from a six-weeks' tour of the United States recently. He visited all of the branch houses of the company from coast to coast, as well as representatives and a number of the principal customers of the firm throughout the country. Mr. Whyte reports that business is good everywhere and future prospects are excellent.

—C. S. PERRY, 63 years old, a druggist of 958 West Sixth street, Cincinnati, is recovering from an experience which came very nearly taking his life, one night in December. Mr. Perry was attacked by highwaymen and was knocked unconscious with a club. Charles Wildon, a negro, was arrested.

—WELCH WILMARTH'S drug store in Minneapolis was burned December 16 and during the fire the Minneapolis Drug company, which is connected with the Welch, Wilmarth concern, invited firemen to smoke, drink soda, and eat, in its store. The fire damage to the building was \$25,000.

—JOHN F. QUEENY, president of the Monsanto Chemical Works, St. Louis, just before sailing for Australia with his wife and daughter for a period of rest and recreation, was elected president of the Manufacturers' Association of St. Louis at the annual meeting of that organization held on January 16th.

—JOHN W. KIVELA, one of the best known of the younger business men of Calumet, Mich., has purchased the interest of Dr. O. H. Sorsen in the Metropolitan Pharmacy of that city, thereby becoming sole owner. The store recently has been thoroughly modernized and is now one of the finest pharmacies in the Copper Country.

—F. T. CHADWICK, JR., druggist of Princeton, N. J., and Asbury Park, N. J., has offered his Asbury Park store for sale. Mr. Chadwick feels that the hard winter work in Princeton followed by the harder summer work in Asbury is too much for him.

—WILLIAM E. FARNSWORTH, vice-president of the Sisson Drug Company, Hartford, Conn., was presented with a large bouquet of flowers in observation of his 40th birthday recently. Directors of the company were responsible for the gift.

—FRANK LIGHTER, druggist of Randolph, Wis., according to the *Advance* of that city, had a very narrow escape from a serious injury a short time ago while attempting to warm an acid, the bottle breaking and burning his hand and arm quite badly.

—WALTER L. SALMON, of Boston, has gone to Winnipeg, Canada, as manager for the Liggett organization there. E. L. Meserve has been made manager for Connecticut succeeding F. L. Tompkins, who leaves that field for New York.

—LOUIS K. LIGGETT, head of the United Drug Company, has announced a policy to help worthy poor. Prescriptions will be filled free of charge in all the United chain stores, on presentation of a certificate showing the person to be actually poor.

—FRED C. DODDS, of Springfield, Ill., aided in the prosecution of Dr. N. L. Johnson of Chicago, who was charged with selling a large quantity of morphine to a woman. Mr. Dodds is secretary of the state board of pharmacy.

—JOHN HANNECKE, druggist at 5400 West ave., St. Louis, Mo., was severely burned on the right hand recently while attempting to extinguish a blazing garment on his son which had accidentally caught fire. The son was unhurt.

—E. E. BURLINGAME of Philadelphia and Harry Weed of Brooklyn have exchanged territory as Liggett managers. Mr. Burlingame going to the Brooklyn and New York field while Mr. Weed goes to Philadelphia.

—O. L. HANCOCK of 1512 North Second street, Vincennes, Ind., has purchased the drug store of Albert F. Miller of Vincennes. The O. L. Hancock Co. was formerly in Campbellsburg, Ind.

—JULIUS KALISH, druggist of 283 Grand street, New York, has been made defendant in a \$5,000 damage suit by a girl who charges that peroxide she purchased in his store made her hair come out.

—HARRY SPENCER ANDERSON, the newsboy heir to \$25,000 in Toledo, Ohio, is a drug clerk in Reading, Pa. Anderson cannot get his money until he is 21 and he refuses to return to Toledo.

—RAWLEIGH COMPANY employes of Freeport, Ill., received Christmas presents from the firm during the holidays. Every employe was given a goose, for which the company appropriated \$1,000.

—DR. E. J. KIRK of Jacksonville, Florida, has associated himself with the Bettes Pharmacy. He has been a druggist in the Florida city for many years and is well known there.

—E. T. OFF, FRED BUCK and FRED H. ROBERTS are making a special effort to stop the importations of drugs into California from Mexico. At present they are working in San Diego.

—CHARLES V. RYAN, of 194 Main street, Springfield, Mass., is being supported by Democrats as a candidate for the directorate of the Federal Farm Loan Bank in Massachusetts.

—A. N. O'KEEFE, vice president of the Southern Drug Company of Jacksonville, Florida, was presented with a gold watch by employes of the concern just before Christmas.

—GEORGE L. BALDAUF, prominent Milwaukee, Wis., pharmacist, secretary and treasurer of the Baldauf Drug Co., 3426 North avenue, has been elected president of the Wisconsin State Savings Bank of that city.

—PROF. FRED MAYER, dean of the College of Pharmacy, Marquette University, Milwaukee, Wis., recently spent a short vacation near Butternut, Wis., on Turtle river, in northern Wisconsin.

—WILLIAM J. SCHELBE, druggist of Springfield, Ill., was married to Miss Elsie M. Burt of the same city early in January. Mr. Schelbe is proprietor of the Laurel street pharmacy.

—DR. J. M. EVANS, who conducted the Pioneer Pharmacy at Evansville, Wis., has disposed of the stock and business to R. C. Schoen, Ph.G., of New Holstein, Wis., who has taken possession.

—JOHN E. CROWLE, after being a clerk for 25 years in the Fred A. Hubbard pharmacy at Newton, Mass., opened a new drug store early in January at 329 Washington street, same city.

—A. O. BATSON, for several years a drug clerk in Somerville, Mass., has opened a drug store at Trapelo road and Common street, Waverly, Mass.

—GEORGE N. HARRIS, druggist at Silsby and Broad streets, Lynn, Mass., has bought the drug store of C. Y. Sawyer, at Ireson and Union streets, Lynn.

—DOBSON'S Drug Store of Brockport, N. Y., suffered a \$10,000 fire loss early in January, when a blaze swept through the entire block in which it is located.

—P. C. BROOKS, Chicago Heights manager of the General Chemical Company, has been transferred to East St. Louis. He left for his new position in January.

—H. E. GUNN, 48 years a druggist in Uxbridge, Mass., has retired from active business. His son, Dr. George B. Gunn, will succeed him in his store.

—S. J. CURLEE, of Flora, Ill., and his son R. A. Curlee, of Chicago, have purchased the drug store in Waukegan, owned by E. A. Nordling.

—H. B. MEADER, of Oakland, Cal., has been appointed by Governor Hiram W. Johnson as a member of the State Board of Pharmacy, to succeed the late D. M. Sutherland.

—FERDINAND OTT, of Cincinnati, was recently elected president of the Ohio Valley Druggists' Association.

—A. H. SHAYNIN, druggist of Los Angeles, gave 400 children a New Year's dinner.

—LOUIS B. TERNEY, druggist of Springfield, Mass., was married to Miss Sarah Goodless at home on January 10th.

—SAMUEL CHESBRO of Willimantic, Conn., has sold his lucrative drug business to the Bay State Drug Company.

DEATHS IN THE DRUG TRADE

DR. HAMILTON WRIGHT

Dr. Hamilton Wright, author of the Harrison anti-narcotic law, and an authority on narcotics, died recently at his residence in Washington, following an attack of pneumonia. He won fame throughout the country through his efforts to solve the opium problem.

He was educated in Boston, Montreal and Heidelberg and in 1909 became prominent among drug workers. He acted as chairman and American delegate to the International Opium Commission in Shanghai and there he did a great work for this country. Later he was sent to the conference in The Hague and twice acted as American representative there. Before his activity in this country, in 1899 to 1903, he was an assistant in the London laboratories and made extensive researches among the Malays.



DR. HAMILTON WRIGHT

Returning from the second Hague conference in 1913, Dr. Wright prepared a bill suppressing the opium trade. It was known as the Harrison bill and is still in effect, although it has been amended and changed since he originated it. He was a leading advocate of all measures tending to stamp out the opium evil in this country.

In 1915 he went to Europe to assist in the relief work in the war zone and while there was seriously injured in an automobile accident which made him ill during the last year of his life. Ten days ago pneumonia set in and he never recovered. He was married in 1899 to Miss Elizabeth Washburn, daughter of the late Senator William Drew Washburn of Minnesota. She survived him with her five children. Dr. Wright was a member of most of the scientific associations of the country.

N. GRAY BARTLETT

N. Gray Bartlett, pioneer druggist of Chicago, and for many years a professor in the faculty of the Chicago College of Pharmacy, died at his residence in that city on Jan. 4. He was born in Louisville, Ky., in 1840, where he was educated in the public schools and the Louisville Literary Academy. He subsequently pursued the study of chemistry under Prof. Wright of the Kentucky School of Medicine, and served as apothecary in a public dispensary, later entering the drug business with J. L. Morris & Sons of Louisville. In 1861, he went to Chicago and entered the employ of E. H. Sargent, and also matriculated in the Chicago College of Pharmacy from which he graduated in due course. In 1866 he went to Keokuk, Iowa, and associated himself with his brother in the drug business. Upon his return to Chicago in 1870, he was chosen as professor of chemistry in the Chicago Medical College, and shortly thereafter was elected editor of *The Pharmacist*, the monthly journal published by the Chicago College of Pharmacy.

In 1871, he became a member of the faculty of his alma mater, occupying in turn the chairs of chemistry and pharmacy. He also served as trustee and for three terms was president of the corporation and a leading spirit in the management of the school. He resigned his professorship in 1895 much to the regret of the college authorities. From 1872 until about a decade ago he conducted a drug store in addition to his many other duties, his professional work as an analytical and consulting chemist earning for him the name of being one of the busiest men in the city. He was a life member of the American Phar-

maceutical Association, and was the recipient of several honorary degrees from universities. Two sons, Allyn R. and John R. Bartlett survive him.

SHELLY B. JONES

Shelly B. Jones, for nineteen years a prominent druggist of Marquette, Mich., died January 5th at his home. He was 54 years old. He had been ill with pneumonia for four days. Mr. Jones was born in Greenville, Mich., in 1862. He was graduated from Albion College in 1883 at the age of 21 years. He went immediately to Baraga County and 19 years ago he went to Marquette as a drug clerk. Three years later he entered the business for himself and since then has operated his own store.

He had been prominent in politics for the past ten years, adhering to the Democratic party, although he had never held a public office. In 1891 he married Miss Nettie Culver. She died two years ago and he remarried. One daughter Denise, survives him.

BENJAMIN S. COOBAN

Benjamin S. Cooban, 46, a well known pharmacist of Englewood, a suburb of Chicago, died on Dec. 31 from diabetes. He was a native of Bradford, Pa., and went to Chicago 26 years ago. Two years later he established a drug store at 459 West Sixty-third street (Englewood), which he conducted up to the time of his death. Mr. Cooban was a well known contributor to pharmaceutical journals on commercial and trade topics. He was a member of the American Pharmaceutical Association. His funeral, which was held in St. Bernard's Catholic Church, was attended by the officers of the C. R. D. A., of which he had long been an active member. His widow and one son survive.

EUGENE ZIMMERMAN

Eugene Zimmerman, a life long resident of Peoria, Ill., who had been in the drug business in that city since 1882, died at his home in Peoria on December 22d, at the age of 58. Last September, Mr. Zimmerman was operated upon and from that time until he died he grew worse. In 1882 Mr. Zimmerman opened his business at 2113 Adams street and remained at that address until 1893 when he opened a new and larger store on Knoxville avenue. He is survived by his wife and five children.

SUMNER W. BIXLER

Sumner W. Bixler, of Constantine, Mich., died suddenly in his home there at the age of 59. He had been associated for many years with the Heimbach Drug Store of Constantine. Mr. Bixler left his store on Saturday evening and went directly to his apartment. He was not seen on Sunday and when friends went to look for him they found him dead, of heart disease. He is survived by his wife and one daughter.

DR. J. J. PIERRON

Dr. Joseph J. Pierron, for many years, a prominent druggist in Lincoln, Ill., died recently in his Chicago home. Dr. Pierron and his brother, Ferdinand, went to Lincoln several years ago from Beloit, Wisconsin, and there founded the drug store which, at the present, Ferdinand Pierron manages. Burial services were held in Cincinnati.

—ANDREW MOORE, a retired druggist of Charleston, Ill., died at his home. He was in his 80th year. He was born in College Corner, Ohio, and went to Illinois in 1860. He first opened a drug store in Mattoon. About 12 years ago he retired from the business.

RECENT DEATHS

—GEORGE TONNAR, a former druggist of Menomonie, Wis., died recently at the Pacific branch of the National Home of Veterans at Los Angeles, Cal. Mr. Tonnar was born in Germany, in 1843, coming to this country with his parents in 1858. After an active army career during the Civil war, he attended Georgetown University, graduating as a physician. He never practiced medicine but engaged in the drug business, first at Dubuque, Ia., and then at Menomonie. He opened a pharmacy in Chicago during the World's Fair period, returning to Menomonie in 1895 and re-engaging in the business there. He retired in 1913. His widow, one son and two daughters survive.

—HENRY EDWARD RANOUS, who had been engaged in the drug business since 1887 at Janesville, Wis., died January 10th, after a lingering illness of several months duration. He was born at Watertown, Wis., in 1870, and went to Janesville where he graduated from high school, and entered the drug business. In 1896 he became partner of the late Dr. St. John, purchasing the Prentice & Evenson pharmacy which was operated under the name of H. E. Ranous & Co. He was prominent in church and fraternal organizations. His parents, one sister and a brother survive.

—OTTO WINTERMEYER, druggist of 1005 West Madison street, Chicago, was found dead behind his counter on the night of January 4th. He was 42 years old, a bachelor and was well known on the West Side although he had owned his store only a few months. Mr. Wintermeyer had lived in Chicago for 25 years and most of that time had been spent in the drug business. There was a mystery about his death and the Chicago police are investigating it.

—HUMPHREY C. MOYNIHAN, one of the oldest druggists in Southbridge, Mass., died January 5th at his home there. Typhoid pneumonia was the cause of death. He was in his 67th year. He was born in Quincy and went to Southbridge when he was a young man. He had maintained a drug store there for 28 years. He is survived by two sons, Harry C., of Southbridge and Humphrey of Winston-Salem, N. C.

—JOHN STEPHEN PENBERTHY, veteran druggist of Florence, Wis., died at his home in that city recently of arteriosclerosis after an illness of three weeks. Mr. Penberthy was a native of Wisconsin. In 1881 he established a pharmacy in Florence. He was nearly 74 years old. Mr. Penberthy was married twice. Surviving are four sons and one daughter. One son, I. E. Penberthy, is engaged in the drug business in Chicago.

—EDWARD J. GRIFFITH, who conducted a drug store for more than thirty years in Oil City, Pa., is dead. He was born in Warren, Pa., and when a young man went to New York City, where he was engaged for some time with his father and two brothers in the drug business. He was a Mason and a member of the Mystic Shrine. His widow survives.

—R. H. MOORE, of the R. H. Moore Drug Co., Franklin, Ky., dropped dead on the street in that city on January 6th. He had been associated with the drug business for forty years and had amassed a fortune. He was a director of the Simpson County Bank. At the time of Mr. Moore's death his wife was at St. Petersburg, Fla., where she was spending the winter.

—HERBERT E. BUCKLEN, of Chicago, Ill., who amassed a fortune estimated at \$7,000,000 in the manufacture of patent medicines, railroads and real estate, died at his home in that city on January 10th. He was 68 years of age. He was noted as the builder of the St. Joseph Valley Railway, which runs from Elkhart, Ind., to Columbus, Ohio. His widow and three children survive.

—JOHN TILMA, 62 years of age, a druggist of 245 Watson street, Buffalo, N. Y., dropped dead recently while on his way to consult his lawyer concerning certain changes he wished to make in his will. Mr. Tilma was a man of considerable property, and had been engaged in the drug business in Buffalo since 1887. He was born in Holland and settled in Buffalo in 1882. Death was due to apoplexy. He is survived by his wife and three brothers.

—DR. LILBURN WALLACE SPOONER, who for a number

of years was engaged as a pharmacist in Charlottesville, Va., was found dead in his room at the Victor Hotel, Washington, on December 28th. Dr. Spooner was sixty years of age. He retired from the drug business several years ago.

—BENJAMIN W. SMITH, formerly a retail druggist at Dallas, Texas, and later a manufacturer of proprietary medicines is dead. He was born at Ocean Springs, Miss., in 1856. He was an active member of the Odd Fellows' fraternity. His widow, one son, Ben W. Smith, Jr., and two daughters survive.

—LEWIS DARLING, M.D., physician and surgeon, pensioner of the U. S. Navy, and member of the firm of L. & W. W. Darling, druggists at Lawrenceville, Tioga Co., Pa., died suddenly at his home in that place, October 20, 1916, aged 76 years and 1 day. Burial was at Lawrenceville, Pa.

—GEORGE R. HARRIS, a druggist in San Francisco during the gold craze sixty years ago, and later a druggist in New York City and New Jersey, died at his home in Brooklyn, N. Y., on January 18th. He was in his 83d year and was a native of St. Johns, N. B.

—CHARLES MARCHAND, well known to many druggists of the country as a manufacturer of hydrogen peroxide, died at his home at Sea Gate, Long Island, on January 16th. The funeral services were held in the Church of St. Vincent de Paul, New York City, on January 18th.

—MRS. ELIZABETH D. MCKESSON CAMP, widow of Hugh Nesbitt Camp, and daughter of the late John McKesson, founder of the firm of McKesson & Robbins, wholesale druggists, New York, died at her home in the Metropolis on January 4th. She was 81 years of age.

—CHARLES P. HANNAFORD, for many years a druggist of Winthrop, Me., died on January 15th after a long illness. He was 70 years of age and for some years his son had taken charge of his business. His widow, one son, and a daughter survive.

—ALFRED J. TARTISS, a former Rochester, N. Y., druggist, died at Utica, on January 9th, of pneumonia, his wife dying the following day of the same disease. He was 78 and was born in Newark, N. J., and his wife was 73.

—JERRY P. FENTON, 48 years old, a druggist of Omaha, Nebraska, dropped dead on January 2d, as he was leaving his store. Mr. Fenton was survived by his wife and 5 children.

—EDWIN T. MOORE, naval pharmacist in the Boston Navy Yard died late in December. Funeral services were held on New Year's Day. Mr. Moore was born in 1856 in Newbury, Vt.

—CHARLES THOMAN of Struthers, Ohio, died suddenly in his drug store on December 27th. He was born in East Lewiston, Ohio, in 1886 and was a graduate of Scio college. He had been a druggist in Struthers for 6 years.

—DR. JOHN E. YOUNGLOVE, 90, a retired druggist of Bowling Green, Ky., died on January 2d of paralysis. He was born in Johnstown, N. Y., and started in the drug business with his brother in Bowling Green in 1846.

HEARINGS ON STEPHENS BILL

The House Committee on Interstate and Foreign Commerce of Congress is conducting hearings on the Stephens Bill to standardize prices on trade-marked goods. Supporters of the bill were present in large numbers. Edmond A. Whittier, Secretary-Treasurer of the American Fair Trade League, said:

"At last the poverty in the argument and material of the trading stamp and price-cutting opponents of the Stephens Honest Advertising bill, is clearly disclosed. Congress already knows that the small, independent business men of the country are unitedly appealing for this relief from the most oppressive existing form of unfair competition.

"Friends of the Stephens Bill are well satisfied that, without exception, every witness who has so far spoken for our opponents, has helped the cause of honest merchandising by his weakness in argument and lack of knowledge of the facts."

A.D.S. MEETING IN NEW YORK

President Goddard Reports on Financial Conditions

American Druggist Syndicate members, numbering at least 500 met in convention the first four days of the week of January 22d in the new A.D.S. building in Long Island City, N. Y. The building itself was not fully completed, but the arrangement for the convention was good and there was room enough for all. In connection with the meeting there was a drug and chemical exhibit which proved interesting.

A wide field of subjects was discussed. Reports of all the officers were read and were received and papers on selling, transportation, buying, stocking, and formulæ were read. The druggists who attended the convention left it feeling well repaid for their visit.

The session opened Monday with a discussion of narcotics and the new bill proposed in New York. Justice Cornelius F. Collins, of the Court of Special Sessions, addressed the gathering, telling them what his committee of judges had decided would be an adequate relief in the problem. He advocated triplicate prescriptions for addicts, one to be filed with the Board of Health, and the others with the doctor and druggist. The convention was unanimous in supporting the proposed bill. Dean W. C. Anderson of the Brooklyn College of Pharmacy responded.

A real feature of the morning was the speech by Arthur Brisbane, editor of the New York *Evening Journal*. Mr. Brisbane spoke on prohibition, among other things, and also touched on the drug trade.

During the Monday session, Charles H. Goddard, president of the A.D.S. read his report. That, too, was well received. Among other things he said that the new building was owned by the association and that \$200,000 in notes had been paid off. He also said that an 8 per cent dividend had been voted and would be paid February 10th.

"The year just closed," he continued, "has been the most successful one we have ever experienced. Our volume exceeds the best previous twelve months by approximately \$1,000,000, largely confined to our own manufactured products. With few exceptions the A.D.S. has been forced to fight for every dollar's worth of business that it has got since the date of birth, and the success was over a very rocky road.

"There has already been returned to the stockholders nearly \$2,000,000 in dividends within the past year. Those who invested their \$100 with me at the first call have already got their money back with three or four hundred percent added in direct returns."

George W. Luft, treasurer read his report showing that the exact net surplus for 1916 was \$4,672,972.25. There are no notes payable, no bonds and no loans on real estate. There is, however, \$8,500.40 in unclaimed dividends.

During the Tuesday session, Secretary of Commerce Redfield sent a report in which he said that this country has become one of the largest exporters of drugs and chemicals.

"As compared with the total exportation of \$27,000,000 during the fiscal year of 1913 we sold abroad during 1916 over \$124,000,000 in drugs, chemicals and dyes," was the way his report read.

That the business between the United States and Germany, after the war, would be greater than ever before in dyes, drugs and chemicals, and that the relations would be closer, was the prediction of Count Johann von Bertschhoff, German ambassador to this country.

Borough President Maurice J. Connolly of Queens, the county in which the A.D.S. building stands, addressed the gathering welcoming them to Long Island City. He said that the need of drugs was becoming more and more acute and called the trade the "savior of the people."

Interesting Papers Are Read

Papers were read by Senator William J. Bullock of New Bedford, Mass., on "Modern Pharmacy;" E. W. Stucky of Indianapolis, "Selling A.D.S. Merchandise;" M. G. Gibbs, Washington, D. C., "The Relation of the A.D.S. Salesman to the Junior Clerk in the Drug Store"

and "Window Dressing" by two expert window dressers of New York's chain stores. The most interesting paper was Senator Bullock's who told of means and methods that have been and can be used to strengthen the modern drug store trade. Senator Bullock said that the drug store of today could not hope to live against competition without a systematic and forceful advertising campaign and modern methods in very department.

Transportation was the theme of the Wednesday convention and both sides of the issue were carefully and freely discussed. Communications giving the railroad's side of the question were read from A. H. Smith, president of the New York Central; Daniel Willard, B. and O.; W. G. Besler, Central of New Jersey, Hale Holden, C., B. and Q., and E. P. Ripley of the Santa Fe. These officials of the roads discussed congestion and its relation to the retailer. All of them pointed out the necessity for ordering early enough to avoid difficulties in case their shipment ran into a congestion.

"How A.D.S. druggists can co-operate with the railroads to overcome delay" was discussed by Charles Conley, who also told his hearers that they could save time and delay in getting seasonable and other needed merchandise they require on time by stocking up early and keeping their stock in such a way as to never be forced into an emergency. The transportation discussion was valuable and was of assistance in buying.

"The Future of A.D.S." by Rees C. Roberts of Ambler, Penn., was a paper advocating stronger co-operation. Mr. Roberts is a firm believer in the co-operation or association system of buying and pointed out how the druggist member of A.D.S. could gain both ways by steady and persistent patronizing of the company.

J. C. Watson of Philadelphia ended the Wednesday program with an interesting paper entitled "Learning by experience."

Miss E. V. Maguire of New York, presented one of the most interesting papers of the entire convention when she read her article on "The Appeal to the Eye and the Psychology of the Power of Display as a Trade Winner." It was both a technical and an efficient article. It was a strong paper that won well merited applause.

The last day was given over to A.D.S. work. Pushing the line was one of the features. Salesmen and advertising heads made speeches while department heads showed the value of their particular lines.

During the entire convention, the theatres of New York were open to the members of the body at half price. On Monday there was a dance and on Tuesday a "free stag party for ladies" at the Standard Theatre. Lunch was served each day in the A.D.S. restaurant for employees.

ASSOCIATION NOTES

The Minnesota State Pharmaceutical Association will meet in St. Paul, February 13-15, 1917. The St. Paul hotel and roof garden will be the meeting place and practically the entire eleventh floor of the building will be devoted to exhibits. The annual banquet will be held February 14. The Minneapolis Drug Band will play.

The Meyer Bros. Drug Company of St. Louis held its annual convention during December. Heads of departments made speeches and lunches and dinners further marked the week's program.

Managers of the Connecticut stores in the Riker chain met at Cafe Mellone, New Haven, on Dec. 20 and dined Fred L. Tompkins, of Providence, who was manager of all the stores of the district. Mr. Tompkins left Connecticut to go to New York where he will have an executive position with the company. E. L. Meserve succeeded as Connecticut manager.

The woman's organization of the Chicago Retail Druggists Association gave its annual Christmas party in the ballroom of La Salle Hotel, the Friday following Christmas. Gifts were distributed and an interesting dance followed the entertainment.

San Antonio is already planning for the Texas Retail Druggists' Association convention to be held in that city in June. A committee has been appointed and plans for entertainment are already being outlined.

BALTIMORE DRUGGISTS MEET

The second annual meeting of the Baltimore Retail Druggists' Association, which was held at the Emerson Hotel, attracted an attendance of not less than 100. The election of officers resulted as follows: President, R. E. Lee Williamson, general manager of the Calvert Drug Company; First Vice-President, Charles Morgan, of Morgan & Millard; Second Vice-President, Charles H. Knight, of Knight & Andrews; Recording Secretary, George A. Bunting; Corresponding Secretary, Melville Strasburger; Treasurer, H. George Wendel.

A banquet followed the meeting. Mr. Williamson acted as toastmaster, and the speakers included Dr. A. R. L. Dohme, William H. Alger, John B. Thomas and Walter Pierce.

NATIONAL DRUG TRADE CONFERENCE

The National Drug Trade conference was held early in January in Washington, and its sessions were held in private. Several important resolutions were passed, and the Conference completed other important matters of business.

The first meeting was that of the executive committee which was held January 15th. The committee recommended the following resolutions which were later adopted by the conference.

"That each constituent organization be requested to pay an assessment of \$50 for the expenses of the conference."

"Whereas, Various amendments to the Harrison Act have been suggested, many of them imposing heavier burdens upon the drug trade than are made necessary by any purpose of the law, and

"Whereas, The act has been as effective as any law could reasonably be expected to be, and any further burden upon the drug trade would be unjust and oppressive, therefore be it

"Resolved, That we petition Congress not to amend the Harrison Act in any other respect than the following:

"Resolved, That Section 8 be amended so as to read,
"Sec. 8. It shall be unlawful for any person not registered under the provisions of this act and who has not paid the tax provided for by this act, to offer for sale, or have in his possession for sale, or under his control for sale, any of the aforesaid drugs, and possession or control by any person who is not registered under the provisions of this act, and who has not paid a special tax provided for by this act, shall be prima facie evidence of a violation of this provision whether such person is a person included in Sec. 1 of this act or not: Provided, etc., as in Sec. 8 of the Harrison Act."

The Conference further discussed a resolution endorsing the recommendation of the Commissioner of Internal Revenue that some provision be made for the treatment of indigent persons addicted to the use of narcotic drugs. Mr. Lynn's resolution regarding compulsory health insurance and the evils of hasty legislation was also discussed. The Conference recommended that such health bills be not passed for the present.

Another resolution, upon which Messrs. Dohme, Finneran and Lynn spoke at length was as follows:

"Whereas, Custom has established standards for the important food products which were generally recognized by laws, rules and regulations in various states, and

"Whereas, Attempts to establish standards for foods and drugs will tend to discourage initiative research and improvement on the part of producers and manufacturers, be it

"Resolved, That the National Drug Trade Conference respectfully protests against the establishment of arbitrary standards for food and drugs beyond those already made, and especially against attempts to establish standards for articles originally devised and introduced by producers and manufacturers and for which such producers and manufacturers have already established standards based on their experiences."

The Kern-Doremus bill was unanimously approved. This prohibits the use of mails to letters, packages and other advertisements bearing publicity on spirituous liquors. A fine of \$1,000 is provided for a violation of this act.

The metric system was endorsed and the remainder of the session was taken up with a discussion of the food and drug laws. The entire matter was referred to the Executive Committee which was instructed to look into it and report as soon as possible.

The new officers elected were John C. Wallace, president; Samuel C. Henry, first vice-president; Dr. Wallace C. Abbott, second vice-president; C. Mahlon Kline, third vice-president; Charles M. Woodruff, secretary. The Executive Committee will be John C. Wallace, Charles M. Woodruff, Prof. James H. Beal, George W. Lattimer

James F. Finneran, R. C. Stofer, Dr. A. R. L. Dohme and Fred K. Fernald.

The delegates to the conference were, John C. Wallace, New Castle, Pa., S. L. Hilton, Washington, and J. H. Beal, Urbana, Ill., A.Ph.A.: F. E. Holliday, New York, C. Mahlon Kline, Philadelphia, and George W. Lattimer, Columbus, N. W. D. A.: Samuel C. Henry, Philadelphia, James F. Finneran, Boston and Eugene C. Brokmeyer, Washington, N. A. R. D.: J. Fred Windolph, Norwich, N. Y. A. A. Ph. C.: Charles J. Lynn, Philadelphia, Dr. A. R. L. Dohme, Baltimore and Charles M. Woodruff, Detroit, N. A. M. of M. P.: Fred K. Fernald, Elkhart, Ind., P. A. of A.

BUYING THROUGH ASSOCIATIONS

Association or co-operative buying is no new scheme. But in these days when bulk purchases mean cut costs and much lower prices generally, it is becoming an advisable scheme. Perhaps there was a time when the wisdom of such a move was not as great; perhaps there may be such a time in the future, but for the present, for the term of the war and for a rather long period beyond that, it is safe, sane and mighty good wisdom.

What does it avail a druggist in a town with three or four other pharmacists to cut off his nose to spite his face? He is forced to pay a lot for stock, just as his competitors are, and there is very little profit for anyone concerned. True, if, under an association plan, one druggist could buy cheaper and make more money, his competitors could also, but business is not a dog in the manger proposition, and there would be a benefit for everyone, while the competition, a healthy attribute of business, would remain the same. And everyone would make money.

This story is the result of a talk with the buyer for one of the important departments of a big chain store. He was talking about his own department, and he showed quite clearly how his chain, with its need of bulk purchases could buy cheaper than any single store could ever hope to do.

It is not breaking a confidence to say that the department referred to is tobacco and cigars. This chain store can buy the most common brand of cigarettes, for instance, at a price amazingly lower than is usually quoted. According to the head of this department cigarettes which retail at 10 cents, and which are put up 50 packages to the box, cost the chain stores in the neighborhood of \$3.78. The drug store which handles that brand would have to pay \$4.15 or \$4.20. The chain store gets the reduction because it buys in large quantities. If three drug stores co-operated and bought cigarettes, together, they would be able to get them at a lower price.

The same facts hold good for many other articles, although there are some, of course, for which the price is unchanged if one package or a hundred is purchased. But in most of the stock, in side lines especially, that is the side lines that are general to a pharmacy and which, therefore, are very nearly regulars, money can be saved.

Aside from the dollars and cents saved in actual buying, there can also be saved a bit in transportation charges. There are several other arguments that can be advanced, and that have been advanced in favor of co-operative buying, but the most important one is that stock purchases made cheaply mean money saved. And money saved means profit. Doesn't it?

BOSTON DRUGGISTS ELECT

The Boston Druggists' Association re-elected Prof. E. L. Patch president in its annual meeting and banquet at Young's Hotel, Boston, January 23d. Other officers chosen for 1917 were: Secretary, Harry C. Wiggin; treasurer, C. Herbert Packard, president Massachusetts College of Pharmacy; executive committee, W. S. Briry, C. P. Ripley, H. E. Bowman, A. H. Barlett, Charles C. Hearn, F. W. Doliber, Fred L. Carter; membership committee, C. E. M. Harrington, Ralph R. Patch, H. C. Otis, H. W. De-Coster, and R. A. Newton. Bass solos by Edward F. Orchard, and a talk on "The United States Navy Today," by Naval Constructor Frederick G. Coburn, U. S. N., followed.

SCHOOLS AND COLLEGES

UNIVERSITY OF TENNESSEE

The School of Pharmacy of the University of Tennessee has arranged to work out with the pharmacists of that State the causes of incompatibilities which sometimes arise in compounding prescriptions. This departure is the result of numerous suggestions for conducting work of this character, which will be in charge of Dr. R. L. Crowe, head of the school.

The school will also endeavor to acquaint druggists of the State with synthetic preparations and furnish information concerning the same, and invite Tennessee pharmacists to send all prescriptions which present difficulties to the new department, where investigation will be made and the result announced to the druggist as soon as possible.

HIGHLAND PARK

The Mortar and Pestle Club, an organization of pharmacy students founded about ten years ago, has shown more than its usual activity this year. It has abolished the "annual exhibit," which has been held for a good many years. In its stead this year the club will establish a complete departmental library. It has been hoped to house this in a well furnished club room on the floor below the laboratories. The exact location is in the front of Science Hall and faces the stair landing. To this library will be added the valuable technical publications now in the General library in the Administration building.

Women have been talking back for quite a while. It remained for the Highland Co-ed Hiking Club to prove that they can walk back. Their initial attempt was a 28 mile walk.

Twenty-five students recently reported to the Band Director for try outs.

LOUISVILLE

The Board of Directors of the Louisville College of Pharmacy at a recent meeting decided to inaugurate a campaign for new members of the college. All individuals interested in any way in the progress of pharmacy, botany, materia medica, chemists, and registered pharmacists of the State are eligible, and a systematic appeal will be made to enlist their support. John J. Sieberz, secretary of the college, has charge of the campaign.

BUFFALO

The student classes in the Buffalo College of Pharmacy have elected the following officers:

Senior Class: President, E. B. Stone; vice-president, Carlton Stacey; secretary, Gladys McMaster; treasurer, Caroline Gallup; Bison representative, Conrad Blessing; athletic representative, B. J. Dowd; marshal, L. P. Whitney; chief leader, Norman C. Paul.

Freshman Class: President, Thomas Kerwick; vice-president, Vesta Cole; secretary, Catherine Gallagher; treasurer, Lester Ward; Bison representative, Francis B. Lanszewski; athletic representative, Leslie March; marshal, Theodore Schmits.

At the annual mid-winter dinner of the Alumni Association of the Buffalo College of Pharmacy held at the Hotel Statler on Thursday evening, January 18th, Prof. Wilbur L. Scoville gave an interesting address on the changes which have been made in the Ninth revision of the United States Pharmacopoeia.

ST. LOUIS

Oscar G. Salb, gave a physiological test of drugs on lower animals, guinea pigs, roosters, frogs and dogs, before students and others at the St. Louis College of Pharmacy the evening of January 10th. This was said to have been the first time the test had been demonstrated to a class in St. Louis.

UNIVERSITY OF OKLAHOMA

The State Board of Pharmacy held the practical part of their January examination in the laboratories of the School of Pharmacy, Wednesday, January 10th. Twenty-six candidates were present, and nine passed.

Plans are now being made by the president's office for the dedication of the new Chemistry Hall, on Friday, January 26th, and a number of prominent speakers are being secured for the occasion. Governor Williams has been asked to make the opening address, and Prof. William A. Noyes, director of the chemical laboratory of the University of Illinois, will deliver the dedicatory address. Others who have been asked to take part in the ceremonies are, J. M. Aydelotte, secretary of the state board of affairs, R. H. Wilson, state superintendent of public instruction, L. Chas. Raiford, head of the department of chemistry at the A. & M. College and J. A. Holmboe, of the Holmboe Construction Company.

The regular summer session begins June 6th.

An enrollment of more than 1,500 students is expected in the summer session, and an attempt is being made to secure the services of several of America's greatest educators in addition to the regular faculty.

Governor Williams, and the State Board of Education, along with J. M. Aydelotte have recommended that the legislature appropriate \$400,000 for salaries, maintenance and upkeep of buildings, for the year 1917-18, and \$365,000 for the year 1918-19. Their recommendations also include \$150,000 for an Auditorium and \$75,000 for building and equipping an additional wing for the library.

PERCOLATORS A SELLING SIDE-LINE

Percolators are becoming prominent in homes. The old coffee pot is going out the back door and the copper or brass containers that make the coffee "bubble" and make it sweeter and stronger are gaining so much in favor that they are rapidly getting themselves out of the luxury class into the necessary.

Druggists all over the country carry Thermos bottles as a side line. Is there any good reason why they should not carry percolators? Most pharmacists have a fairly well established trade in wood alcohol which is built up by percolator users, and are making a little money from it.

Percolators can be purchased reasonably and they show a good profit. The person who wants to buy a percolator, alcohol burner, has to go either to a department store or to a store which deals especially in articles of that nature, and he is forced to pay a high price for what he wants. Of course, percolators are expensive to a degree, but a druggist would not have to sell them at the price other stores demand. He could cut under \$1 or \$2 and still make a good profit.

Then, too, percolators would lend themselves to a fine display. They are enticing little things, and a table with four or five of them showing up in the center of the store would attract. Not only would customers be drawn to them for their own sake, but such a display would liven the store and so increase the effectiveness of stock which is expected to "turn over" more rapidly.

Electric and alcohol burning percolators are made, the former sold to a special class of homes. Electric cooking aids are, of course, valuable, but there may come a time when the owner will move to a house in which there is no electricity and it becomes useless. The alcohol burner is always useful and it is certainly true that the percolator makes better coffee than the old-fashioned pot.

On the same line, it might be well to put in a few chafing dishes. But chafing dishes are something of a luxury, even now. The public has not been universally educated up to after dinner late at night suppers, and for the most part that is what chafing dishes are used for. But the coffee drinking public—and it is a public that includes almost every one who will ever come into your store—is one which demands good drink, and percolators make better coffee than the old-fashioned coffee pot

Driving Dollars Away By Neglect

How a Druggist is Losing a Once Profitable Trade

THIS is the story of two druggists, in the same neighborhood; one of them is Going, and the other is Coming. And inasmuch as the fact that the one who is losing his grip on his trade is responsible for the coming of the other, it ought to be worth while to find out the why's and wherefore's of the situation. It is interesting, always, to find out why a man has succeeded; there is inspiration in it. But nearly always, there is equal interest and profit in examining into the causes of failure. Between knowing what to do and what not to do, a wise man can find a way to avoid failure and thereby win success.

The druggist who is losing out, and who has been labeled by friends and customers, sadly and regretfully, as a Has-Been, has only himself to blame for this condition. Some years ago he established himself in a growing suburb, with no competition whatever; and as the shop was new and a much-appreciated convenience, he got all the business there was to get. His soda-fountain was the most popular place of resort in the village, and he flourished like the proverbial green bay tree. In fact, he might very well have got rich right there, if he had not let his prosperity go to his head. But that is what happened.

"There's no reason why I should work my head off around the store any longer," he confided to his wife, after things had been coming merrily his way for a time. "We've got the business cinched, and things couldn't be moving along better if I had fixed up the program myself. The boys can run things very nicely, and I'm going to give myself a rest, and take things comfortably for awhile. We'll enjoy things while we can, and let the business take care of itself and us too."

That sounded pretty good to Mrs. Druggist, of course; she had wanted a nice little automobile for a long time, and now was the time to get it. And she had wanted a trip to New York, just to look in at the theaters and do some shopping, and she got that too. The druggist got his rest—to which, of course, he was perfectly entitled, because the man who has handled a drug business for a few years knows what hard work is. He doesn't belong to a union which limits his work and boosts his pay, unfortunately.

But there is something in the Good Book about moderation in all things; and there should be moderation in a druggist's vacation, especially where the business depends upon his personal efforts, as it usually does. In this case, when the druggist had got into the habit of dropping into the store at nine or ten o'clock in the morning, taking a couple of hours for lunch, attending the ball games whenever he felt like it, staying away altogether in the evenings, and otherwise conducting himself like a gentleman of leisure, it soon became apparent that it was affecting business.

The Boss Was Missed

"What's become of the boss?" asked a customer who had been in the habit of buying all of his cigars, magazines and miscellaneous goods at the store, instead of in the city. "Haven't seen him around here in a month of Sundays, and I'm getting rusty in my political arguments. He isn't sick, is he?"

The prescription clerk of whom he asked the question grinned amiably, as he handed out the box of cigars the customer indicated he desired to pick from.

"Sick?" he repeated. "I should say not! Never felt better in his life, I should say. No, sir, he's enjoying himself, and I wish I could do the same. He looks in and sees that we are keeping things running as they should, though. What do you think of the pennant race? Some finish, isn't it?"

The customer agreed that it was some finish, and they proceeded to discuss the probabilities of the matter seriously, for some minutes. The customer, himself a retail merchant in the downtown district, and a keen one, seemed to have his mind well enough on the argument; but his eyes were busy, and he noted several things during the conversation.

First, he noted that the boy who attended to the business at the fountain was not on the job, although a young

couple had come in some minutes back and sat down as if waiting for a drink. The dispenser was outside, on the sidewalk, joking with some other youngsters of his own age, in the confident knowledge that his boss would not be there to see that he kept at his work. Next, the customer noted that one or two other people were apparently waiting for attention, and he even took occasion to suggest as much to the clerk talking to him; but that gentleman carelessly said that "They can wait" and continued the conversation. And he wondered, also, whether the cigars he had taken—three for a quarter—would be charged or forgotten.

A Disappointed Customer

Then the telephone rang. Reluctantly, the prescription clerk left the chances of the Braves and the Dodgers hanging in midair while he answered the call.

"Jones' Pharmacy," he said, as he took down the receiver. Then he listened a moment.

"Blank's Food?" he repeated. "No, I don't think we have that. Wait a minute, and I'll find out."

He ran over to the shelf bearing several makes of infants' foods, and took a glance.

"Nothing doing," he announced, as he returned to the 'phone. "I remember selling the last can this morning, and we haven't had time to get any more in. You ought to be able to get it downtown."

That ended the conversation, and the man Jones had in charge came back to the cigar counter to resume his talk on the baseball situation.

"Gee, but that dame was sore!" he laughed. "We've been selling her a couple of packages of that food every week, and she's mad now because we're out of it. She seems to think we ought to keep an eye on her personal requirements, and make an effort to satisfy them—as if we could pay any particular attention to any one customer. She said just now that she's going to take my suggestion and get what she wants downtown in the future. I should worry!"

The customer was rather staggered at this cheerful disregard of the welfare of the business.

"Well, but look here," he gently suggested, "don't you think it pays to see that you can supply customers' wants? Jones put in this brand of cigars because I—and several other customers—like it. Why wouldn't it have been a good idea for you, aside from any question of sensible stockkeeping, to prevent yourself from running out of a staple article, to see that you kept this particular food on hand for this customer? When you sold the last can, why didn't you order more at once? In fact, the way I do in my haberdashery is to order when I get to the last case of a given article, generally speaking. Why couldn't you do the same, especially on a line that moves?"

"Maybe we ought to do that," acknowledged the cheerful and careless clerk. "But we never have, and that's all there is to it. Mr. Jones used to know the stock pretty well, and he kind of kept track of things by memory; I've known him to send out and buy an article at another drug-store, a fifteen-minute car-ride away, at retail price, rather than tell a customer he couldn't supply it. But I don't think that's good business. Anyhow, that woman needn't have got so sore."

"No, I suppose not," said the customer, as he moved away. "But you'll know how it is yourself when you get to raising a baby or two, and need things for them."

And he said to himself:

"No wonder Jones is losing out. And I'll bet a big iron dollar that any number of items don't get charged during an average day—those cigars of mine, for instance."

Goods Sold But Not Charged

As it happened, he was right; for things went too much haphazard at the once popular Jones' store for charges to be made of all of the items. People were in the habit of having things sent, or of dropping in and picking up a film, or a magazine, or having a few drinks, and charging them; and Jones never let these items get away. The ease with which an account could be run had helped largely in building up his highly desirable neighborhood trade; but he

was a collector of ability, and let nothing escape. Now, however, an astonishing amount of goods went out which never got on the books.

These things get about. One dissatisfied customer—like the one whose baby had to go without his usual food, while a special trip was made for it—can do an infinite amount of damage; and, be it remembered, live young men in the business are always looking for good openings for a fresh, clean, up-to-date store. Such a one found just such an opening in the suburb referred to, sizing up the situation carefully and deciding coolly that Jones' store couldn't stand real competition, of the sort he intended to furnish.

The new store was all that it should be in the matter of equipment. It had a handsome and modern fountain—which Jones' did not—and a full, fresh stock of standard preparations, as well as of well-selected novelties and side-lines. Moreover, it had a little delivery car which the new man freely advertised was intended to be used. He circularized virtually the entire village, setting forth what he had to offer, and invited visits and business; and he got both.

And by the time Jones had become really alarmed at his dwindling receipts, both gross and net, and made a start at finding out what the trouble was with his once prosperous business, the new man seemed to have the cream of it, and a good deal more. As a matter of fact, Jones hasn't discovered yet that lax methods and indifference to customers and their needs have ruined his business. But he realizes the great, sad truth that it is a good deal easier to lose business than it is to build it up—a truth which is worth remembering.

NEWS OF THE BOARDS

UTAH

The Utah Board of Pharmacy recently filed its biennial report with the Governor in which it was stated that a canvas of the druggists of the State brought replies which indicated that a large preponderance of the pharmacists prefer not to be considered peddlers of intoxicants if a statewide prohibition measure is passed. The board in its report asks for a law providing for the registration of druggists and a law requiring itinerant peddlers of nostrums to register, take out licenses and be subjected to the same rules which govern other drug dealers. Complaints it is alleged, have been received from country merchants that peddlers work the various country routes with drugs which have not the indorsement of regular dealers.

The board also asks for a law to prevent the indiscriminate use of peyote, which is being used by the Indians in the southern part of the state in their religious rites, and recommends that it be listed as a narcotic drug under government control. Recommendation is made that the fee for examinations of pharmacists for license be reduced from \$25 to \$15. The receipts of the board for the two year period under review are reported to be \$3,347.94, and the disbursements \$3,125.86. During the year 36 applicants passed satisfactory examinations to practice, and 18 were granted certificates on the reciprocal exchange basis adopted with other states.

KENTUCKY

The annual report of the Kentucky Board of Pharmacy just published gives the total number of registrations in force in that state as 1,613 registered pharmacists and 100 assistants. During the year 41 persons were registered as pharmacists, and 37 as assistants. In this report the attorney of the board, Edward Bloomfield, states that several amendments are absolutely needed to the present pharmacy law; 1, providing that no one be permitted to own or conduct a drug store who is not himself a pharmacist; 2, that no corporation or association should be permitted to conduct a store, and 3, requiring a higher preliminary education of applicants desirous of registering as pharmacists. The attorney states that every applicant should at least be a graduate of a high school or its equivalent. Whether Kentucky is ready to demand that all applicants in addition should be graduates of a college

of pharmacy he says is open to some question, "but even this should not be far away."

OHIO STATE BOARD ELECTS

At a recent meeting, the Ohio State Board of Pharmacy elected the following officers, President, Edward Voss, Jr., of Cincinnati; Treasurer, A. L. Flandermeyer, Cleveland; Executive Secretary, M. N. Ford, Columbus.

LOUISIANA PHARMACISTS UPHOLD LAW

The Louisiana Board of Pharmacy in its 28th annual report to the Governor, which has just been published, contains some interesting information concerning the status of pharmacy in that State. Secretary Baltar states that since the organization of the board there has never been such a close inspection of drug stores as that undertaken last year, and that of the 511 stores inspected, all but one were in charge of registered pharmacists, showing that the pharmacists of the State believe in upholding the law. During the year 55 applicants were passed as registered pharmacists and 35 as assistant pharmacists. There were 56 apprentices registered and 767 re-registration certificates issued. Nine pharmacists were registered by reciprocity from other States, and four Louisiana pharmacists applied for registration in other States.

WISCONSIN BOARD EXAMINES APPLICANTS

The Wisconsin Board of Pharmacy held its January examination at Madison, concluding its meeting on January 15th. Forty-three of the sixty-two applicants were successful, eighteen of the number being granted registered pharmacists' certificates, and twenty-six, assistant pharmacist's certificates. The meeting of the board examiners was attended by H. G. Ruenzel, president, Milwaukee; G. V. Kradwell, Racine; C. J. Boverg, Eau Claire; B. J. Kremer, Fond du Lac; and Edward Williams, secretary, Madison. The next meeting will be held in Madison on April 10th-13th.

TRIBUTE TO DR. WILBERT

The following resolution has been unanimously adopted by the members of the Council on Pharmacy and Chemistry of the American Medical Association

"The death of Martin Inventius Wilbert, a member of the Council of Pharmacy and Chemistry of the American Medical Association since its organization, removes one of its most able and loyal members. He was possessed of an intellectuality and a manhood which commanded the attention and respect of the members of both the medical and the pharmaceutical professions. He was fearless, honest and unselfish. He was uncompromising in his denunciation of the evils which beset the practice of medicine and pharmacy, but was never ungracious either with his pen or in his speech. If after due deliberation he was sure that a definite policy should be promulgated to improve the conditions of these professions, he proclaimed his view and conducted a campaign that inevitably received the support and recognition of those best informed. He gave a life of service with never a thought of reward and earned every honor which was bestowed on him. His knowledge of pharmacy was such that he could have obtained prominence in the manufacturing field and with it would have come a large measure of financial reward. But he chose to devote his thought and energies to the general good rather than to his own profit. His influence on medicine and pharmacy was unique. The forcefulness of his personality was equaled only by his modesty and sincerity. His greatest work—one which will be cherished as a part of the history of the American Medical Association—was his devotion to the aims and objects of the Council on Pharmacy and Chemistry and his unselfish and indefatigable labors in its behalf.

"We, the members of the Council on Pharmacy and Chemistry of the American Medical Association, mourn the loss of one of our most useful associates, and one whose life may be held up to the younger generation of pharmacists as an example of unselfishness and devotion to high ideals."

MASSACHUSETTS ALUMNI ELECT

Dr. Howard H. Smith, '85, presided at the annual banquet of the Massachusetts College of Pharmacy Alumni Association at the Crawford House, Boston, January 17th. These new officers were elected: Dr. Smith, president; J. E. Stacy, Miss Jennie Sumner, A. M. DuPaul, vice-presidents; G. L. Burroughs, secretary; Leon A. Thompson, assistant secretary; Frank F. Ernst, member of the council; Prof. E. H. LaPierre, treasurer.

PATENTS & TRADEMARKS

PATENTS

Granted December 19, 1916

- 1,208,833—Alexander S. Ramage, assignor to Bostaph Engineering Company, Detroit, Mich. Process of producing phenols.
 1,208,877—Wilhelm Wollenweber, Bochum, Germany. Manufacture of acid ammonium phosphate.
 1,209,051—Francesco C. Shotwell, Monroe, La. Collapsible funnel.
 1,209,091—Albert Westlake, New York, N. Y. Fibrous cap for bottles.
 1,209,111—Sophia D. Brelsfoard, Maroa, Ill. Cover for tooth brushes.
 1,209,201—Paul Radmann, Godegard, Sweden. Method of producing soluble alkaline compounds.
 1,209,245, 1,209,246—Edwin O. Barstow, assignor to the Dow Chemical Company, Midland, Mich. Method of making magnesium chlorid and the like.
 1,209,512—Joel Starrels, New York, N. Y. Process for producing fatty acids of high purity and melting-point.
 1,209,516—Charles E. Thompson, assignor of one-half to Francis H. Wager, Troy, N. Y. Tooth brush.

Granted December 26, 1916

- 1,209,807—George E. Brown, Lowell, Mass. Carrier for bottles.
 1,209,980—Clarence J. Lawson, Yonkers, N. Y. Bottle sealing cap.
 1,210,053—Charles W. Duval, assignor of two-thirds to Maurice J. Couret, New Orleans, La. Process of manufacturing a vaccine for the prevention of hog-cholera and product therefrom.
 1,210,102—David E. Riggins, Perry, Okla. Bottle holder.
 1,210,250—Frank E. Young, Canton, Ohio. Method of and apparatus for manufacturing alcohol from garbage.
 1,210,281—William L. Drouilhet, Galveston, Tex. Bottle attachment.

Granted January 2, 1917

- 1,210,623—John C. Feser, Brooklyn, N. Y. Tooth brush.
 1,210,651—Anton Jahl, Linz, Germany. Process for making pure, highly concentrated hydrogen peroxid from the peroxid of an alkaline earth.
 1,210,726—Daniel Tyrer, Stockton, England. Manufacture of phenol.
 1,210,728—John C. Uhlein, Watertown, N. Y. Non-refillable bottle.
 1,210,892—Clara Borchmann, New York, N. Y. Cover for receptacles.
 1,210,949—William John Knox, assignor by mesne assignments, to General Research Laboratories, New York, N. Y. Medicinal compound.
 1,211,027—Charles A. Youngman, Louisville, Ky., Bottle filling machine.
 1,211,227—Fritz Pollak, Berlin, Germany. Process for the manufacture of insoluble condensation products.
 1,211,252—George William Sinclair, Odda, Norway. Apparatus for the treatment of calcium cyanamid.
 1,211,334—Edward C. Mohr, and Remus A. Brach, Bloomfield, Nebr. Filter.

Granted January 9, 1917

- 1,211,413—Lee E. H. Cone, Midland, Mich., assignor to The Dow Chemical Co., Midland, Mics. Method of making indoxyl and derivatives.
 1,211,461—John R. Long, Orrville, Ohio, assignor of one-fourth to John C. Gibson, Akron, Ohio. Shellac-jar.
 1,211,468—William J. McLean, Everett, Mass. Tooth brush handle.
 1,211,510—Seth Wheeler, Castleton, N. Y. Dispensing cabinet.
 1,211,564—Philipp Eyer, Halberstadt, Germany, assignor to the Firm of Rudolph Koepf & Co., Oestrich-on-the-Rhine, Germany. Production of antimones.
 1,211,666—Walter T. Bobo, Battle Creek, Mich., assignor to The Easy Truss Co., Battle Creek, Mich. Truss pad.
 1,211,704—Eric Berkeley Higgins, Wallasey, England. Conversion of unsaturated into saturated compounds.
 1,211,712—James E. Keeffe, Chicago, Ill. Dentifrice.
 1,211,737—Andrew A. Martini, Buffalo, N. Y. Medicine device.
 1,211,923—Louis M. Dennis, Ithaca, N. Y. Method of separating a sulfonic acid of a hydrocarbon of the aromatic series from sulfuric acid and of converting the sulfonic acid into a salt.
 1,211,934—Edgeworth Greene, Montclair, N. J. Bottle.
 1,211,945—Jacob W. Kaiser, East Cleveland, Ohio. Dispensing receptacle.
 1,212,001—Harry T. Baxter, Nauvoo, Ill. Tooth brush.

Granted January 16, 1917

- 1,212,229—William Jones, New York, N. Y. Apparatus for the production of oxygen and hydrogen gases.
 1,212,359—Sidney H. Katz and Frank K. Ovyitz, Pittsburgh, Pa. Process for the manufacture of formates.
 1,212,373—George H. Love, Pueblo, Colo. Tooth brush.
 1,212,504—Constantin Krauss, Cologne-Braunsfeld, and Paul Stachelin, Knapsack, near Cologne, Germany. Process of preparing nitrogen compounds.
 1,212,612—Louis M. Dennis, Ithaca, N. Y. Method of separating benzene sulfonic acid from sulfuric acid and of converting the benzene sulfonic acid into a salt.
 1,212,645—Arthur L. Kane, and John J. O'Neil, Newport, R. I. Tooth brush holder.
 1,212,871—Leonard G. Abbott, Boston, Mass. Bottle stopper.
 1,212,928—Bernhard Jacques Flurschheim, New York, N. Y. Process of manufacturing diphenylamin.
 1,212,927—Thomas Arthur Flood, Salt Lake City, Utah. Vaccinating device.
 1,213,130—Richard M. Page, Denver, Colo., assignor of seven-tenths to Charles I. Hays, Denver, Colo. Poison bottle indicator.

TRADE MARKS

Published December 19, 1916

- 97,111—George Borgfeldt & Co., New York, N. Y. Face powder, toilet powder, etc.
 97,720—Society of Chemical Industry in Basle, Basel, Switzerland. A pharmaceutical product—viz., the combination of metal-organic albumin applicable as substance for serological examinations.
 98,398—Aseptic Products Co., Long Island City, N. Y. Medical and surgical plasters.
 98,681—Magdalena Chejlava, Chicago, Ill. A salve for cuts, bruises, etc.
 99,048—Gustav A. Strahlke, Alton, Ill. Hair growers and tonics.
 99,099—Samuel Thomas, Lebanon, Oreg. A preparation for the kidneys.
 99,111—Columbus P. Ashburn, Bristol, Va. A remedy for diphtheria and sore throat.

Published December 26, 1916

- 82,284—John Sterling Royal Remedy Co., Kansas City, Mo. A remedy for catarrh, syphilis, and rheumatism.
 91,229—The William S. Merrell Chemical Co., Cincinnati, Ohio. Fluid medicines made from plant drugs and known as tinctures.
 91,876—Koloman Kovacs, Duquesne, Pa. Remedies for rheumatism, headache, roughness and dryness of the skin, etc.
 94,538—Ilkell Mfg. Co., Omaha, Nebr. Talcum, liquid face powder, etc.
 96,461—Arnold Carson, Philadelphia, Pa. Salves for healing wounds and skin diseases.
 96,947—Leon Baron, New York, N. Y. Inflammations, eruptions and irritations of the skin.
 98,492—Cordelia Louise Caron-Morin, Manchester, N. H. Nerve medicine.
 98,804—Frank W. S. Elstroth, Brooklyn, N. Y. Salve used as an emollient in treating burns, scalds, cuts, etc.
 99,040—Kellogg Toasted Corn Flake Co., Battle Creek, Mich. A drug specifically described as soda mints.
 99,119—Eckman Manufacturing Co., Camden, N. J. Tablets for coughs, colds, asthmatic and bronchial troubles.

Published January 2, 1917

- 96,362—Robert A. Odier, Geneva, Switzerland. Lotions, pomades, and powders for use in the treatment of wounds.
 97,521—Poland & Savage, Philadelphia, Pa. A remedy for epileptic fits and convulsions.
 97,823—David A. Saltz, New York, N. Y. Hair remover.
 97,948—Conway & Hall, Sault Ste. Marie, Mich. Medicinal tablets for anemic conditions of the blood.
 98,041—George Borgfeldt & Co., New York. Solid alcohol.
 98,367—La Guardias and Co., New York, N. Y. Hair tonic.
 98,828—Clarke Guthrie Co., Philadelphia, Pa. A dental, medical and surgical disinfecting fluid.
 98,923—The Germicide Co., Denver, Colo. An antiphlogistic preparation or plastic dressing.
 98,979—Griffith Chemical Co., Freeport, Ill. A pharmaceutical preparation for use as an antiseptic astringent and hemostatic.
 99,053—The Jelol Co., New York, N. Y. A medical preparation of olive oil.
 99,075—The Avalon Farms Co., Chicago, Ill. Liquid worm-killer, bone-blister, poultry tablets, etc.
 99,115—Frank Buss, St. Louis, Mo. A medical salve or ointment.
 99,126—Natski Medicine Co. Moweaqua, Ill. A blood purifier.
 99,186—Banks A. Bennie, Nashville, Tenn. A liniment for the treatment of rheumatism.
 99,238—Duane Laboratories, New York, N. Y. Paste for treatment of soft bleeding gums.
 99,293—The Elcaya Co., Inc., New York, N. Y. Toilet cream.
 99,334—W. J. Bush & Co., Inc., New York, N. Y. Glycerin substitutes.
 99,409—Hall & Ruckel, New York, N. Y. A depilatory powder.
 99,488, 99,491—Waldes & Co., Prague-Wrschowitz, Austria Hungary. Powder paper.
 99,509—George A. Pettitt, Syracuse, N. Y. Eye wash.
 99,510—Lulah M. Smidt, Los Angeles, Cal. Liquid and solid superfluous hair remover.
 99,528—Frederick Stearns & Co., Detroit, Mich. A reconstructive tonic.
 99,622—Entol Products Co., Inc., New York, N. Y. Antiseptic nad healing lotion.
 99,624—Frost Remedy Co., Albany Mo. A remedy for asthma.
 99,823—Monahan Medicine Co., Asheville, N. C. A remedy for trachoma and other affections of the eyes.

Published January 9, 1917

- 91,023—The Scholl Manufacturing Co., Chicago, Ill. Corn pads, corn plasters, foot ointments, etc.
 92,969—A. S. Campbell Co., Boston, Mass. Hot water bottles.
 99,337—Nora Cole, Allentown, Pa. A chemical ink eraser.
 99,620—The Dional Syndicate, London, England. Antiseptic preparation for healing wounds, cuts, etc.

Published January 16, 1917

- 93,992—Otto A. Glenner, Chicago, Ill. A germicide for diseases of the mucous membrane and skin.
 97,613—Charles S. Berry Little Rock, Ark. Minted epsom salts.
 98,762—Alle-Rhume Remedy Co., Rochester, N. Y. An internal remedy for rheumatism, liver, kidney, stomach, etc.
 99,023—Isidore Horowitz, Savannah, Ga. A tonic in tablet form.
 99,072—Viroculin Co., Waterbury, Conn. Medicinal preparation for treatment of the eyes.
 99,079—Madam's Buford & Owens, Oklahoma, Okla. Hair oil.
 99,148—Essen Remedy Co., Newark, N. J. A medicine for indigestion.
 99,285—Star Eczema Co., Corsicana, Tex. Eczema remedy.
 99,296—Farbwerke vorm Meister Lucius & Bruning, Höchst-on-the-Main, Germany. A chemical compound for tuberculous diseases.

THE DRUG MARKETS

OCEAN FREIGHT RATES ADVANCE PRICES

Domestic Production of Salicylic Acid and Numerous Synthetics Responsible for Some Declines.

NEW YORK, January 25.—Business in the drug and chemical market during the past fortnight has been fairly active, the tendency of many price changes being upward. Higher war risk rates on account of the presence of a German raider in the South Atlantic have become an important factor in the shipment of drugs and chemicals, and the advancing rates in consequence thereto, along with the demand for freight space, have done much to cause a firmer feeling for a number of articles. The most important development, perhaps, has been in the general reduction in the prices of salicylates and other so-called synthetic products, due mostly to increased production by domestic manufacturers. The opium market shows strength, and importers are much concerned over future supplies, owing to the difficulty in procuring the release of stocks abroad. Slight advances are noted for morphine and its salts. Quinine is unchanged, with a good demand. All varieties of camphor are higher.

Among the most important price advances noted are those for oxalic acid, arnica flowers, codeine and its salts, creosote carbonate, cubeb berries, fenugreek, gamboge, guaiacol carbonate, magnesium sulphate, manna, both large and small flake; various potassium salts, Spanish and American saffron, salicin, Castile soap, sparteine sulphate, storax, strontium bromide and thymol. The price declines noted cover the various salicylic compounds referred to above, acetanilid, acetphenetidin, antipyrin, asafetida, bromoform, glycerin, hemp seed, Rio ipecac, menthol, various essential oils, cottonseed, rape seed and salad oils; resorcin, sodium cacodylate and Belgian valerian root. A revision in the schedule of prices for bismuth salts is also given. Botanical drugs of various kinds are tending upward, based on a stringency of supplies and crop reports, while the situation with regard to imported crude drugs is somewhat uncertain, owing to shipping difficulties and war risk rates which, in some instances, are almost prohibitive.

OPIMUM—While the prices quoted show a slight advance over those of last month, the condition of the market is far from satisfactory, and importers are much concerned over their ability to secure future supplies, owing to the difficulty in procuring the release of stocks which are held abroad. Jobbers are now quoting \$15.70@15.75 per pound for natural, \$18@18.25 for granulated, and \$17.75@18 for U.S.P. powdered.

MORPHINE—The strong market for the basic material, and the uncertainty surrounding future supplies, have caused manufacturers to advance their prices for all salts, the revised quotations being as follows: Acetate, in 1/8th-oz. vials, per ounce, \$9.75@10; hydrobromide, 1/8th-oz. vials, per ounce, \$9.35@9.50; hydrochloride, 1/8th-oz. vials, per ounce, \$9.75@10; meconate, per ounce, \$10.60; sulphate, 1/8th-oz. vials, per ounce, \$8.35@9.95; in ounces, per ounce, \$8.35@9.75. The alkaloid has also been advanced to \$11.50@11.60 per ounce in 1/8th-oz. vials.

CODEINE—In sympathy with the increased strength for opium this alkaloid and its salts have been advanced to \$10.45@14 per ounce for alkaloid; \$10.55@12.60 for hydrochloride; \$12.60@12.80 for nitrate; \$9.25@10.70 for salicylate; \$9.20@10.70 for phosphate, and \$9.65@11.25 for sulphate. It is said that manufacturers are refusing to enter orders for large quantities for future delivery.

QUININE—The market is firm and there is a good demand, but jobbing prices continue at 56c@57c per ounce for bulk in 100-oz. tins, 60c@65c in 5-oz. tins, and 65c@68c in 1-oz. tins.

ACETANILID—Increased production and a moderate demand have caused an easier feeling in the wholesale market and prices have declined to 58c@65c per pound.

ACETPHENETIDIN—Similar conditions prevail with regard

to this synthetic, with the further fact that holders in some quarters display an inclination to realize on their stocks. Jobbers are now quoting \$1.50@1.85 per ounce as against \$2.60@2.75 a month ago.

BENZOIC ACID—There is an active demand for this acid from toluol, and quotations have been advanced to \$12@12.80 per pound. Sodium benzoate, however, continues at the price quoted last month, \$8.50@9 per pound. English benzoic acid, true, is slightly easier at 90c@1 per ounce.

OXALIC ACID—Is higher at 60c@65c per pound, although arrivals of foreign make have been reported.

SALICYLIC ACID—Increased production has materially reduced prices all along the line, and jobbers are now quoting \$1.22@1.27 per pound for 1-lb. cartons, and \$1.20@1.25 in bulk.

ANTIPYRINE—Is also lower and tending downward, wholesale lots being quoted at \$1.20@1.45 per ounce, as to size of order.

ANISEED—Market conditions are firm, due to the rise in war risks and charges affecting future shipments, quotations having been advanced to 30c@35c.

BISMUTH AND ITS SALTS—Following the lead of manufacturers, jobbers have recently revised their schedule of prices for the more important salts, as follows: Citrate and ammonium, \$5.50@5.65 per pound; powdered hydroxide, \$5.05; oxychloride, \$4.35; phenolsulphonate, \$5.20; salicylate, 40 per cent, \$4.75; subbenzoate, \$6.50@7.50; subcarbonate, \$3.60@3.80; subgallate, \$3.55@3.85; subiodide, \$5.85@6.90; subnitrate, \$3.10@3.25, and subsalicylate, basic U.S.P., \$5.20.

BROMOFORM—Has declined to \$3.75@4 per pound.

CAMPHOR—Heavy demand by celluloid manufacturers and other conditions, have caused an advancing market, and jobbers now quote 93 1/2c@95c per pound both for refined, in bulk and 1/4-lb. squares, and 98 1/2c@1 for powdered. Japanese is held at 95 1/2c@1 per pound.

CUBEB BERRIES—Are somewhat scarce and firm at an advance to 75c@80c per pound.

DIACETYLMORPHINE—This alkaloid prepared from morphine by acetylation is higher in sympathy with the basic material, jobbers quoting \$12.25@12.65 per ounce for the alkaloid, and \$11.05@11.25 for the hydrochloride.

FENNEL SEED—Scarcity of supplies and increased war risks on shipments from abroad have advanced prices to 31c@40c per pound.

FENUGREEK SEED—There is considerable demand at higher prices, 10c@12c per pound being quoted.

GAMBOGE—There is a growing scarcity for all grades and the market rules firm with blocky quoted at \$1.90@2, powdered at \$2@2.20, and bright select pipe at \$2.05@2.25.

GLYCERIN—The general decline in prices for various fats and oils and competition among refiners have tended to lower quotations, jobbers asking 55c@56c per pound for C.P. in bulk (drums and barrels added), 56c@57c in cans, and 61c@65c for less.

GUAIACOL CARBONATE—Stocks are in meager supply and prices have advanced to \$5.25 per pound.

ICELAND MOSS—Is higher at 32c@35c per pound.

IPECAC ROOT—The market is quiet and featureless with a decline noted in the price of Rio to \$3@3.25 per pound. Cartagena continues to be quoted at \$2.50@2.65 for whole, and \$2.62@2.80 for powdered. London advices report a firmer market there for the last named variety.

JALAP ROOT—Is firmer with jobbing prices advanced to 20c@25c for selected root, and 30c@35c for powdered.

LEAD ACETATE—There is a considerable consuming demand, with jobbing quantities quoted at 22c@25c per pound.

MANNA—Stocks are in light supply and higher prices

prevail for all varieties, large flake being held at \$1.60@ \$1.70, and small flake at \$1.20@ \$1.25. Sorts are unchanged at 50c@60c.

MENTHOL—Foreign markets are reported strong, but buying here has been inactive, and jobbers have reduced quotations to \$3.50@ \$3.75 per pound.

MUSTARD SEED—Cables from foreign markets report strength and stocks are firmly held here at the following quotations: Black, 25c@30c; ground, 26c@30c; white, 26c@33c; ground, 20c@22c. Recent importations from Yokohama and London have been reported.

OIL BERGAMOT—Primary markets are reported quiet and the demand is somewhat slow. Jobbers are quoting \$6.90 @ \$6.95 per pound.

HAARLEM OIL—Absence of arrivals from abroad and firmer primary markets have influenced an upward trend in prices, Dutch being quoted at \$3.80@ \$4 per gross.

OIL LEMON—The market abroad shows strength, but jobbing prices here are somewhat lower, \$1.55@ \$1.60 per pound being asked.

OIL ORANGE—Increased arrivals and slightly lower primary markets have caused a decline in price for West Indian oil, jobbers quoting \$3.30@ \$3.40 for sweet. It has been stated that an effort is on foot to distil orange oil in this country, and that the Government is now in possession of the necessary machinery for this purpose.

OIL WINTERGREEN—Following the general reduction by manufacturers in the prices of synthetic (methyl salicylate), this article is now held at \$1.15@ \$1.20 per pound. The natural oil remains firm at \$4.75@ \$5.00 per pound.

COTTONSEED OIL—There has been a gradual advance in manufacturers' prices, and the general trend is upward. The domestic demand shows increasing strength and there is some inquiry from abroad. Jobbers quote \$1.20@ \$1.25 per gallon. Salad oil is similarly influenced and prices have been advanced to \$1.20@ \$1.25 also.

POTASSIUM SALTS—Spot stocks of many of these salts continue scarce, although for most of them prices remain unchanged at last month's quotations. Those which show an advance are the bicarbonate, which is held at \$1.90@ \$2.20 per pound; bichromate, 90c@ \$1; cyanide, \$2.25@ \$2.50, and permanganate, \$3.75@ \$4.

RASPBERRIES—The demand for dried berries for making syrup and fruit bases for lozenges has practically depleted this market, and supplies are likely to be scarce until after next season's crop can be gathered. Jobbers quote 55c@60c per pound at this writing, but higher prices are predicted.

RESORCIN—Increasing supplies from manufacturers and liberal offerings from holders have caused a decline in prices, jobbers quoting \$1.45@ \$1.58 per ounce for pure white.

SAFFRON—All varieties are higher, American being quoted at \$1@ \$1.10, and Spanish, true Valencia, at \$12.50@ \$13, the last named being in scanty supply.

SPARTEINE SULPHATE—Is higher at \$2@ \$2.15 per ounce.

THYMOL—Continues to advance in sympathy with advices from primary sources. A considerable consuming demand is also reported. Jobbers quoting \$13.75@ \$14.25 per pound.

VALERIAN ROOT—Increasing freight rates on foreign shipments and scarcity of spot stocks have influenced a firmer feeling in this market, and prices have been marked up to 70c@75c per pound for whole Belgian, and 80c@85c for powdered.

BAYBERRY WAX—There is a moderate demand, and holders appear to have a grip on the situation. Jobbing prices have been advanced to 35c@40c per pound.

A FREE SPATULA IN NEWSKIN

The Newskin Co. of New York, is making a special offer to retail druggists with an order for \$4.00 worth of goods, assorted sizes—4 dozen small size at 75c, ½ dozen medium at \$1.00. They will send free of charge to the retailer \$1.00 worth of New-Skin, 25c size, and a seven-inch Spatula—crucible steel, hand polished. In operating the offer, The Newskin Company makes use of a Premium Certificate, entitling the dealer to the extra features, which Certificates are obtained through jobbing houses.

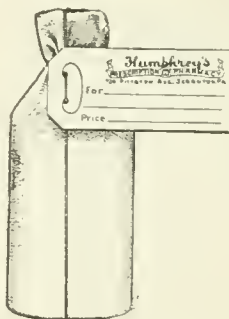
OPPOSITION FOR NARCOTICS BILL

At a hearing of the State Legislative Narcotics Committee, of which Sen. Whitney is chairman, on the new State narcotic law that is proposed by the judges committee of New York City, Dr. William J. Schieffelin of Schieffelin & Co., with other wholesale druggists opposed the triplicate filing of prescriptions advocated by the framers of the bill. F. E. Holliday, secretary of the National Association of Wholesale Druggists also spoke. Their contention was that the proposed law added to the burden of the druggist unnecessarily.

Representatives of all the manufacturing houses present agreed that the domestic and export sale of narcotics had decreased substantially during the past year. John W. Perry, of Merck & Co., said that the exports to Mexico were practically nothing and Canadian shipments only a trifle larger.

Charles A. Loring, of Powers-Weightman-Rosengarten Company, stated that his concern sold drugs only to wholesale firms and manufacturers of medicinal products. He insisted that the sales of his firm had decreased materially. Edward Plaut, of Lehn & Fink, Theodore R. L. Loud of the New York Quinine and Chemical Works and Jacob Weil of Britt, Loeffler & Weil also spoke.

A NEW SPECIALTY



Druggists who want to improve the looks of their packages and facilitate their delivery will be interested in the new Senseman Stringless Tags which are illustrated herewith. These tags are very quickly and securely attached to the string on the package and avoid all necessity of tying knots or using a paste brush. They add to the attractiveness of the package and are sure to make a favorable impression on customers. These tags are supplied with druggists' name and address, and those interested

should send for samples and prices. They are manufactured by the Senseman Printing Co., 105 N. 5th street, Camden, N. J.

NEW PACKAGES FOR PHENOLAX WAFERS

Phenolax Wafers made by The Upjohn Company are now offered in a package of 30 wafers to the bottle—all other packages having been withdrawn. The object of this action is to distribute the limited supply of Phenolphthalein in such a way that the retail trade will be able, without loss, to supply the consumer with a limited number of Phenolax Wafers (30) at the same price per wafer as when the 100 package was on the market.

ELCAYA MOVES

James C. Crane, Sole Agent of the Elcaya Toilet Preparations has moved to the Remsen Building at Madison avenue and Thirty-Second street, New York City. Mr. Crane started business 16 years ago in a small office at 108 Fulton street, which cost him \$5.00 a month. He has succeeded in building up a large business in his special toilet preparations, and the growth of the business is illustrated by the fact that in his new quarters he occupies the entire floor.

5% ON FREEZONE

The Edward Wesley Company of Cincinnati, proprietors of "Freezone" have announced that on orders of six dozen through your jobber special discount, 5 per cent, will be allowed. The manufacturers also announce that they will advertise this product very thoroughly, and they guarantee retailers that if the goods do not sell fast enough they will take them back for cash at the price paid for them.

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CHEMICAL COMPANIES' EARNINGS

If no other statistics were available, the heavy earnings revealed in the reports of many manufacturing chemical companies would indicate that the American chemical industry has enjoyed since the beginning of the European war, an era of unprecedented prosperity. The industry as a whole has enjoyed an enormous export trade at most remunerative prices, and if this were not enough, increased domestic consumption has added very materially to the financial returns of those engaged in such manufacturing. Whether American manufacturers will be able to retain their hold on a considerable portion of this new export business and at the same time meet the needs of domestic consumption after the cessation of hostilities, must for some time largely remain a debatable question, but the present outlook seems to favor the belief that we now have a grip on the situation that cannot be easily loosened. Historic events are now being staged, but the chemist will continue to be the great protagonist in the arena of international activity.

BUSINESS AND THE METRIC SYSTEM

The recent organization in this city of a national association to promote the adoption of the metric system of weights and measures in this country and the fact that business men were prime movers in its formation is significant. Among the organizations which had representatives at the meeting were the American Pharmaceutical Association, the National Wholesale Druggists' Association, the National Association of Retail Druggists, and the American Chemical Society, all of which are directly associated with the drug trade. The war has aided greatly in disseminating a knowledge of the metric system among American workmen engaged in manufactures for Europe, and its early adoption would greatly assist in promoting foreign trade. Dr. George F. Kunz, who addressed the meeting, said that both England and the United States had been slow in realizing the waste of time and the chances of error involved in translating the terms of a logical and consistent standard of weights and measures into those which only owe their use to a blind maintenance of tradition. In the scientific professions, the country has already adopted the metric system to a much greater de-

gree than the average person suspects, while for the pharmacist it is the system employed in both of his official guides, the Pharmacopoeia and National Formulary.

DEAD LANGUAGES AND NOMENCLATURE

Considerable attention has recently been directed to the expert conclusions formulated by Dr. Flexner with regard to the enormous waste that takes place each year in our educational system by devoting so much time to the study of the so-called "dead" languages. Not only have these conclusions attracted attention, but they have been adopted as the basis of an interesting experiment that is to be financed by the Rockefeller Foundation in an attempt to work them out practically in a school that is to be under the administration of Teachers College in New York City.

The dominant note in Dr. Flexner's proposition is a challenge to the traditional methods of study, for it would eliminate not only the study of Greek and Latin, but mathematics beyond elementary arithmetic, while formal grammar would be cast aside. History, except as it may bear on modern problems, would also be proscribed, and the effort would be made to equip the mind with the "material of language and science which form the stuff of actual life." To many this proposition will be designated as revolutionary, while others will feel quite safe in predicting that the program and object to be thus attained will never get beyond the experimental stage.

As pharmacists working for the higher educational qualifications of those who would enter our calling, we are deeply interested in this project. The language of medicine and pharmacy in so far as their peculiar nomenclature is concerned, harks back to the days of the past, notwithstanding the fact that in the quick march of education but few students have any competent knowledge of the important portion that both Latin and Greek have contributed to the formation of scientific terms in general and particularly of those with which we as pharmacists have greatest use. In law, medicine, business and trade, Latin is in frequent and constant use, while the expressive language of Greek genius is ever present in the literature of all science.

So far as the languages go in drug store work, a rudimentary knowledge is better than no knowledge at all, for even a minimum of training will enable the possessor of such knowledge to look up his words in a lexicon and thus apply the etymology of those terms in his scientific nomenclature which directly owe their origin to the mother tongues of the Greek and Latin races.

The physician may write his prescription, as Dr. Fantus of Chicago would have him do, without recourse to the language of the Cæsars, and the student of pharmacy can doubtless make some headway without any training in the historic development of language; but the lack of even a minimum of such knowledge is bound to prove a handicap by eliminating the cultural aspect of advancement.

On the other hand, the possession of such knowledge, fragmentary though it be, will tend to increase the range of the student's ideas and to give him a better grip on the information locked up in the intricacies of medical and pharmaceutical nomenclature. In the final analysis, most of us will agree that a knowledge of these languages does occupy a most important place in the literature of our calling. New methods may be needed to bring such knowledge within the scope of the modern school and to conform with the advanced ideas of the least expenditure of mental energy, but to condemn the acquirement of some acquaintance of these dead languages as a useless waste of time does not accord with trustworthy medical experience or with the best pharmaceutical practice.

EDITORIAL COMMENTS

The Society for the Prevention of Crime, New York City, has issued a report in which it is said that the Federal Antinarcotic law and the Boylan law of the State have both failed to cut off the sources of supply of narcotic drugs to addicts, and the suggestion is made that "the ultimate solution of this stupendous problem may require that all habit-forming drugs shall be manufactured or distributed by the Federal Government." This brings into view a phase of paternalism not considered by the founders of the Republic. Most pharmacists will agree that any further legislation for the purpose should be based only upon a careful, systematic and scientific investigation by competent and unbiased individuals, and not upon the opinions and say-so of notoriety-seeking reformers.

Druggists of North Carolina are much concerned over pending bills in the Legislature of that State which aim at the practical elimination of the sale of proprietary medicines by retail druggists and others. The newly elected Governor on taking his seat made a number of recommendations of this character, and being a son of a doctor, some of the druggists are satisfied that the physicians have a hand in these activities. Reports from the State indicate that the druggists are preparing to take concerted action against what they consider undue legislation, feeling that their business has never before been menaced by so many conflicting measures as now.

Many newspaper publishers have been aroused by recent moves which they claim would give the Postmaster General autocratic power over newspapers, and by the menace of the "Corrupt Practices" act, which would give the authorities power over the news columns and advertising columns as well. They say that no end of trouble would arise if the officials of the Bureau of Chemistry were given power to extend their supervision to every statement made in advertising with respect to foods and drugs as they now have over the printed matter on labels of products under the Food and Drugs Act.

DO THE RETAIL DRUGGISTS NEED A NATIONAL BUYING CLUB?

PART TWO

In the first of this series of articles we referred to the great advancement that had been made in *production*, also to the predictions of leading economists that the next great development in merchandizing would be in *distribution*. Economic forces are always at work to make goods more cheaply and to deliver them at a lower cost to the ultimate consumer. It is safe to say that the next generation will doubtless see many improvements in our present clumsy methods of distribution. These economic influences are beyond the power of man, or group of men, or any man made laws.

In the drug trade, these economic changes began to assert themselves about the time that the N. A. R. D. was organized or just prior to the beginning of the present century. This organization was the direct result of conditions which the retail druggists found unbearable and they were forced to do something to protect their interests. Following this we have such organizations as the United Drug Company, the American Druggists' Syndicate, the Co-operative Wholesale Drug concerns and the local Buying Clubs of druggists, all of which have been helpful in assisting druggists to meet new conditions.

During this period we have also seen the great mail order houses grow to enormous proportions with the parcels post as their active partner; also the chain stores, the department stores, the 5 and 10 cent stores and the peddlers' wagons with their millions of sales. Physicians' supplies is another branch of the drug business which has gone through many changes during the past twenty years.

All of these developments have had their effect on the business of the retail druggists. Millions of dollars worth of goods which previously were sold through the retail drug stores are now sold each year by these newer selling agencies. The druggists are now forced to meet competition that was unknown a few years ago. This competition is most powerful; no individual druggist can meet it alone; co-operation and consolidation are absolutely necessary for the druggists to successfully meet these new competitors.

The druggists must not overlook the fact that the business of these big competitors is rapidly increasing. Sears, Roebuck & Company's gross sales for 1916 are reported at \$146,838,507 or an increase of \$34,172,782 over 1915. The Woolworth 5 and 10 cent stores for 1916 had gross sales of more than \$87,000,000 and net profits of \$8,600,000. These are but striking examples among hundreds of these concerns and their number is rapidly growing. There are eight or ten big family publications devoted primarily to advertising goods sold by mail with a total circulation of over ten millions copies each month, this being entirely separate from the millions of catalogues sent out by the big mail order houses.

What proportion of these big sales are goods handled by druggists is not known, but every druggist knows that it is considerable and that it is increasing. The number of mail order manufacturers of toilet goods, novelties, proprietary medicines, etc., is growing rapidly.

We recently had the opportunity of reading a circular letter written by the president of one of the large mail order houses and addressed to its employees. There was one significant statement in this letter. We cannot repeat his exact words but in substance he said:

Our principal competitors are the small merchants, particularly in the smaller towns, but they are not organized and until they do organize we need not fear their competition.

It is a tremendously significant fact that the great strength of the chain store, the department store, the five-and-ten cent store and the mail-order house is, in each case, its buying power. Because it can buy in large quantities it gets the price which enables it to under-sell the smaller dealer and still make a good profit. It is a no uncommon transaction for a mail order house to take a manufacturer's entire output, thereby saving him all expense for selling and all financial risk. Naturally, the manufacturer gives such a buyer his lowest possible price, decidedly lower than he can afford to make to any ordinary jobber, much less to a retailer.

It is but natural that the manufacturer should seek the larger customer and offer him every inducement to buy. He can afford to sell 1,000 gross to one customer much cheaper than 1 gross each to 1,000 customers, but if the 1,000 druggists would bunch their orders the manufacturer would sell them at the 1,000 gross price. The consumer will buy where he can buy cheapest and the retail druggist cannot expect the public to buy from him just to keep him in business. There is little sentiment in business. The big retailer's great strength is in his buying-power and the retail druggist must develop an equally strong buying power, if he expects to meet his competitor on his own ground.

These big retail selling agencies with their enormous buying power and unlimited capital are the most serious competitors that the retail merchants in our smaller towns, including retail druggists, are compelled to meet and the sooner the retail druggists realize this fact the better it will be for their future. The combined buying power of ten thousand retail druggists is larger, *in drug store merchandise*, than that of any one mail order house, but the number of mail order houses is constantly increasing and those in existence rapidly growing.

In a few years it will not be so easy, perhaps impossible, for the druggists to meet this competition.

The one big fact that must be apparent to every druggist who has given this subject any considera-

tion is, that he must buy as cheap as his competitor if he expects to meet the other fellow's selling price. There are many other things that he must also do, but to start with he must buy right, or he will have no occasion to do the other things.

This question of buying is one of the big problems before the drug trade at the present time and its successful solution will be of inestimable value to the retail druggists. We are not unconscious of the many new channels which many of the druggists now have for making their purchases, such as local buying clubs, co-operative jobbing houses and the several manufacturing companies who operate purchasing departments for their shareholders. These are all helpful, each in its special field, and they furnish a satisfactory service for supplying most of the druggist's routine requirements. But something else is needed; something that will have a larger buying power and that can supply the druggist with those goods which he requires to enable him to maintain his prestige and hold the trade of his locality. This new agency must be so large that its combined buying power will be recognized as the largest and the most influential in this country for certain lines of goods that are handled by retail druggists. It must meet the mail order house, the 5 and 10 cent store, the chain store and the department store and go them one better. The public must recognize that any druggist who is a member of this new buying organization is in a position to purchase at rock-bottom prices.

The only way that this can be accomplished is for a large number of druggists to bunch their orders. It must be a National buying club in every sense of the word, with many thousands of druggists as members, and carry with it a much larger buying power than that of any other purchasing agency for the lines of merchandise which these druggists require.

Such a National buying organization should be composed entirely of retailers and absolutely under their control. It should be devoted entirely to the one subject of *buying* with no manufacturing or other axes to grind, and there should be no middleman's profits of any kind whatsoever.

So far we have purposely refrained from expressing our views as to how a National Buying Club for druggists should be organized, how it should be conducted, what lines of goods it would purchase, how these goods would be distributed and what selling methods the retail druggists should follow to enable them to meet any and all competition that may come into their respective territories. But we are prepared to say that all of these things are perfectly feasible and can be carried out successfully at a comparatively small expense to each retail druggist, and the results would revolutionize the retail drug business in this country.

We have every confidence in the practical value of the plan which we have evolved for such a National buying organization, but we are not so sure that the retail druggists are, as yet, ready for the undertaking. Soon as we feel satisfied that a substantial number of druggists recognize the need of such a buying agency we shall consider it our duty to give them the full benefit of our conclusions.

As we have previously stated, our first obligation in this matter is to the retail druggists, but we have no desire to intrude our views or suggestions upon our retail friends until they are ready to receive the same.

We publish herewith the views of several druggists on this subject, gathered by our correspondents. It is interesting to note the growing sentiment in favor of this movement and now that the subject is fairly before the drug trade, we trust that other druggists will be prompted to send us their views, either for publication or for our personal guidance. We fully appreciate that some retailers, because of other connections, might not care to write us for publication.

We predict that it is only a question of time when all thinking druggists will recognize the necessity for such a buying organization, and we hope that our agitation of the subject may hasten its realization.

(To be continued)

Views of Leading Druggists on a National Buying Club

MILWAUKEE, WIS.

"A national buying exchange looks at the first glance like a whale of a plan. Its bigness is, without analyzing the proposition, almost too much to grasp. It looks good. Will its expense be controllable? Will it give the retailer the advantages of ordering from nearby markets? In other lines, co-operative buying has led to quarreling. Transportation charges have been a stumbling block, which of course infers lack of proper organization and refinement of working plans. Some say that individual buying means more individuality among retailers. Needs of druggists are very individual, depending on location, population movements and neighborhood demands and conditions. A school or a factory built in the vicinity of a drug store may change the whole business in three months. It is easy to see that co-operative buying, such as THE ERA discusses in an unprejudiced way and with an open mind, will have its advantages in respect to these problems. There may be disadvantages, and likely will be. Will they really amount to much; or will they be outweighed by the advantages, clearly and markedly? What about the jobber?"

This composite interview from retail druggists in Milwaukee, summarizes the things that are on their minds since the startlingly frank article in the February issue of THE ERA. The subject of a national buying club has been a chief topic for discussion, for Milwaukee has a successful local buying club. Its success throws the balance of opinion in favor of a national club.

Must Do Something Quickly

J. J. Possehl, president of the Wisconsin state pharmaceutical organization said: "The local organization has made good. The plan for a national organization looks fine. It's a big undertaking. Time will be necessary to work it out and experience bought at the expenditure of time must tell the story. Proper organization, with full cognizance of details which only a national organization must meet with, and which a local would never even know about, ought to get the desired results. Certainly, there is a need to do something, and do it quickly about this buying end of the business."

Eckstein Warns Against Jealousy

Sol Eckstein, Wright Drug Co., with three stores in Milwaukee, and a leader in national association affairs, said: "Jealousy among members has often proved a stumbling block in buying club operations. It has killed some enterprises of that kind. There is a buying club here and it is successful. The jobbers, in many cases, will be hard hit by both local and national buying clubs."

The buying club idea means easier collections, and more prompt ones, for those who sell the clubs. A national club, for a time at least—and a long time, undoubtedly—couldn't buy in the aggregate as much (even considering only a group of lines or products) as the drug jobbers of the United States. Could the club get the prices, then, that are necessary to make it a success, carry its overhead and all that? There are points to think about."

Freight Rates

Hugo Wussow, Wussow Drug Co., a leader in local and state association affairs, bore especially on the matter of freight charges: "Such a plan looks good. Buying right is only a working out of the law of self-preservation," he remarked. "Sometimes I think the business, as a whole, will not suffer if a lot of the little, fly-by-night stores are wiped out. A national club will have problems of distribution and freight charges to face. No doubt proper organization will solve them. But, I say, look out for distribution and freight charges."

Wants Social Intercourse

William Thomson, a guiding spirit in local organization work and particularly the social features of it, said: "It seems impossible to do without jobbers. Therefore, the trade, as a whole, is not able to get very far with plans that will strike a deadly blow at the jobber. Local buying clubs succeed largely because of the contact between members, social and business. Will a national buying club be too unwieldy to permit of this contact? Our local club has certainly succeeded and the plan for a national club, ipso facto, looks mighty good. THE ERA is to be complimented on furnishing a fruitful subject for discussion and thought, just at this time."

Otto Hackendahl, of the Hackendahl Drug Co., said: "The plan has my endorsement. I am for a national buying club. However, let there not be too many heads. Look out for overhead. Let the plan of organization guard against possibilities of disputes which co-operative effort is far from being free of, so far as it has been tried in a number of lines of retailing."

Local Club Saves 5 to 15 Per Cent

Herman L. Emmerich pointed to the 5 to 15 per cent of savings on purchases by the local club, as an endorsement for the buying club idea. "Many druggists seem unfortunately asleep or careless," he added. "Our club here isn't anywhere as near big as it ought to be. Sometimes I get disgusted with the lack of interest and appreciation for scientific buying methods. Yet, retail druggists as a class are far ahead on these matters compared with other lines of retailing. But, in spite of the fact that a very intelligent class of men are engaged in the drug trade, compared with some others, there are a lot of men in it who refuse to think. Let those who do the work of solving the problems of a national buying club seriously think about this. The jobbers will not like it, if the club means what I think it will. The jobber has been mighty useful, not only to the little druggists whom he carries and whose 'banker' he is. There are druggists, however, who will say 'let the jobber look out for himself.' It is not surprising that retailers put their own interests first, is it? I endorse the idea for a national buying clubs, so far as I understand it. Success to THE ERA!"

ST. LOUIS, MO.

J. A. Wilkerson, manager of the Seventh and St. Charles store of the Johnson-Enderle-Pauley chain in St. Louis approves of the principle of the national buying club for retail druggists. On certain articles, he says, mail order and cut prices make it impossible for the average retailer to hold his own except through service and personal following in his own limited retail district. He points out that a popular toilet article, selling as a leader—or what he might term an inducer—the average druggist cannot sell at lower than 44 cents, or six cents off the regular selling price, while the buyer of big lots can sell at 39 cents and about break even while depending on other purchases of staples and other articles for a profit on the customer's visit.

J. Weipert, St. Louis druggist, thinks that, with proper organization, economically conducted, a national buying club would benefit the average retail druggist who is

not generally in position to buy staples in sufficient quantity to get an extra discount.

Francis Summ, South Side St. Louis druggist, supports the idea of the national retail buying club, because of his store's experience in saving an average of \$12 a month by buying many articles through a buying organization to which many St. Louis druggists belong.

Like One Price to All

T. L. Draper, another South Side druggist in St. Louis, favors the idea of a national retail druggists' buying club, but only if such an organization could be made sufficiently strong that freights and other incidental expenses could not overcome the extra inducement. Mr. Draper is strong for the one price to everybody proposition, with no one from manufacturer to retailer gaining any more than a reasonable profit. He believes that the buying public of America is strong for quality first and does not begrudge a reasonable profit. He believes that, with one price to all, buying and selling, and reasonable profits only, the merchant's incentive to cut prices and scratch his head for leaders and inducements would be replaced by a higher class of merchandising activity, that of better service and more sympathetic and personal relations with his buying public. He thinks the average retailer's strength lies in quality, reasonable price and sympathetic service. He believes in giving a store a personality, and suggests that the best way to lose some of the best customers is to give them the impression that the druggist is feverishly bent only on getting his money by any and every inducement. He likes standard goods, reasonable profits, but he agrees that there are certain forms of competition which have to be met and could be met by a co-operative buying organization so conducted that its benefits would be for the druggist and not for a few big leaders.

BOSTON, MASS.

"The idea of a national buying club is O. K.," said Charles H. Davis, secretary of the Boston Association of Retail Druggists, "but the small buying clubs, like the South Boston Buying Club or the Franklin Buying Club of Somerville, work out well, because they have small territory to cover. The small clubs can take on goods in which there is practically no profit, in sufficient quantities to get all the discounts, yet the distribution expense cuts down the saving. Nevertheless, the distribution expense in the small, local buying clubs is small when compared to what it would be with a national club.

"The druggists' associations in this section have steered clear of going into buying organizations, because, since the experience of the old New England Pharmaceutical Association, they know that adding such a feature to a local association means its downfall.

"I find that goods, such as I understand it is proposed that a national buying club handle, can be had of the A.D.S. as reasonable as could well be expected. But one disadvantage about going into the United Drug Co. plan is that, to my mind, the individual druggists lose, in a large measure, the identity and prestige that they should maintain."

ST. PAUL, MINN.

From a Trade Pacifist

"In forming national buying clubs one is simply helping the mail order houses and department stores," declared H. Martin Johnson, secretary of the local retail druggists' association. "In taking up a line of 'sales leaders', if such 'bait' is the same as that handled by mail order houses and department stores, the sooner we quit handling such items, the better off we shall be. I feel sure that if the druggists would cease handling nationally advertised articles that are handled by department stores, the manufacturers eventually would make terms with the druggists. When one tries to compete with the mail order houses and the department stores, one merely helps the people who are causing all the trouble."

C. T. Heller who operates two stores in St. Paul, said: "I am not enthusiastic about such clubs. They may be started but they frequently fail to stand up, though there is a good chance to eliminate middlemen's profits."

C. W. Haase, manager of the City Drug store, said: "It looks like a good thing. It would make good sales leaders available at lower prices, and would eliminate middlemen's profits."

A PHILANTHROPIC PHARMACIST

Comparatively few pharmacists have the faculty of amassing a competency that will enable them to leave benefactions on their death to other than their immediate families. Exceptionally favored individuals connected with pharmacy have occasionally remembered colleges of pharmacy or other organizations devoted to the welfare of humanity, but the establishment of a trust fund by a deceased pharmacist for the operation of a drug store is rather unusual, if not unique in the history of pharmacy. As reported in the ERA last month, an endowed pharmacy is to be established in Middleboro, Mass., when the provisions of the will of the late David G. Pratt, once a member of the Governor's council, become effective. By the terms of the testator's will, one-third of his estate, valued at about \$276,000, is to be set aside on the death of his widow for the purpose named.

The testator directs that the pharmacy when established shall be in charge of a registered pharmacist and furnish supplies free "to deserving and needy persons," and also to "sojourners." Besides affording this assistance, drugs and medicines will be sold for cash to those able to pay, the surplus accumulating from the money so invested to be devoted to the building of roads and sidewalks in the town where the testator spent the greater part of his life. The institution of this charitable undertaking, in so far as it relates to helping the poor and needy, may not be exactly of the type that others with a plethora of this world's goods to devise would elect, but in its conception, the late Mr. Pratt's act must be placed in the same category which contains the promptings that have actuated and dominated the minds of the philanthropists and humanitarians of all ages. No better epitaph is needed than that "they loved their fellow men."

PROBLEMS OF PLANT CULTIVATION

Considerable has been written in the public press since the beginning of the European war by various individuals setting forth widely divergent views concerning the possibilities of medicinal plant cultivation in the United States. These contributions in their entirety are illuminating in that they represent our present unpreparedness and also, our former dependence upon foreign countries for many of the so-called "erude" drugs, as well as what we could do, perhaps, were we to devote intelligent effort to the establishment of a drug plant industry upon our native soil.

Among the noteworthy contributions on this subject is one by Dr. H. H. Rusby, dean of the New York College of Pharmacy, which appears in a recent issue of the Columbia University *Quarterly*, and which is worth reading by all pharmacists,

especially by those who are at all interested in drug plant cultivation. As Dr. Rusby sees it, the greatest possibilities of this industry seem to lie in the cultivation of drug plants by large corporations or under Government supervision with public aid, while he warns the individual against an enterprise which he believes would only become profitable in exceptional cases.

The reasons behind these conclusions are not difficult to understand. The advantages of cultivating most medicinal plants over collecting those which have grown wild are obvious; cultivation assures a dependable supply, lessens the possibility of the admixture of other plants through ignorance, is cleaner and more likely to insure careful preservation in packing and marketing. Against these advantages stands the fact that a large part of the drugs in use are consumed in such small quantities that their cultivation on a profitable scale would soon overstock the market.

A still greater objection to the entry of a large number of agriculturalists into this comparatively new industry is the fact, stated by Dr. Rusby, that we have not at the present time the necessary knowledge of methods to render cultivation successful. In the great drug plant producing countries now devastated by war, the collected knowledge and experience of generation after generation of growers have made the highest development of such an industry possible, but without such knowledge we could not hope to obtain immediately the highest success in similar work here, even though conditions of climate and commercial prospects are most favorable. There is, therefore, much to justify the contention that drug experiment stations should be established and maintained at public expense and thus provide a means whereby the peculiar problems of drug plant cultivation could be studied and passed along for commercial utilization.

The desire of society to do justice to the individual hurt by conditions beyond his control is being manifested in the many enactments dealing with public health, and is also reflected in the decisions of courts in cases relating to workmen's compensation laws. But now comes a new angle on the power of the State to protect its citizens. Under the terms of a bill which is to be presented to the South Dakota Legislature, surgeons who remove a vermiform appendix which is not diseased will not be paid for the operation. If the bill should become a law, the removed organ must be sent to the laboratory for examination, after which it will be returned to the original possessor with a report. If not found diseased, the bill relieves the patient of all financial responsibility attending the operation. The function of this rudimentary organ, which possibly served in the prehistoric days of the evolution of the species the purpose of storing food in the lower animals, has been a much discussed subject. The South Dakota proposition is illuminating, if nothing more, for if enacted, it will at least serve to let in a little "daylight" on this part of man's anatomy.

The Biologicals of the U. S. Pharmacopoeia

How Vaccines and Antitoxins are Officially Treated

F. E. STEWART, Ph.G., M.D., Phar.D.*

(Continued from the February, 1917, ERA, page 49)

History of Smallpox

FINALLY let us consider what has been accomplished in the treatment of infectious diseases by the biologicals now official in the United States Pharmacopoeia: namely, Smallpox Vaccine, Diphtheria Antitoxin and Tetanus Antitoxin.

You of course know that smallpox, or variola, is an acute, highly infectious and contagious disease occurring in all countries, and characterized by the sudden onset of a high fever, followed, in a few days, by an eruption of the skin, which passes through the successive stages of papule, vesicle, desiccation and desquamation.

Smallpox is one of the most fatal and hideous of diseases. Those who recover are usually disfigured for life. Total blindness is not an uncommon result.

History:—Smallpox prevailed in China many centuries before the Christian era. It was first accurately described by Rhazes, an Arabian physician, 900 years before Christ. The Great Plague, described by Galen (A. D. 130-200), and the Black Death, which prevailed in epidemic form in Europe, were doubtless smallpox—"pestilence" and "plague" being used synonymously with smallpox and other eruptive fevers. Smallpox prevailed in the sixth century and again during the Crusades. In Hindostan, according to the tradition of the Brahmins, it is of remote antiquity. Several goddesses worshipped in India were supposed to preside over smallpox and to determine the fate of those afflicted with the disease.

Among the ancient Romans the first authentic description of the disease was given by Philo, a Jewish author who lived during the time of the Roman Emperor Claudius Caesar (40 A. D.)

In 570 A. D., Merius, of Avenches, Bishop of Lausanne, described a violent malady which broke out in Italy and France, to which he referred as *variola*, this being the first mention of the word *variola* in literature.

Smallpox was known in Arabia in 569 A. D., and was found existing in Japan when Europeans first visited that country. The Code of Annals of Ulster reports that in 679 a grievous leprosy prevailed in Ireland, which is supposed to have been smallpox.

Smallpox is believed to have been introduced into America by the Spaniards, it having first appeared in Mexico in 1520. It broke out in Massachusetts in 1633.

Cause of Smallpox. The cause of smallpox is unknown. The disease is probably due to a living germ of vegetable or animal origin—i. e., bacterial or protozoan. Streptococci, though often found in the smallpox vesicles and pustules, and often contributing materially to the production of a fatal outcome, may be regarded as secondary in significance.

Ancient Method of Immunity by Inoculation.

As already stated in my first article, centuries before the Christian era the Chinese observed the immunity against a second attack enjoyed by those who had survived the smallpox, and accordingly attempted to obtain immunity against the disease by inoculation, using the crusts from smallpox patients for that purpose. The Brahmins had also discovered that the inoculation of smallpox produced the true disease in a mild form, so that the malady proved fatal only to one in one hundred, or, under the most favorable circumstances one in three hundred. Lady Mary Wortley Montague, wife of the British Ambassador to Turkey, became acquainted with the method and introduced the idea of inoculation for the purpose of protection into England in 1718; but, as already stated, it became evident that while immunity was secured in the inoculated person, the disease thus induced could be spread as rapidly as by the natural form, and the practice was abandoned.

I have already told you that Jenner had become acquainted with the fact that the peasantry in various parts of the world, particularly in England, believed that sores on the hands of persons who milked cows affected with cow-pox were immune from smallpox, and that he studied the phenomena and by experiment proved this belief to have a solid foundation. Also that he recommended vaccination with vaccine taken from the udder of the cow suffering with vaccinia as a preventive of the disease, and that the method was finally adopted in Great Britain and the United States.

Vaccination Against Other Diseases

I have already called your attention to the work of Pasteur; how he was animated by the wonderful discovery to continue the experiments in regard to vaccination, and succeeded in devising methods for vaccinating against other infectious diseases; so that now we have methods for immunizing against typhoid fever, the bubonic plague, cholera, streptococcal infections, pneumonia, and even common colds.

In writing of the death of Queen Mary of England from smallpox in 1694 Lord Macaulay said: "That disease, over which science has achieved a succession of glorious and beneficent victories, was then the most terrible of all the ministers of death. The havoc of the plague has been far more rapid, but the plague has visited our shores only once or twice within living memory; and the smallpox was always present, filling the churchyards with corpses; tormenting with constant fears all whom it had not yet stricken, leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the betrothed maiden objects of horror to the lover."

The Harleian collection in the British Museum contains an Anglo-Saxon manuscript written in the tenth century, one of the pious exhortations of which is as follows:

"In the name of the Father, of the Son and the Holy Ghost, Amen. May our Saviour help us, Oh Lord of Heaven! Hear the prayers of Thy man-servants and of Thy maid-servants. Oh, Lord Jesus Christ, I beseech thousands of angels that they may save and defend me from the fire and power of the smallpox and protect me from the danger of death. Oh, Christ Jesus, incline Your ears to us."

This affecting prayer shows strongly the terror which the smallpox inspired at that time.

Before the introduction of vaccination, smallpox was the greatest scourge that ever affected the human race. In 1796 Junker wrote that 400,000 lives were lost yearly by smallpox. In 1803 King Frederick William, of Prussia, in an edict, stated that 40,000 died annually in Prussia of the disease. From 1761 to 1800, in the city of London, there was an average death rate of 2037 persons yearly from smallpox. From 1700 to 1800 it is estimated that an average of 800,000 persons died yearly from smallpox throughout the world.

The general fatality of smallpox among those who have never been vaccinated is greatest in children between one and ten years of age, reaching as high as 58 per cent. Before Jenner's discovery, it is estimated that one-tenth of all the children born die of smallpox. Between the ages of fifteen and twenty the fewest deaths occur. After the fortieth year, and as old age approaches, the fatality is again high.

In general the prognosis is worse in women than in men, on account of the complications of child-birth and the conditions which favor the hemorrhagic variety of the disease. On the other hand, among men, irregular habits and the excessive use of alcohol increase the death rate. Among dissolute persons of both sexes the prognosis is very grave. Badly nourished and overworked people, con-

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fined to dark and ill-ventilated rooms, and those depressed by scrofula, syphilis, tuberculosis, or those convalescing from fevers or other diseases, readily succumb to it.

The death rate is usually higher at the commencement of an epidemic than at its close, because those most susceptible or wholly unprotected are usually first attacked.

The simplest form is known as the *discrete* variety. If the pustules be so close to each other that they join, the case is *confluent*. The variety with bloody infiltration is called *hemorrhagic*, or *black smallpox*. In the form of black smallpox, practically all patients die. In the confluent form, more than three-fourths die. In the semi-confluent form, about one-half die, and in the discrete, one-fourth to one-twentieth.

Benefit Conferred by Vaccination.

The immense benefit conferred upon humanity by vaccination against smallpox is hard to realize at the present time, even by those who are familiar with the history of the subject.

In the early part of the nineteenth century, when smallpox—which at first assumed epidemic form in Europe about 1700—had become a veritable scourge, it suddenly began to decline, and this decline continued for decade after decade until the disease lost its terrors, and the great majority of physicians had never so much as even seen a case. How was this almost miraculous change to be accounted for? There can be but one reply to this query: the introduction of protective vaccination by Jenner and its general adoption have controlled and practically eradicated smallpox.

It is now believed that a thorough and continuous practice of vaccination would blot out smallpox from the face of the earth.

From the beginning there has been opposition to vaccination, some of which prevails even at the present time. The Anti-vaccination Society was formed in London to combat Jenner in his work. All kinds of arguments were brought forward against vaccination. It was claimed that the physical characteristics of the bovine species were transmitted by the vaccine, and that the persons who submitted to the operation developed horns and hoofs like a cow. Thousands of circulars were distributed, illustrated by a very remarkable picture, entitled "The Cow-Pox; or the Wonderful Effects of the New Inoculation." This picture represented vaccinated persons with the heads of cows growing out of their foreheads. Women, otherwise good looking, were represented as having horns and hair of a cow in place of the natural hair. Various portions of the cow grew out of the body in different places.

Only Method of Combating Epidemics

Equally foolish arguments are advanced by the Anti-vaccinationists of modern times. While they admit there is no danger of horns and hoofs growing upon those who are vaccinated, they have equally foolish arguments to advance in opposing to the practice. They are trying by every means in their power to have annulled the laws requiring compulsory vaccination. If compulsory vaccination were abolished and the Anti-vaccinationists succeeded in convincing people that vaccination should not be practised, we would soon have a return of the dreadful smallpox epidemics of the middle ages. Epidemics of smallpox are an ever-present menace and can only be combatted by vaccination and strict quarantine. Thus, in Donarenez, a small city in Finistere, France, of about 10,000 inhabitants, where vaccination has been singularly neglected, an epidemic of smallpox broke out in 1887 and 1888, in which 1931 persons, nearly one-fifth of the entire population, died.

In the report of the Municipal Hospital of Philadelphia for 1899, Dr. W. M. Welch gives the average mortality previous to the epidemic of 1894-95 as 58.38 per cent, while during the epidemic of 1871-72 the death rate in unvaccinated cases reached the appalling figure of 64.41 per cent. Imagine one of our large cities, filled with unvaccinated persons, subjected to an epidemic of smallpox with a mortality of 64.41 per cent. Such an epidemic would carry off more than half of the entire population.

Which is to be preferred: smallpox, with its horrors, or a sore arm resulting from vaccination? Consider the facts; observe the horrible nature of the disease; remember the terrible mortality and the disfigurement of the

survivors, and then let every person answer this question for himself.

As for the danger of transmitting other diseases by vaccination, the possibility did exist before the introduction of the modern methods of producing vaccine. In early times the vaccine virus was passed from one person to another, the serum from the vaccine lesion of vaccinated persons being employed to vaccinate others. If the serum was taken from a person suffering from a constitutional disease, there was, of course, danger of transmitting the disease to others. This has been entirely obviated by the use of bovine virus and the modern safeguards thrown around its preparation, as described in my first paper on the subject of the biologicals of the United States Pharmacopoeia.

The danger of post-vaccinal tetanus, which is now being used as a scarecrow by the Anti-vaccinationists, is not to be feared. The United States Bureau of Hygiene issued a bulletin on this subject, which formed the basis of a paper which I contributed to the Proceedings of the Philadelphia Branch of the American Pharmaceutical Association and was afterwards published in the Journal of that Association. In this bulletin, it was clearly demonstrated that there is no danger of causing tetanus by vaccination any more than there is of causing tetanus by any surgical operation. The wound produced by the physician in vaccination, although trivial, should be considered in the light of a wound produced by the surgeon in operation and should be cared for with as much attention as though a limb had been amputated or the abdomen opened by the surgeon's knife.

Quarantine Alone a Failure

The claim that sanitation and quarantine are all that are necessary to prevent the spread of smallpox has been demonstrated as misleading by well-recognized authorities on the subject. Dr. George Dock, one of America's leading physicians, an author and teacher, in the Journal of the Missouri State Medical Association, January 1912, calls attention to the failure of quarantine as a preventive against the disease. His charge that quarantine is ineffectual is illustrated by the experience of an institution for the feeble-minded at Lapeer, Mich., in October, 1910, and at Saginaw in the same year.

The limits of this paper will not permit a more extended reference to this phase of the subject. However, the proofs given by Dr. Dock are well worthy of consideration by those who are combatting the dangerous attempts of the Anti-vaccinationists to abolish compulsory vaccination.

Dr. Dock closes his paper by saying: "When we read the thoughtless expressions of Anti-vaccinationists we often feel as if the best thing to do with them would be to leave them to their folly, but consideration of statistics shows how unfair that would be. There are the minors, who pay a disproportionate toll in such cases. In Saginaw, for example, of the 156 cases, forty-five were under 10 years of age, thirty-five from ten to twenty—more than one-half minors. This shows the supreme selfishness of those who hold that vaccination should be left to the conscience or the complaisance of the individual."

In this connection, it may not be out of place to repeat Dr. Osler's famous challenge to the Anti-vaccinationists:

"A great deal of literature has been distributed casting discredit upon the value of vaccination in the prevention of smallpox. I do not see how anyone who has gone through epidemics, as I have, or who is familiar with the history of the subject, and who has any capacity left for clear judgment, can doubt its value. Some months ago I was twitted by the editor of the 'Journal of the Anti-vaccination League for 'a curious silence' on this subject. I would like to issue a Mount Carmel-like challenge to any ten unvaccinated priests of Baal. I will go into the next severe epidemic with ten selected vaccinated persons and ten selected unvaccinated persons. I should prefer to choose the latter—three members of Parliament, three anti-vaccination doctors, if they could be found, and four anti-vaccination propagandists. And I will make this promise, neither to jeer nor to jibe when they catch the disease, but to look after them as brothers, and for the four or five who are certain to die I will try to arrange the funerals with all the pomp and ceremony of an Anti-vaccination demonstration."

(To be Continued.)

Druggists' Weights, Scales and Graduates

By **GEORGE J. WEIGLE,***

State Dairy and Food Commissioner, Wisconsin.

THE Wisconsin department of weights and measures is one of the first State departments to take up the testing of the appliances used back of the prescription counter in determining the ingredients entering into the composition of prescriptions.

In May, 1914, the attention of the delegates attending the national conference of weights and measures officials was called to this most important matter. In an address delivered, it was shown that many of the weights, scales and graduates used by druggists were grossly inaccurate. The inaccuracies were due in part to the manufacture of defective weighing and measuring appliances and in some instances to carelessness or ignorance on the part of the druggist. In the absence of systematic inspection of these appliances, and in the absence of definite regulations, manufacturers sacrificed accuracy in their efforts to undersell competitors by placing a cheaper product upon the market. They were forced to do this through competition. Prescription weights were stamped from sheet metal, no attempt being made to adjust the weights within the limits of accuracy. To this class of weights belong the small set of denominations from 2 grams to $\frac{1}{2}$ grain selling for a quarter or less, with which you are all more or less familiar.

Prescription scales of improper design and lacking in sensibility and accuracy were manufactured and sold regardless of use.

Glass Graduates Inaccurate

Glass graduates of manifold design with the graduation marks indicating anything but the correct capacity were found in common use. Graduates with the graduation marks blown in the glass were even found in use for prescription purposes. That these graduates were not made with the intent to defraud the public is quite evident, for many of the graduates of the smaller sizes were of larger capacity than that indicated. It is not unusual to find prescription graduates 10 per cent or even more too large. For many years there has been a systematic inspection of the weights, scales and measures in grocery stores and meat markets, but no inspection of the appliances used by the druggists. The druggists did not receive the protection offered to other tradesmen. This is made manifest in our state by a comparison of the number of inaccurate appliances found in drug stores as compared with the number found in groceries, meat markets and other places of business.

During the year 1915, 26.3 per cent of the glass graduates tested by city sealers of weights and measures were found inaccurate, whereas during the same period of time but 14.5 per cent of the tin measures tested were found inaccurate. The inaccuracies in the tin measures were largely due to dents and to the accumulation of oil and other materials on the inside of the measure. The inaccuracies of the glass graduates are due entirely to improper calibration on the part of the manufacturer.

During the year 1915, 34.2 per cent of the prescription weights tested by city sealers were found to be inaccurate, whereas only 10.3 per cent of the weights used in other lines of business were inaccurate. The condition here is due not only to the manufacturer but in a very large degree to carelessness on the part of the druggist. Many druggists in cleaning weights that are slightly tarnished use dilute acid or ammonia. Each time this is done some of the metal is dissolved and the weight becomes correspondingly light. It is not unusual to find prescription weights 10 or 15 per cent light and in many instances reports received at our office show that weights which have been in use for a number of years are from 25 to 40 per cent light. Even the wear caused by throwing the weights together loosely in a box or drawer will soon cause the weights to become light beyond the tolerances permissible. For this reason it is advisable for druggists to use block weights.

While it is not advisable to clean weights, the opposite procedure is necessary in the case of the prescription scale or balance. A watch will not keep good time without an occasional cleaning. Neither will a scale weigh accurately if it receives hard usage and is never cleaned or adjusted.

Periodical Inspection the Remedy

The remedy for the above conditions lies in a periodical inspection. This alone, however, is not sufficient. The manufacturer of these appliances must be regulated. The state of Wisconsin is the first state to our knowledge to issue specifications for prescription balances and weights. The specifications adopted in Wisconsin have been recently adopted in the state of Minnesota. At the last conference of weights and measures officials at the Bureau of Standards, specifications for both prescription scales and prescription graduates were adopted. The adoption by the conference of these specifications will have a tendency to bring about a much needed uniformity throughout the entire country. Manufacturers are falling into line to produce weighing and measuring appliances that comply with specifications. Henry Troemner of Philadelphia has issued a new catalogue which is a decided improvement over any previous issues, in that it takes as its basis of classification the tolerances and specifications adopted by weights and measures officials.

Prescription Balance Errors

It might be well at this point to call attention to a few of the more important regulations. Prescription balances are divided according to use into two classes, viz., Class A and Class B. To the former class belong such balances as the New Triumph and the Favorite. Many of the common box prescription balances belong to Class B. The balances are classified on a basis of sensitiveness. The sensibility of a Class A balance must not exceed .1 grain, that of a Class B balance .5 grain. Class B balances are to be used only in the rougher weighing. It is to be remembered that the less sensitive a balance becomes the greater are the opportunities for error. It is impossible to make direct weighings of less than 10 grains with any degree of accuracy on a Class B balance of $\frac{1}{2}$ grain sensibility. Experiments made at the office of weights and measures at Madison show that when loads of one grain are weighed on a balance of the type mentioned above, errors either in excess or deficiency amounting to as much as 15 per cent result. The errors are not due to the fault of the operator but to the sluggish action of the scale. It is, therefore, highly important that every druggist doing prescription work be provided with a Class A balance. It is also advisable, though not absolutely essential, for druggists to have a Class B balance. The use of a Class B balance for weighing the larger loads will prolong the life of a Class A balance. The new regulations require the manufacturer to label the balance to show the class to which it belongs, and the capacity of the balance. All prescription balances are now required to be provided with a pointer or other indicating device moving over a graduated scale. The manufacturer is prohibited from placing the graduations on the beam too closely together, and the balance must be provided with the proper means for the arrestment of the pans.

The nominal value of all weights must be clearly indicated by lines, dots, figures or other appropriate method. The weights must be tested by the manufacturer and brought within the tolerances prescribed by this department. In this connection it might be well to mention that the manufacturers' tolerance is only one-half as large as the tolerance allowed the druggist.

Specifications for Glass Graduates

New specifications for glass graduates to become effective January 1, 1917, will be issued. These specifications will be the same as those adopted at the conference at Washington. The specifications provide for two types of graduates, the cylindrical and the conical. A definite ratio between the height of the graduate and the diameter

* Portion of an address before the Wisconsin Ph.A., from the 1916 Proceedings.

at the highest point is expressed for the guidance of the manufacturer. In the case of cylinders this ratio is 5 to 1; in the case of cone graduates 2 to 1. The new specifications will eliminate the flat bottom graduate commonly known as the Acme. Duplicate graduates will be permitted, but the main graduations on this type of graduate must extend one-half the distance around the graduate so that when it is necessary to do careful measuring, a proper setting of the ends of the lines can be obtained. Other matters taken care of in the new specifications are the temperature of calibration, 20 degrees C., the marking of the graduate to indicate whether the same is to deliver or to contain, the regulation of the thickness of the graduation marks and the elimination of graduates in which the lines are blown.

In this connection it might be stated that many druggists have more sizes of graduates than are really necessary. Graduates of the capacities of 2 dram, 1 ounce, 4 ounces and 1 pint will answer all of the requirements of the ordinary drug store. It is not advisable to use graduates of the larger capacities in the measuring of small quantities. For example, it is not advisable to use a pint graduate in measuring 2 drams or $\frac{1}{2}$ ounce. Either a 2 dram or a 1 ounce graduate should be used for this purpose.

In conclusion, it might be said that while the report for the past year has not as yet been compiled, it is our belief that when issued it will show a decided improvement over the report for the previous year, inasmuch as field men report the purchase of improved types of weighing or measuring appliances used hack of the prescription counter and the exercise of greater care by the druggist in handling and use of the same.

WOULD AMEND HARRISON LAW

Senator Thompson has offered an important amendment to the Harrison Narcotic bill which would prohibit mescale and mescale buttons. The bill has been offered to the House of Representatives and was at once placed before the Committee on Ways and Means, after it had passed the Senate.

The new amendment provides that "on and after the first day of March, every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away opium, anhalonium (mescale or mescale buttons) or coca leaves or any compound, manufacture, salt, derivative, or preparation thereof, shall register with the collector of internal revenue of the district his name or style, place of business, and place or places which such business is to be carried on: Provided, that the office, or if none, then the residence of any person shall be considered for the purposes of this act to be his place of business.

"At the time of such registry and on or before the first day of July annually thereafter every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes or gives away any of the aforementioned drugs shall pay to the said collector a special tax at the rate of \$1 per annum."

The amendment has the further provisions to be found in the other clauses of the Harrison act and is to be enforced by the Secretary of the Treasury and the collector of the internal revenue through the usual channels.

WANTS PHARMACISTS TO CO-OPERATE

The American Chemical Society is scheduled to meet in Kansas City during the week beginning April 9, 1917. The officers of the Pharmaceutical Division are desirous of preparing an interesting program for this meeting and any and all of the readers of this paper are invited to contribute. A symposium on the ninth decennial revision of the United States Pharmacopoeia is in progress. If any one can or is willing to contribute to this symposium on any subject, such contributions would be greatly appreciated. Contributions can be sent to the secretary, Dr. Beal, Urbana, Illinois, or to the chairman, Dr. L. F. Kehler, 1322 Park Road, Washington, D. C.

UNITED DRUG CO. VS. W. N. JOYNER

Editor, The Pharmaceutical Era:

We notice in your January, 1917, issue an article beginning on page 29 relative to Wilber N. Joyner, in which several references are made to the so-called "United Drug Company" owned and operated by Wilber Newell Joyner.

The following statement is made in this article:

Mr. Joyner organized the United Drug Company six years ago, the object being to operate a chain of stores throughout the northwest, with a parent store in Spokane.

Several locations, according to Mr. Joyner, have been secured in other towns in Washington, Oregon, Idaho and Montana.

He announces that many stores will be started by United Drug Company in a short time.

We enclose herewith a copy of the writ of injunction issued January 5, 1917, from the District Court of the United States, Eastern District of Washington, Northern Division, in the case of United Drug Company, plaintiff, vs. "United Drug Company," Joyner's Original Cnt Rate Drug Company and Wilber N. Joyner, defendants, wherein said defendants are perpetually enjoined:

from further infringing upon the rights of, and unfairly competing with, the plaintiffs, or either of them, in the premises; and especially from employing or using the aforesaid names "United Drugs," "United Drug Company," "Orderlies," "Orderlets," or any of them, or any variation thereof, or any word or symbol so nearly similar thereto as to be calculated to be mistaken for or confused with said names or any of them, either alone or in connection with other words, figures, symbols or accompaniments, upon or in connection with any pharmaceutical, medical, chemical, or other preparation, drug or chemical, or any article of merchandise bought, sold, used or dealt in by wholesale or retail druggists or the like;

In view of the statements made in the article, and the confusion that will likely arise throughout the trade on account of the references to the name United Drug Company, we assume that you had no knowledge of our proceedings against Joyner and his sub-companies, and trust you will give the necessary publicity to this injunction.

Very truly yours,

Legal Department (United Drug Co.)

Boston, Jan. 29, 1917.

A. W. Murray

P. S.—Joyner did not appeal, but has removed the signs bearing the name "United Drug Company."

A. W. M.

WANT PROTECTION FOR GINSENG

Michigan ginseng growers, at their meeting in Lansing the latter part of January, decided to petition the Michigan state legislature for laws to protect the growing of medicinal plants, particularly ginseng, in the state. The resolution was introduced by C. W. Vining of Lakeview asking that the state provide some means by which the growers would be protected on all sides.

Discussion of ginseng raising was then had. Penn Kirk, editor of the *Ginseng Journal* told of the value of production of golden variety, and stated that Italy and England were to try experiments. He claimed that there was no importation danger from abroad because of the stability of ginseng and the rapid consumption of it. Virginia creeper was suggested as a good foliage maker and shield for the growing plants.

The election of officers resulted as follows: President, Dale S. Price of Portland; secretary and treasurer, E. L. Wilder of Muskegon Heights.

COCOA AND CHOCOLATE MEN ELECT

The Cocoa and Chocolate Manufacturers' Association held an organization meeting in the Hotel McAlpin, New York, on January 26th, and elected officers for the coming year in an executive session. The purpose of this meeting was to discuss problems with several non-members who were interested and to prepare the way for the installation of officers in March.

The following were chosen for the coming year: President, Louis Runkel, Runkel Brothers, New York; vice-president, S. S. Marvin, Pennsylvania Chocolate Company, Pittsburg; treasurer, Frank D. Huyler, Huyler's, New York.

Efficiency, Key Note of Navy Drug Store

Brooklyn Supply Station Feeds Entire Sea Force

IN THESE days of preparedness, war talk, launching of new battleships, and "greater Navy," there is an interesting feature that is claiming the attention of Brooklyn. In perhaps the busiest part of that city of homes, antiquated trolley systems, and conservative elements is the Navy's big drug store, and it appears to be assuming an importance, greater every day.

The drug store is in the corner of the Naval Hospital reservation on Flushing avenue, just beyond Wallabout Market in which thousands of wagons and automobiles go back and forth each day. It is an unassuming building, recently enlarged, but from it the drugs which are supplied to all of the Naval stations, hospital ships, sick bays, and warships, are dispensed. The managers of that drug store, Naval Medical Inspector R. P. Crandall and his assistants, Pharmacist A. A. O'Donoghue and Pharmacist Schaffer, do not put up prescriptions, but they deliver more drugs over the counter in a day than many drug stores do in a year.

To supply the Navy from one depot is too gigantic a task, even for the United States. So other depots are supplied from the central station. There is another depot in Mare Island Navy Yard and a third in Canacao, with branches in all navy yards; but supplies for every one of these come directly from Brooklyn.

Your Uncle Sam, as a business man is modest. These days the most hardened reporter on one of the great New York daily papers can't get within "a mile" of the inside of the drug store. The ERA interviewer was excluded in the same way. It is not, however, that the Navy department doesn't want the American druggists to know how it does business, it is because Europe is at war, and secrets are secrets, and should be kept.

Navy Yard Exclusiveness

The writer of this little story remembers an incident that happened to a daily newspaper man that might be related, at the risk of taking the druggist away from his business for a moment. It was during the Vera Cruz troubles a few years back, when many sailors and soldiers were injured there. The hospital ship Solace returned with several hundred wounded and the reporter was assigned by his managing editor to "cover" the return to Brooklyn.

When he got to the hospital entrance, after seeing the ship dock and getting what information he could from those wounded men who were not at once removed to the hospital, he was denied entrance. The best "stories" were, of course, in the hospital. But, as the Naval authorities do with their drug store, so do they do with the hospital in war time, or near-war time. No one is admitted to the yard.

The reporter did not like to be denied. So he wandered up Flushing avenue a few blocks and when the marine who was on guard was looking at the sights in Wallabout Market, slipped through the officers' private entrance. On the lawn of the hospital he got a good "beat" interview, but it took his paper two or three weeks (which they gladly spent, by the way) in smoothing over Uncle Sam so that he would give the courtesies of the yard to reporters of that paper thereafter.

Some such thing might happen if a determined effort

to get into the drug store in the hospital yard was made. The officials are more than ever strict now, however, and it would be impossible to avoid real trouble, if one were

to "sneak" or try to get into the yard. He probably would never get inside, except to go to the guard house as a matter of fact.

This much can be said about the big drug store there, however. It is in a remarkably small building, but it is a most efficient place. The quantities of drugs—you can imagine what it handles when it supplies eleven naval stations, ten or fifteen navy yards, and more than 200 ships, together with several smaller donations to supply ships, emergency stations, etc.—are never allowed to

accumulate. The drug supply station is an admirable lesson in how to turn over drug stock in a hurry.

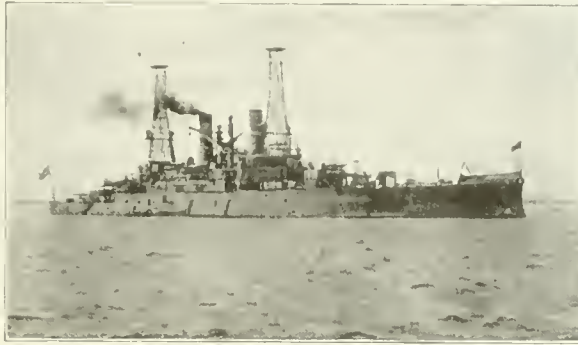
Inspector Crandall has worked out a scheme by which every available inch in his three-story building is occupied. By the way, the building is not more than 50 feet long by 40 feet wide, so you can really get an idea of what the Inspector has to work with. It is near the water's edge, however, and with the Navy Yard marine squad turned into shipping clerks, taking the supplies direct to the waiting steamers or floats, the stock can be handled quickly and carefully.

Not the least interesting feature of the work of this drug store is the supplying of a battleship. Take the Mississippi, for instance, the giant that was launched at Newport last month. Soon she will be ready for sea trips and before she gets her trial she will be sent up to New York. There she will lie alongside dock number one, and will be supplied. Among other things, her drug store will be put aboard.

Did you ever see a warship's drug store? It's a clever little room, with just enough space in it for moving around, the rest given over to boxes, cases and bottles—although as few bottles as possible. Bottles break, you see, and when a ship gets to rolling, there is difficulty. Medicine for colds, cramps, dressings for minor injuries, pills of all description, and that sort of thing predominate. Of course there are more heroic drugs, which are used in connection with the sick bay.

The astonishing part of it all is that it is cramped into such a small space. But the ship's medical officers are as mandatory on the subject of efficiency as the strictest head of the greatest department store in existence. There is no waste. It would never be permitted. There is no waste room, either. The pharmacist can get the pills the "medic" asks for in two or three seconds. It could not be otherwise. Suppose a big gun exploded aboard and six or seven sailors were badly hurt. They were taken to the sick bay—wouldn't it be a fine "howdye-do" if the drug store was in such condition that the needed salve and medicine could not be supplied very quickly?

It is part of the business of Inspector Crandall and assistants to see that every battleship, every destroyer, every cruiser, every submarine, every supply ship and most of all, every hospital ship has its full quota of supplies. He must also fill requisitions from the Naval stations and Navy yards. And besides that, his little store must see that the sub-supply depots in Canacao and Mare Island are always filled so that there need be no delay in supplying ships that may be operating from either of those bases.



U. S. S. FLORIDA

The Chemistry of Modern Washing

Function of Soap and of Alkali and Their Uses

THROUGH the efforts of the Committee of the American Chemical Society, many points of general interest are being brought to the attention of the general public through the daily and technical press, and it is a common saying that in time the most complex invention comes back in principle and even in form to the simple elemental type from which it was derived.

Something of this same kind of "reversion" has certainly taken place in the apparently simple process of getting things clean. These cleaning processes vary in character from the everyday washing of clothes to the washing of automobile rims before finishing; from the washing of wool as it comes from the back of the sheep to the washing of a man-o-war's deck.

Wood Ashes Early Source of Alkali

In earlier times, when an article was to be cleansed, it was washed with the aid of soap as a matter of course, and no thought was given as to why soap should be a cleansing agent. These early soaps were efficient cleansers, but in many cases were hard on the materials that were cleansed. Certain kinds of "dirt" were not removed by the soap but by mechanical action, and often the cleaning was accomplished only by the wearing off of the contaminated surface of the article being cleaned. These earlier soaps were rather crudely made from mixed fats, and the homely processes used generally insured a large excess of free alkali. The early source of the alkali was principally wood ashes, which contained considerable amounts of potash. Later, in about 1823, artificial alkali, which was in the form of caustic soda, began to be used in England. This soda alkali had the advantage of producing a hard soap and in many cases was not so destructive on the articles that were cleansed. Later, they began to make selection of the fats used in the manufacture of the soap, and then soaps containing but very little excess alkali were produced, and it was found that these soaps did not have the cleansing power of the earlier soaps which contained the excessive alkali. It, therefore, became the custom to incorporate varying amounts of soda ash or other mild forms of alkali in soap, but time proved that in many cases these forms of alkali were still too strong.

Development of Commercial Cleansing

As the population became more congested, there were developed commercial cleansing organizations which made a business of cleansing various articles for the public. With this development the people became more critical as to the efficiency of the cleansing operation and the attack on the goods cleansed. Naturally, therefore, attention was directed to securing efficient cleansing without destruction of goods. It was found that alkali had a distinct function in the operation and that in many cases the cleaning could be entirely effected by the alkali alone. In other cases it was found that the operation could be divided and that the use of the alkali in a separate operation gave increased efficiency and a lower cost. In these investigations it developed that the soap acted in a more or less mechanical manner and removed only such materials as could be washed away in a solid state or in an emulsion. It was found that some of the "dirt" was "set" in the goods and made more difficult to remove by the action of soap, but that if the goods were treated first with some form of alkali this material would be taken out.

It was found that various operations required soda of varying character, and that the soda alkalis were in most cases fully as efficient as potash alkalis and more economical to use. Hence the use of alkali in cleansing resolves itself almost universally into the use of soda in cleansing. In the cleansing of textiles, it was found that under ordinary working conditions the action of caustic soda, or lye, and soda ash was too harsh and as a result of this there came to be used milder forms of soda, such as borax.

This, however, was expensive, and later there was de-

veloped another form commonly known as sesquicarbonate of soda, which was an efficient cleanser without unduly attacking the goods cleansed. On account of the difficulties of manufacture of the sesquicarbonate many firms made up mixtures of soda ash and bicarbonate of soda approximating the composition of sesquicarbonate and possessing more or less of the properties of that compound. These materials have a very mild action and are especially adapted in all cleansing operations where soda is suitable, where the materials to be cleansed would be attacked by alkalis as strong as soda ash or where the operator's hands come in contact with the cleansing solution, such as in the cleansing of containers and apparatus in dairies and creameries, and other food containers.

With the increase in the marketing of food products or beverages in bottles and the increase in size of the plants producing these materials, there were developed machines for the automatic cleansing of the bottles used. It was found in this case that a strong form of soda was required to give efficient results, and for this purpose caustic sodas or mixtures of caustic soda and soda ash are generally used. It has been found that soda is applicable to many other cleansing operations where it shows advantages in economy and efficiency of cleansing. Some of these domestic purposes are the cleansing of unfinished wood floors, tile floors, marble walls and fixtures, and the washing of dishes in hotels and restaurants, in dish-washing machines.

HOME-GROWN LEMON-GRASS OIL

The attention of growers of volatile oil plants is called to the possibilities of profit in the production of lemon-grass oil in a new publication of the U. S. Department of Agriculture, Bulletin No. 442. Because of the overhead charges for a plant which will be in use only a few weeks in the year, the production of lemon-grass oil by itself, it is said, probably will not be profitable, but by growing it in conjunction with other volatile oil plants, a long distilling season may be attained and greater use obtained from the distilling plant.

At the present time about 100,000 pounds of lemon-grass oil are used in the United States, chiefly in the perfume and soap industries. Practically all of this oil is imported, most of it being produced in the East Indies. There seems to be, however, no reason why lemon-grass cannot be grown successfully in the subtropical portions of the United States.

The plant does best on well-drained, sandy loam, but it is suggested that the high pine lands of the Florida peninsula would be suitable. Newly cleared sandy pine land without any previous application of lime has given good results. On the other hand, poorly drained soil should not be used. The crop, it is said, may be planted with safety where the temperature does not fall below 25 degrees F.

The first year, two cuttings can be made, thereafter three harvests a year should be expected. Close cutting is not profitable because of the low oil content in the lower portion of the plant.

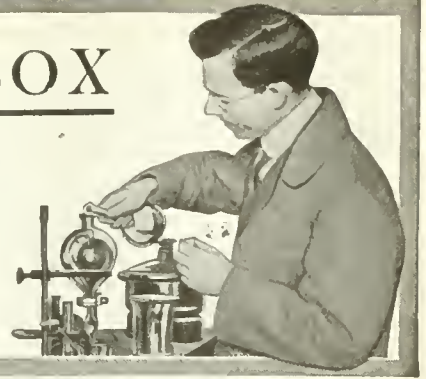
Commercially, the investigators of the Department of Agriculture have had no difficulty in selling samples of the oil produced in their experiments in Florida at a price equivalent to that obtained for the better grades of imported oil. Eighty cents per pound is taken as the average price to be expected under average conditions. A well-cared-for acre of lemon-grass should yield, it is said, about 35 pounds, or a gross income of \$28 an acre. After the first year the expense of growing the grass and distilling the oil is estimated at approximately \$17 an acre. In this estimate, however, it is pointed out, no allowance is made for such charges as taxes, insurance, interest, or depreciation of outfit. These items are of sufficient importance to make it doubtful whether the production of lemon-grass oil by itself can be recommended.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Gelanthum: Unna's Jelly

(T. R. L.)—The composition of "gelanthum," also known as "Unna's Jelly" has been variously stated. According to the National Standard Dispensatory, "it is said to contain 2½ per cent each of gelatin and tragacanth, 2 per cent of thymol, and 5 per cent of glycerin, and is flavored with rose water."

An English pharmaceutical journal gives these formulas:

(1)

Tragacanth	150 grains
Gelatin	120 grains
Glycerin	6 fl. drams
Thymol	¼ grain
Distilled water	a sufficiency

The first two ingredients are placed in a covered jar with 10 ounces of water, the jar is then transferred to a steam bath for 24 hours. The product is then pressed through muslin, well mixed, the glycerin added, heated on a waterbath for an hour, and finally made up to 12 ounces with water containing the thymol in solution.

(2)

Tragacanth	110 grains
Gum acacia	30 grains
Gelatin	120 grains
Distilled water	10 fl. ounces

Make a paste as in the preceding formula, adding:
Glycerin

Heat again and make up with thymol water to 12 ounces.

This preparation has been suggested by Unna as a vehicle for the application of ichthyol, salicylic acid, resorcin, and other skin remedies, and is said to be preferred to fatty vehicles on account of its water-soluble character. See also the formulas for dermatologic pastes of the National Formulary, 4th revision.

Sabadilla in Tear-Producing Gases

(M. H. W.)—We do not know to what extent sabadilla is used in the present war for the manufacture of asphyxiating and tear-producing gases, but last year Consul Homer Brett, of La Guaira, Venezuela, reported to the Department of Commerce that a telegram from England had been published in Caracas stating that such was the case, and this, coupled with the fact that sabadilla seeds and all preparations compounded from them were declared contraband of war by England, has no doubt given some credence to the story. Consul Brett reported the following facts concerning sabadilla, which is exported only from Venezuela:

"Sabadilla, known locally as 'cevadilla,' a diminutive of the Spanish word 'cebada,' meaning barley, is the name of a plant of the lily family, botanically called 'Veratrum sabadilla Retzrus,' occurring only in Venezuela and Mexico. The highly-poisonous seeds have long been used in medicine. The substances produced from sabadilla seed are cavadine, or crystallized veratric, an alkaloid with the formula $C_{27}H_{49}O_9N$; veratric acid ($C_{27}H_{47}O_9$), and sabadalline ($C_{34}H_{59}O_8N$). This last is an amorphous, pleasant smelling alkaloid, that accelerates the beating of the heart.

"While nothing is known in La Guaira as to its use in the production of war gases, it is a fact that sabadilla dust irritates the eyes, the throat, and especially the nose so

much that laborers working with it are obliged to wear protecting masks. Sabadilla powder is used by cattle raisers in this country as an insecticide with excellent results. It is stated that in Europe it is used in the manufacture of disinfectants, and that in the Balkan States and Russia it is employed in tanning fine leathers and as a mordant for dyes. The first exportation from Venezuela was made to Hamburg 25 or 30 years ago. The foreign demand has never amounted to more than 5,000 sacks annually. Whenever production passes beyond this point the price has fallen below the cost of gathering. It is not a cultivated crop, but might become such if new uses were discovered which would cause an increased and regular demand."

The exports of sabadilla to all countries, as stated by Consul Brett, amounted to 256,546 kilos in 1913, 169,228 kilos in 1914, and 86,248 kilos for the first six months of 1915, most of the product previous to 1915 going to Germany. For the entire year of 1915 exports of sabadilla to the United States, as declared at the La Guaira consulate and the Caracas agency, were 61,433 pounds, valued at \$9,097, as against 73,732 pounds, worth \$7,454, in 1914. He also added that the newspapers stated that immediately after the publication of the telegram referred to above, the price of sabadilla seed in Caracas rose from 40 bolivars (\$7.72) to 60 bolivars (\$11.58), but that none was to be had in that market. Any one who has worked with veratrine knows how even the most minute quantity of this substance is powerfully irritating to the nostrils, and that when applied to the mucous membrane of the nose and throat, it produces violent sneezing and coughing, effects which pharmacologists state "are due to the stimulation of the peripheral endings of the sensory nerves." We suggest that you read what the dispensaries have to say concerning this drug.

Paste for Cleaning the Hands

(E. T. H.)—Various formulas for preparations in paste form for cleaning the hands of workmen have been suggested as is shown from the following taken from the Era Formulary:

Hand Paste

(1)

Soft soap	16 ounces
Ammonia water	1 ounce
Pumice stone, fine powdered	6 ounces

Mix well and put up in well closed cans.

(2)

Soft soap	1 pound
Fine sand	1 pound
Glycerin	4 ounces

Mix well.

Soap Paste for Motorists

Soft soap, 80 parts; solution of ammonia, 5 parts; benzine, or oil of turpentine, q.s.; finely levigated pumice stone, 30 parts. This may be made by first mixing the soap and solution of ammonia, incorporating the solvent and then adding the pumice stone. A non-gritty paste may be made by melting 3 parts of soft soap at a gentle heat, removing from the fire, and gradually incorporating oil of turpentine, 1 fl. part.

Manufacture of Extract of Beef

(W. H. B.)—Extract of beef as made by the Liebig process is usually prepared as follows: Fresh lean beef, freed from sinews, is thoroughly chopped or minced in a suitable apparatus and extracted with ten times its weight of water heated by steam. The mixture is strained and the liquid set aside for a few hours to become cold, when fat and gelatine separate and are removed. Finally the liquid is evaporated in a vacuum apparatus to the subsistence of a soft extract. In some establishments, the original mixture of meat and water or the subsequently strained liquid, is boiled for some time to get rid of the coagulable albumen.

The yield of extract which, when prepared by the above process, consists wholly of the water soluble constituents of the meat, varies from 2.25 to 3 per cent of the weight of the meat used, so that one gram should represent about 30 grams or one ounce should represent nearly two pounds of lean beef. According to Dr. Wiley ("Foods and Their Adulteration"), the Liebig method of preparing beef extract is practically that described for making a soup stock under pressure, instead of using only the trimmings and refuse of the animal. However, "the whole of the flesh is usually employed. The bones are sometimes used in the making of a beef extract. The fresh meat is cut into small pieces and extracted under pressure as already described. After cooking and filtering the product, it is brought in vacuo to a proper consistence." According to Wiley's statement, "it requires about 34 pounds of meat to yield one pound of concentrated extract, and this extract may be diluted for consumption so as to make from 6 to 7 gallons of beef tea. Liebig does not recommend the presence of gelatin in beef extract because, being cheaper in quality, it is an adulteration of the genuine article, which should contain only the pure bases and not the gelatinous principle of the meat in the tendons and bones."

Almond Lotion

(F. L. M.)—"Please publish a formula for a good almond lotion in the ERA and oblige."

Here are two formulas:

(1)

Sweet almonds	1 ounce
Alcohol	1½ ounces
Glycerin	4 fl. ounces
Boric acid	32 grains
Tragacanth	40 grains
Rose water	q. s.

Mix the glycerin with 11 fl. ounces of rose water and make a mucilage with the tragacanth. Blanch the almonds, and emulsify with the glycerin, rose water and tragacanth mixture in three portions of five ounces each, straining after each operation. Add the alcohol containing the boric acid in solution and make the product up to 1 pint.

(2)

Blanched sweet almonds	1 ounce
Glycerin	1 ounce
Simple tincture of benzoin	½ fl. ounce
Oil of ylang ylang	5 drops
Powdered borax	1 dram
Rose water, enough to make.....	20 fl. ounces

Add the borax to the blanched almonds and beat to a smooth paste. Gradually dilute with the rose water, straining through fine muslin until 15 fl. ounces is obtained. Add the tincture to the emulsion very gradually, shaking well after each addition; lastly add the oil of ylang ylang, with enough rose water to produce 20 fl. ounces. If desired, ¼ ounce of fresh curd soap, cut in fine shavings, may be dissolved in a portion of the rose water by the aid of gentle heat. This prevents separation.

Waterproofing Wearing Apparel

(E. W. P.)—A process using wool fat and described in one of our foreign exchanges some time ago for the rapid and extemporaneous treatment of military uniforms for the purpose of rendering them impermeable to water, is as follows: Dissolve 500 grams of lanolin in the required amount of chloroform, mix with 4500 grams of gasoline and lightly impregnate the uniforms by immers-

ing them in the mixture for a few minutes; express the excess liquid and dry in air.

A modification of this process consists in the use of a 5 or 10 per cent solution of wool fat in any fat solvent, such as petrol, carbon tetrachloride, or benzene. If petrol or benzene is used it should contain half its volume of carbon tetrachloride or of dichlorethylene, in order to render it non-inflammable. The clothes are merely soaked in the solution, kneaded and moved about for a few minutes, then wrung out and hung up to dry in the open air. There is no need to remove buttons or facings. An aluminum salt process is to impregnate the material for twenty-four hours with 5° Bé aluminum acetate solution, diluted 1 to 40 with water, then dry in hot air, and draw through a 5 per cent soap solution. A trace of undecomposed soap remains in the fabric, and this is removed by passing the soaped fabric through a solution of alum or aluminum acetate, rinsing, and drying. In using this process, the metal buttons should be removed.

Deodorizer for Inside Closets

(M. G. F.)—In further reply to your query, January 1917 ERA, page 16, a subscriber suggests that you use caustic soda for cleaning inside closets, this being one of the substances employed for that purpose.

Dressing for Top of Dispensing Counter

(Dispenser)—Any of the usual methods employed for laboratory table tops will answer equally well with wooden topped dispensing counters, a number of which have been published in previous volumes of the ERA. A so-called acid proof solution, recommended by one authority, is the following: Solution 1—Iron sulphate, 4 parts; copper sulphate, 4 parts; potassium permanganate, 8 parts; water, enough to make 100 parts. Solution 2—Aniline, 12 parts; hydrochloric acid, 18 parts; water, enough to make 100 parts. Apply solution No. 1 first, when hot. When it has dried, remove the excess by thorough rubbing, and then apply solution No. 2. When the wood is dry, apply a thin coat of linseed oil thinned with turpentine.

A method recommended by F. W. Nitary in the *Journal of the A.Ph.A.* some years ago, directs the removal of the varnish, if the top has been varnished, and a thorough cleaning of the wood with soap and water. Then allow the wood to dry. Prepare a saturated solution of potassium chlorate, heat to boiling, and apply to the wood while hot, so that it will penetrate the fibre. When dry, apply a second coat in the same manner. Now prepare a 20 per cent. solution of copper sulphate and apply boiling hot, after the former has dried, allowing the wood to become well saturated and taking up any surplus liquid remaining after 10 or 15 minutes, so that no appreciable crystallization takes place on top of the wood. When this is dry, apply a solution made by dissolving 90 parts by volume of aniline oil in 60 parts by volume of hydrochloric acid, diluted to 500 parts with water, and allow that to well penetrate the wood. Let this coat dry about 6 hours or over night, then apply a heavy coat of hot, raw linseed oil. Allow to stand 6 hours or over night and scrub well with soap and water until all surplus color has been removed, that is, until the water stays clean; then allow to dry and well rub down with linseed oil, applying several coats (a day or two apart) if necessary to completely fill the pores of the wood. This gives a deep-black finish, with a slight gloss, which, it is claimed, can be kept in perfect condition by an occasional scrubbing with soap and water and a subsequent rubbing down with linseed oil.

Re-Inking Ribbons in Duplicating Machines

(T. W. F.)—We are unable to give the formula or formulas employed in the various copying machines in use. For re-inking ribbons the following formula has been suggested: Aniline black, 1 ounce; pure grain alcohol, 15 ounces; concentrated glycerin, 15 ounces. Dissolve the aniline black in the alcohol, and then add the glycerin. This is for a black ink. For blue, use Prussian blue, and for red, use red lead instead of aniline black. The ink thus made is also recommended for rubber stamping pads.

A process for making mimeograph inks recently patented in the United States, contains the following points which show the line along which some inventors are work-

ing: (a) A carbon black pigment is ground with a mineral oil with or without the addition of a small proportion of blue pigment, and the mixture is incorporated with Turkey-red oil or other sulphonated oil. (b) A colored pigment of lake color is used instead of the black pigment specified in the preceding. (c) A dyestuff of the desired color, or its base is dissolved in alcohol, and then an acid capable of forming oil-soluble colors and a small proportion of a solvent for basic aniline dyestuffs are added. The solution is ground with a mineral oil, with or without the addition of another pigment, and Turkey red oil is added to the mixture. As we have stated, this process is covered by U. S. patent.

As a rule almost any good stencil ink will work when used with the ordinary duplicating machine, the following formula for such an ink being taken from our files: Shellac, 2 ounces; borax, 2 ounces; water, 25 ounces; gum arabic, 2 ounces; Venetian red, lampblack, Prussian blue, or any desired coloring substance, a sufficiency. Boil the shellac, borax, and some water until solution is effected; add the gum arabic and withdraw from the fire. When the solution has become cold, complete to 25 ounces with water and add enough more of the coloring substances to bring the ink to a suitable consistency.

Golden Tincture

(H. E. B.)—A wide variety of opinion prevails as to just what preparation is wanted when "golden tincture" is called for. In a former edition of Remington's "Practice of Pharmacy," the following formula is given under this title:

Ether	2 fl. ounces
Tincture of opium	2 fl. ounces
Chloroform	4 fl. drams
Alcohol	2 fl. ounces
Mix. Dose, 3 to 20 drops.	

An Eclectic preparation called "golden tincture" is made as follows:

Balsam of tolu	1 ounce
Guaiac resin	1 ounce
Hemlock gum	1 ounce
Myrrh	1 ounce
Oil of hemlock	1½ fl. drams
Oil of wintergreen	1 fl. ounce
Alcohol	4 pints

Reduce the solids to a coarse powder, mix all, macerate for 14 days agitating frequently, and filter. Recommended for rheumatism, colic, pains in the stomach, chest, etc.

It has been stated in the pharmaceutical journals that Hoffmann's Anodyne, colored with tincture of turmeric, is usually dispensed in German communities on orders for "golden tincture." If we remember correctly, the name has also been applied to Bestuscheff's Tincture (Ethereal tincture of Ferric Chloride, N.F.), although we cannot locate our authority for this designation at this time. Under the title "Goldtinktur," suggested by Hager this formula has been printed:

Potassium acetate	¼ ounce
Caramel	90 grains
Spirit of ethyl chloride	1½ fl. ounces
Acetic ether	2 fl. drams
Simple syrup	1½ fl. ounces
Water	2 fl. ounces
Alcohol	12 fl. ounces

Dissolve the caramel in the water and add the other ingredients.

From this array of formulas it is somewhat difficult to say whether any one of them will meet the requirements or not. It is probable, however, that this can be determined from the customer who should be able to tell what use he may want to make of the preparation.

Formulas for Tooth Paste

(W. L. B.)—As a rule toothpastes are powders like precipitated chalk, powdered cuttlefish bone, charcoal, cinchona or other substance mixed with a sweet excipient, such as honey, simple syrup or glycerin, etc., to form a paste of suitable consistency. Sugary excipients are more or less objectionable, unless the paste be used quickly, as

they gradually ferment and react on the other ingredients. A so-called "ideal" excipient and suitable for most tooth pastes, is the following from the ERA FORMULARY:

Saccharin	8 grains
Alcohol	1 ounce
Glycerin	3 ounces
Water	9 ounces
Gelatin	2 drams

Dissolve the gelatin in the water on a water bath. Dissolve the saccharin in the alcohol, add the glycerin, and mix the two solutions. As stated, this will work with most powders, except when borax forms a part. In such a case the glycerin may act on the borax, liberating boric acid, which in turn will set free carbonic acid gas from calcium carbonate, (chalk), in consequence of which the paste will become spongy.

Here is a formula in which soft soap and glycerite of starch are employed:

Soft soap	1 ounce
Glycerin	8 ounces
Starch	½ ounce
Water	½ ounce
Precipitated chalk	6 ounces
Oil of peppermint	½ ounce
Coloring	q. s.

A glycerite of starch is prepared with the starch, glycerin and water, the soap added, and with the flavoring and coloring added, rubbed into a homogeneous paste. The precipitated chalk, after bolting through a No. 14 bolting cloth sieve, is then added, and the whole worked into a smooth paste, which is conveniently filled into tubes by the aid of a sausage stuffer. The flavor may be changed to suit, and the coloring may be omitted. In large quantities the mixing may be done with a bread mixer, putty machine or other mechanical contrivance.

Shaving Paste for Collapsible Tubes

(G. R.)—Try the following: Lard, 7 pounds; caustic potash, 1 pound; water, 3 pints; glycerin and perfume, a sufficient quantity. Melt the lard in a porcelain vessel over a waterbath; dissolve the caustic potash in the water, and pour the solution very slowly into the melted lard, stirring thoroughly all the time until saponification is completed. Then add the requisite perfume, and sufficient glycerin to render the mass thin enough to be adapted for use in tubes.

The following formula has been recommended for a cream or paste for use in shaving without a brush:

Stearic acid	200 grains
Ammonia water (28 per cent)	15 minims
Solution of potash (5 per cent)	360 minims
Glycerin	1 fl. ounce
Water	9 fl. ounces
Perfume	a sufficiency

Melt the acid, add the hot water, glycerin, and solution of potash, previously mixed and brought to a temperature of 80 degrees C., adding the ammonia water just before mixing with the stearic acid. Stir and heat a few moments until the mixture thickens, then cool, and add the perfume. For perfume a mixture of lavender and bay oils is said to be particularly suitable.

Preventing Moisture on Eye Glasses

(E. C. A.)—The following formula has been published for a preparation to prevent the deposition of moisture on eye glasses:

Potassium oleate	2 av. ounces
Glycerin	1 fl. ounce
Oil of turpentine	1 fl. dram

Soft soap may be used instead of potassium oleate, although the results are not so satisfactory. Melt the oleate and glycerin together on a waterbath, then add the oil of turpentine. Should the paste be too thick it may be thinned by the addition of more glycerin.

Another method of securing the same results is to apply a very thin coating of vaseline or white oil which it is said, will prevent the deposit of moisture on eye glasses.

BOOKS REVIEWED

MANUAL OF ORGANIC MATERIA MEDICA AND PHARMACOGNOSY. An introduction to the study of the Vegetable Kingdom and the Vegetable and Animal Drugs. (With syllabus of inorganic remedial agents.) Comprising the botanical and physical characteristics, source, constituents, pharmacopoeial preparations, insects injurious to drugs, and pharmacal botany. By Lucius E. Sayre, B.S., Ph.M., dean of the School of Pharmacy, professor of materia medica in the University of Kansas, etc. Fourth edition, revised, 8 vo., 606 pages, 302 illustrations, cloth, \$4.50 Philadelphia, P. Blakiston's Son & Co.

In presenting a new edition of this standard work, the author comments on the fact that the last revision of the Pharmacopoeia has required, on the part of revisers, very exceptional work directed toward the subject of standards, and that inasmuch as the United States Pharmacopoeia, as well as the National Formulary, is mentioned in the statute known as the Food and Drugs Act, this revision has become of greatest importance. Recognizing this, he has taken great pains in the revision of this edition of his volume in an endeavor to have it conform in every particular to those works, and especially that it shall conform to the official standards.

We believe that he has accomplished this undertaking, and that the continued usage of this book will fail to discover any glaring inaccuracies. Users of previous editions of this materia medica will find in this volume some changes in the manner of presentation. Thus, the Families of plants yielding organic drugs have been rearranged, the order followed being that adopted by all botanists of note at the present time, commencing with the Algae, Fungi, and other cryptogamous growths. This method has required an entire transposition of the natural orders of the former edition. The chapter on inorganic chemicals has been enlarged, while added to this is a brief chapter on therapeutic action, which is intended as a suggestion to students of how to expand their knowledge in this direction by reference to other works.

The text is divided into four parts, as follows: Part I, A Study of Drugs, which covers classification, titles of new remedies, a conspectus of official drugs arranged according to structural characteristics, and a conspectus of official and unofficial drugs arranged according to prominent physical properties and subdivided by odor and taste. Part II, Drug Descriptions, which embraces four sections covering respectively, organic drugs from the vegetable kingdom, which are described and arranged according to families or natural orders, from Algae to Compositae; animal drugs; synopsis of natural orders or families, and of drugs arranged according to Part II; and drug assay processes. Part III, Insects injurious to Drugs; and Part IV, Powdered Drugs, in which are set forth methods of identification and official drug powders, reagents and processes, and methods of illustrating the character of cell-walls and cell-contents. In the matter of illustrations explanatory of the text, this book is very complete, while the occasional insertion of outline maps with the drugs indicated in their natural localities will prove instructive to the student; especially at this time when commercial necessity has caused the grower of drug plants to study as he has never studied them before the natural history and habitat of such plants. Whether as a textbook for the student or a reference work for the pharmacist, we are sure this volume will continue to hold its own with the several very satisfactory works already covering this field.

A BIBLIOGRAPHIC GUIDE FOR STUDENTS OF THE HISTORY OF PHARMACY. By Edward Kremers, 8 vo., 55 pages. Published by the University of Wisconsin, Madison.

This bulletin may be taken to represent a new direction in the instructional methods of colleges of pharmacy, and so far as we can recall, it is the first systematic attempt that has been made in this country to provide an outline or bibliographic guide for the study of the history of pharmacy. The cultural value of such study and the broadening influence it may have upon the student will prove beneficial in the highest degree, for a knowledge of the evolution of one's calling helps to link it up with the world's progress. According to Dr. Kremers, any attempt at a classification of pharmaceutical history cannot be based on periods of either chemical or other devel-

opment, neither on the more artificial milestones, the centuries, but must rest on those characteristics that are comprised in the German word "kulturgeschichtlich." In other words, the history of pharmacy should be regarded as a part of the history of civilization. In accordance with this underlying principle, the classification according to periods of general history with the subordinate classification according to races and political units is suggested as seemingly the most rational.

This classification (according to periods of general history) the author presents as follows: 1, First period, antiquity; pharmacy as practiced in the civilized countries of antiquity, *a*, Egypt; *b*, Asiatic countries; *c*, Greece; *d*, Rome. 2, Second period, Middle Ages; the practice of pharmacy by the Arabians. 3, Third period, the pharmaceutical renaissance in the European (Christian) states and the development of pharmacy in their colonies; *A*, The Romance countries; *a*, Italy; *b*, France and French colonies; *c*, Spain, Portugal and colonies; *d*, Roumania. *B*, The Germanic countries; *a*, England and her colonies; *b*, the German states. *C*, The Slavic and Magyar countries. *D*, The United States of America. 4, Supplement: *A*, Asiatic countries which exerted little or no influence on European civilization; *a*, China; *b*, Japan. *B*, Semi-civilized and barbaric peoples; *a*, The American Indian; *b*, the Negro, etc.

We have read this bulletin with a great deal of interest and can congratulate the author on the manner in which he has assembled his material and articulated it into a connected whole. If the educational dictum is true that a knowledge of civics and history is necessary for good citizenship, as these subjects are emphasized in our common schools, then surely a knowledge of the evolution of pharmacy must have place in the education of the pharmacy student if he is to be raised to the level of practitioners in other lines of professional work.

BIBLIOGRAPHY RELATING TO BOTANY, EXCLUSIVE OF FLORAS. Vol. II, No. 12; January, 1917. Authors, M. Edith Wycoff, librarian. Published by the Lloyd Library, Cincinnati, Ohio.

This bulletin is No. 25 of the bibliographical contributions of the Lloyd Library and contains, as stated above, a bibliography relating to botany by authors whose names begin with the letter M. According to the prefatory statement, the Lloyd Library at this time contains 45,298 volumes devoted almost exclusively to botany, materia medica, and pharmacy, with a section on Eclectic medicine. The catalogue has been compiled from all available sources, such as Jackson's "Guide to the Literature of Botany," Pritzel's "Thesaurus Literature Botanicae," "Botanische Centralblatt," "Index Catalogue of the Library of the Surgeon-General's Office," Catalogue of the Library of the British Museum, Catalogue of the Royal Botanic Gardens, Kew, and book notices in journals, thus making available to a vast number of readers information concerning botanical literature the average individual could never hope to know about. American botanists and students, and especially research workers, are sure to appreciate this effort undertaken by the Lloyd Library.

THE METRIC SYSTEM FOR DRUGGISTS. By D. Chas. O'Connor, author of "Commercial Pharmacy," etc. 4x6 inches, 21 pages, paper, 50c. Boston, Spatula Publishing Co.

This little pamphlet represents an attempt of the author to bring the metric system as applied to pharmacy within the understanding of drug clerks, and particularly to aid them in their efforts to pass State board examinations. So far as we can discover, the treatment of the subject is satisfactory so far as it goes, but the pamphlet cannot be classed in the same category as the excellent bulletins on the metric system issued by the Bureau of Standards at Washington, nor does it offer anything that is not to be found in the chapters on the same subject given in most of the standard works on practical pharmacy.

A woman went into a drug store out in Belvidere, Ill., if we are to believe the "Republican" of that city, and asked to have a clerk open a bottle of ointment she had purchased. He asked her why and she replied something in this manner:

"I've heard there was often a fly in the ointment. I wanted to be sure nothing like that happened in the kind I buy."

WOMEN IN PHARMACY

Conducted by Emma Gary Wallace

Selling Campaign For the First Spring Month

Housecleaning and Other Supplies for the Feminine Population

Our March Sales

AS WE have begun the year by focusing our selling forces on some one line of articles every week, we must keep the good work up throughout the month of March.

First Week—Renovators

The thrifty housewife, the business woman, and in fact, the entire feminine population, begin to think of their spring clothes early in March, and magazines are full of new styles. The shop windows are entrancing with bewitching modes. BUT all of us cannot sally forth and buy an entire wardrobe much as we would like to do so. Most of us have got to go over our boxes and bundles and sort out the things which can be renovated and used to good purpose. Here is where the druggist comes in.

Push dyes, cleaning materials, spot removers, soap bark, hat cleaning material, hat bleaches, glove cleaners, and so on. Now don't think you can do this all by yourself. Have a confidential chat with a dyer in the neighborhood. Show him that you are going to help him get more business and get it *early*. Ask him to let you put a first-class sample of his work in your window. Of course, you will put a card on it saying who renovated it. Make it plain to him that you are going to fill the window with dye packages and cleaners yourself, and that you will suggest by display card that small jobs can be done quite satisfactorily at home, although anything difficult is better put in the hands of a professional. In this way you will both get lots of business that would not come to either of you otherwise. It is suggestive to have some uncleaned hats and garments and some which have been renewed. With the high cost of living, people will be glad to economize this year. One store which did a fine business last year in this line of goods, had a demonstrator—an attractive young lady—explain how silks, woollens, feathers, curtains, etc., could be renewed with the materials for sale.

Second Week—Tonics

At this time of year, tonics of all kinds are seasonable—hair tonics, skin tonics, and those for the system. The long, cold winter with its heavy diet and indoor life has depleted us more than we realize. Tell people how to fortify themselves anew. Do not claim that you have found the elixir of life, or someone may call your bluff! Give a commonsense explanation of why tonics are needed and what the ones you offer are intended to do.

The artificial heat of the house encourages dry and falling hair, and this together with cold winds, tends to make the skin harsh and its texture coarse. The fact that every spring brings a perennial crop of foul-air borne diseases of the bronchitis-pneumonia type, is in part due to the fertile soil in which the germs fall. In the spring time our resistance to disease is likely to be much less than at the beginning of the cold weather season, because we have not lived as much in the open, have breathed artificially-heated air the greater part of the time, and our habits have been more sedentary so that the waste products of the body have been less thoroughly eliminated. Emphasize these points in offering remedies to meet March needs.

Third Week—Housecleaning Supplies

The forerhanded housewife is now beginning to assemble her supplies for housecleaning, and the early bird will get the worm—that is to say, the one who offers her or suggests to her what she needs, will make the sales.

Urge her to save her hands and nails by using rubber gloves and good cleaning sponges. Give a list of dirt and stain chasers, such as ammonia, javelle water, deodorants and disinfectants, sachet powder in neat, little bags or quantity lots for linen closets and dressing cases, wall paper cleaners, chamois, silver cream, furniture polish, fragrant pastilles, chloride of lime, sulphur candles, washing compounds, and anything and everything which will cut work in two.

Here again, point out that half the battle is to have supplies on hand to begin with, and that there is no economy in scrubbing expensive goods to pieces if a little washing compound or cleaner will remove the objectionable spots. Push housecleaning supplies and emphasize the need of sanitation and that cleanliness is sanitation reduced to everyday terms.

Fourth Week—Thrift Week

Some banking institutions annually set aside a Thrift Week, and the idea is a worthy one. Every drug store will do well to have a Thrift Week too—a time when oddments will be closed out and turned into cash. This will be a money saving opportunity for customers. Broken lots of toilet and stationery goods, lines which are being closed out or upon which there is a heavy enough stock that special prices can be made to reduce the quantity, can all be considered in this connection.

Advertise special thrift sales every day or all week as your locality may warrant. Do not think so much of what you've got to get rid of as of what people will be interested to buy. This will suggest leaders at least, and the things you wish to close out, can be used for the main bulk of the special offerings.

Do not forget that this is water glass time. This is not an experiment. Having a family of several people to cater for, the writer of this article put down ninety dozen eggs last April and May, using water glass. This has effected a nice saving, and although there are only a few dozen left, not a single doubtful one has been met so far. The secret is to prepare the water glass according to directions, boiling the water first and letting it cool, and using strictly fresh, newly-laid eggs. A stone jar is best for a container.

The one who would sell water glass and make money on it, must buy a good grade product, for if you sell a poor water glass and Mrs. Blank loses all her eggs, she will advertise the fact and spoil your trade ever after. Get first-class stock and be prepared to explain to people just how to use it. Advertise and show them that by buying eggs at from twenty to twenty-five cents a dozen in place of from fifty to sixty cents enough money can be saved to buy the children their shoes for a year. Most drug stores should be able to work off several barrels of water glass a year by pushing it. It should be all bottled and labelled and displays made in the window of the water glass and fresh eggs. A printed card telling how to use it will show how simple it is.

March should be a money-maker in every drug store. It usually is.

Queen City Chapter, No. 5, W.O.N.A.R.D., will celebrate its tenth anniversary with a Birthday Party, February 22d. This will be given at the residence of Mrs. John C. Otis, 1613 Ruth avenue, Walnut Hill, Cincinnati. The charter members of the organization will all assist in receiving.

CONCERNING THE WORK OF DEMONSTRATION

If we give space at all in our stores to a demonstrator, it is important that these people know just what they want to do and how to do it.

Sometimes it may not be necessary to go outside and to hire a special demonstrator, for there should be someone on every store force capable of taking up this work in connection with some article for a few days.

A good demonstrator is one who can interest whoever may pass near by in what is offered for sale, and having interested them, can show the advantage and superiority of the goods offered and in a fair percentage of cases, bring about a sale.

Just how is this done?

Mrs. Housewife comes in to purchase a bottle of cough syrup. She notices that there is a demonstrator occupying a prominent space. This demonstrator is preferably a woman, is of attractive personality, daintily, neatly and suitably dressed, is not officious or forward, yet is evidently on hand to show her goods to whoever may be interested in them.

A demonstrator booth with a bright canopy top, an arbor, or a gaily decorated table all have a psychological effect. The very fact that they are unusual attracts attention, and like as not causes the customer to pause for a moment at least, to see what is being offered. Now that moment is what must be made to count. A pleasant smile of greeting, a prompt taking up of the goods and a *brief but pointed and intelligent* explanation, will change the general interest into close attention. A clever demonstrator can easily keep three or four people or more interested at the same time. One thing to avoid is a monotonous repetition of a stereotyped rigmarole which has evidently been learned and recited parrot-like a great number of times. The personal element counts, especially with women customers.

If possible, a sale should be made before the prospect leaves the booth, although it is a mistake to over-urge. A special offering in price or quality will usually effect this. People who pass on, promising to think it over, are not likely to come back. A clever demonstrator is not an order taker. He or she is a salesman of the first order.

In the same way, the clerk behind the counter must be prepared to demonstrate when occasion arises, not one line of articles, but all those handled by his department. If he is showing rubber goods, he must be prepared to show why they are good value, where the superior points of excellence are, how they should be cared for, and to explain why they are well worth the price. If he is selling plasters, it is not enough to suggest a plaster and take the money. He should be prepared to tell why the plaster offers a valuable means of medication which does not interfere with the occupation of the wearer, holds the medication in place and offers a gentle but continuous massage to the muscles. Good commonsense and a sound reason will appeal to most people, and people are flattered to have someone take interest and time to give them good reasons.

In every customer's mind is always the question WHY, when they are looking at new goods or even considering the advisability of selection. The demonstrator or salesman who thinks of what is in his own mind only, will not get very far. He must be prepared to perceive that question in the mind of the customer and to answer it. If he does that, it will be necessary for him to put himself somehow in the other fellow's place. A demonstrator selling a glove cleaner, must know why the prospect is interested. Is it in the interests of economy, sanitation, better grooming, or what? Knowing this, the salesman can easily emphasize the points which will make the sale.

AROUND THE CIRCUIT

Mrs. F. B. Twitchell, Chairman of the Press Committee of the Boston Chapter, reports that the January meeting of Boston Chapter, W.O.B.A.R.D., was held at The Brunswick. The President was in the chair. Notices of Federation Conferences were given. Mrs. F. B. Twitchell reported a Legislative Conference held by the Brightmestone Club of Allston. Mrs. Mabel J. McKay of Newton Highlands gave a delightful talk on life in Colombia, S. A., illustrated by native costume, curios, and national

airs. Mrs. Amy S. Shumway of Newton Highlands played a fine selection from Greig. Tea and a social hour closed a pleasant meeting.

At the present writing, Philadelphia Chapter, No. 6, is planning to celebrate the tenth anniversary of its organization, February 13th and 14th. A royal good time has been planned for. Mrs. William E. Lee, President of the Chapter and Financial Secretary of the National Organization, will give her usually delightful "At Home," February 13th. This is to be followed by a banquet at the Hotel Sewell, with a dance for the young people at 10 o'clock. Mrs. Leslie O. Wallace of Auburn, who organized the Chapter ten years ago, and Prof. Joseph P. Remington, dean of the Philadelphia College of Pharmacy, are expected to be present as guests.

The January meeting of the Woman's Pharmaceutical Association was held January 13th at the home of Mrs. M. M. Gray, 4151 Gladys avenue, Chicago, where it celebrated its fourteenth birthday. Dr. Charlotte E. Stimson gave an interesting resumé of the work of the Chapter during its fourteen years of life. Refreshments were served by the hostess assisted by Mrs. Kneass and the attendance was a very good one. The occasion was a very happy one and we trust this Chapter may continue for many, many more years in the good work in which it has been engaged during these its childhood years.

The women closely connected with the drug trade throughout the United States look with dread and apprehension upon the probability of war, and regardless of nationality, we hope and pray that our fair country may be spared the horrors of war. Of course, we would not have dishonorable or cowardly peace, but we have no desire if it can be avoided, to be dragged into the conflagration of nations.

Cincinnati Chapter, No. 5, recently contributed to the "Save the Zoo" fund of that city, believing that it is for the benefit, particularly of the children of the city, to keep this great attraction at its best. The Chapter also expressed its interest in Bethesda Hospital by a Christmas gift of money raised by means of a silver collection.

Mobile Chapter, No. 9, held the first meeting of the year with Mrs. S. H. Colvin. Officers were elected for the ensuing twelve months as follows: President, Mrs. J. M. Newton; vice-president, Mrs. John Rutherford; secretary, Mrs. Philip Ebbeck; treasurer, Mrs. James Dumas.

The Milwaukee Druggists' Ladies' Society gave a very enjoyable dance at the Hotel Maryland, January 11th. This organization is planning to entertain the visiting ladies of the Wisconsin Pharmaceutical Association with an elaborate entertainment when they meet in Milwaukee in June.

The Chicago Drug Club celebrated Ladies' Night, Monday, January 22d, at the Hotel Sherman. The members brought their wives and lady friends, so that there were more than five hundred present. Benson's famous orchestra was on hand and a special vaudeville program was presented. It was thoroughly enjoyed by all present.

Indianapolis Chapter, No. 20, recently gave a dance which netted their treasury \$50. This Chapter discusses each month some question of interest to them as druggists' wives. The last subject considered was "What Can the W.O.N.A.R.D. Do to Help the N.A.R.D.?"

Miss Jennie Eloise Bell of the Chicago College of Pharmacy, class of 1886, recently passed away at her home in Chicago. She was one of the first women graduates of the Chicago College of Pharmacy and a prominent member of the Eastern Star.

The Chicago Chapter, W.O.N.A.R.D., gave an enjoyable card party, February 13th. Refreshments were served and a number of very handsome prizes awarded. The decorations were suitable to the valentine season.



Fishing Tackle in the Drug Store

A Strong Side Line That Is Very Important

THERE isn't any reason why a person shouldn't go out fishing with a long narrow twig, a tomato can full of worms and a desire to catch trout on a hair-pin, except that he probably won't get any fish. He'll be more than likely to catch nothing but a cold and a scolding from his wife for staying out so late. That may be considered recompense for a day's outing without an outfit, because you never can tell about humanity, but under most circumstances, a little of such a day goes a long distance.

On the other hand, the person who trots out to the brook in which a dilapidated sunfish has summered and wintered for going on ten years without molestation, and plans for a day's fishing aided and abetted by a small two-ton truck load of paraphernalia of different description, may not have any greater success. Somewhere between these two there is a happy medium, made the more happy by the probability of a successful catch if Nature will do her part. You can buy the best rod known to man and then not catch a single fish if Nature puts it into their heads to forget all about flies, spoons, bait and whatnot, of course.

This matter of happy medium isn't confined to fishing, by any means. No one with any philosophy in his soul will so contend. But this particular story deals with fishing, you see. It is printed at this particular time because very soon there is going to pop up in the town near the fishing stream a peculiarly dressed individual who will Waltonize in the woods nearby. The hardware store will probably sell him most of his tackle. Now comes the purpose of the story—the drug store should do it.

You, Mr. Druggist, will have to sell that visitor a couple of quarts of anti-mosquito dope unless you happen to live in a rural Utopia. If you do live there, by the way, you have no business being in your business. Under ordinary circumstances, however, you'll have to sell the dope, so you might just as well save his feet and sell him everything else. If he gets the habit of coming to the drug store first, the hardware man will have to become a plumber and watch for leaks. There is far more logic in the sale of fishing tackle among druggists than among hardware men.

City Trade, Too, is Possible

Added to the possibility for the town druggist is that of the city man. The regular fish stores, which supply nothing but fishing goods, aren't going out of the business yet of course, but the druggist with an eye to a success-

ful venture can so utilize his stock as to add fishing tackle and make it pay. Perhaps the customer is going to start from uptown—he'll welcome the opportunity for purchase without having to go way off down to the center of the city and find the store closed when he gets there anyway.

No, there isn't one good reason in the world why the average druggist who exists in a town that carries a sporting spirit shouldn't sell fishing tackle. If there is no sporting spirit, by the way, it's time the druggist got up on his ear and introduced it. A supply of fishing tackle is as good as anything else. No matter which way you turn, Mr. Druggist, we've got you. You ought to carry fishing tackle as a side line.

Now, having decided that fishing tackle is a good side line, let us turn to the next sub-head. What kind of tackle should be carried? Certainly, the Denver druggist who carries a lot of fine salt water lines, and some cod hooks with tarpon apparatus on the side, would not be headed for success. What he ought to handle is trout outfits. Down in the Mississippi Valley bass is caught—don't put in eel spears. Up in the Adirondacks nothing is caught, but there are still a vast number of anglers who go there for the rest. They must have their outfits. Trout and bass, they want. Down along the coast it's salt water fish, blues, cod and further south, tarpon. Flies aren't very successful there.

There are different kinds of fishing supplies. The druggist who wants to make money and decides to sell fishing goods should first know what is caught in his territory. If you are unfortunate enough to be in a place where no fish are caught, you'd better not put in the stuff. You can sell soda and make up a scheme of reciprocation with the nearest movie house.

Something will be written about the proposition in the ERA one of these days. But if you do have a lake or a trout brook near you, and if the men and women of your town like to go fishing, know what they expect to catch.

If it is a territory where bait is used, be sure to get bait rods. We cannot give an exact estimate of the cost to you, but we do know that the cost price is low enough for you to sell at a good retail profit. A bait casting rod may be bamboo, steel, willow or almost anything, but it is to your advantage to get a good rod, a reputable



make, to handle. They come from \$1.00 to almost any price you dare to pay or think you can get.

Then there are the fly and the baby bamboo rods for mountain fishing. In both there is profit. The light stream angling rod, for semi-mountainous districts, must be powerful, strong and pliable. Such a rod as the "Eclipse" is a safe rod to handle. It gives satisfaction and is a good money-maker.

There is nothing in it for the druggist if he doesn't consider both sides. He should not buy outfits that are too expensive. The man who would pay a large price will generally go to the fishing tackle store and get his stuff direct, from top to bottom. The druggist's field is with the man in between. The medium goods are the ones he should handle, and they are the ones which will make money for him.

Mountain and Pond Fishing

We never had the slightest idea that there was so much to be learned in fishing until we got enthusiastic and began to study the possibilities for druggists. Most of our fishing has been done by seines, and we caught the fish when Captain Frank Cahoon, a real Cape Codder, brought it in in the cockpit of his big surf boat. You don't have to work for what you eat on Cape Cod in the summer time.

If you serve a trade that will use a pond or small lake for its fishing, you should be sure to put in a stock of light weight rods. These sturdy little rods are good casters and are light enough to be easily handled. The "Baby Catskill" for instance is a rod that has been tried. Your customers will like that rod and be properly appreciative.

Leaving the questions of rods, the druggist who makes a success with this highly desirable side line, must use discretion in choosing spoons, flies, leaders, lines and such things. You will not need heavy lines, unless it is your purpose to serve anglers who will do salt water fishing. Fine and medium fine lines will serve the purpose, and you should again choose with a stern eye towards the fish that are caught in your neighborhood. In the matter of flies, there are some that will not be needed. As in many other products, superfluous flies are made by the manufacturers. They are luxuries. Some of them, the smaller and medium class flies, are needed for good fishing, and those you should have. Trout flies on eye hooks are becoming more and more popular and those are the sort you should handle.

As for other supplies for fishermen, you need carry no great stock. It is difficult to conceive of a drug store having a large call for creels, baskets, fly boxes and so forth. There certainly will be some sort of a call, but here again it is true that the man who buys from the drug store, unless the line has been developed to a specialty and is advertised and credited with supplying every possible need, will not need everything that a fisherman uses. If you are able to make yourself a specialist in fishing goods, so much the better, but if yours is a general trade, similar to that you have in other side lines, you will do well to choose your stock with utmost care. Fishing goods are too expensive to leave on the shelf. You must sell them to profit, but if you do sell them, you make a nice amount.

Displays of Fishing Goods

Turning to another feature:

Every drug store owner and every person who trades, likes to enter a good shop. He likes to peer about him and see things tastefully and invitingly displayed.

As soon as the warm weather comes, or as soon as the law is off the fish of your neighborhood, is the time to get busy with your display. A window given to the featuring of fishing tackle is easily made. In the center, for instance, could be placed a creel or a basket with rods leaning against it. If it is possible to get a stuffed fish, so much the better. It could be placed in front of the

box. Then, along the floor of the window space could be placed the hooks, flies, lines, spoons, and smaller stock.

It is possible to go much further than that. The active druggist, if he is a fisherman, will know whether bass are biting up near the Red Brook or not. If he does not happen to be an enthusiastic angler himself, he will know some one about the town who is. It is easy enough to find out where the best bass can be caught. In one corner of the window, or along the window pane, it would be possible to place cards giving that information to the prospective tackle buyers of the town. In case you are on tidewater, a schedule showing the tides will answer the same purpose.

There are many bits of local information that fishermen like. The keen druggist makes it his business to find out where the best fishing places are, and whatever other information he should have. Some of this he can give away free by means of cards in the window—the remainder he can keep and give to purchasers when they are busy buying goods. If the druggist keeps himself well informed on fishing he can make his store a clearing house for knowledge that will be invaluable to him as an advertiser.

Here are some of the different classes of fishing and the rods and other outfit that should be sold for them:

Trout fishing with flies—very light rods, such as the Eclipse, Long Island, Catskill, etc. Made pliable to give a large casting area.

Large stream and lake fishing—strong, powerful rods, much heavier than the first class. Medium weight and heavy lines, strong, accurate and quick working reels.

Mountain brook fishing—smaller rods, must be strong. Reels of steel, strong and speedy. Silk lines of good strength.

Salt water—trolling lines or rods strong enough to fight with. Powerful lines.

STATE NARCOTICS COMMITTEE REPORTS

Criticism of the medical profession, as well as suggestions for new legislation which are radical, marks the report of the New York State narcotics committee which was handed to the legislature on the night of February 19th. Senator George H. Whitney of Mechanicville is chairman of the committee.

"Your committee is inclined to criticize the medical profession for its lack of study," reads the report. "Evidence shows that many addicts have died under treatment and that a great number of those discharged as 'cured' are driven back to the use of drugs."

The committee's report insists that narcotic drug addicts should not be classed with any other sort of addicts, least of all with alcoholics. The constant use of the drugs has been recognized as bringing on a regular disease, says the report, and it is not possible to treat it as alcoholic diseases are treated.

Supplementary remedial legislation should be enacted as soon as possible, the report says, although the committee asks for time in which to make further investigations. Records of narcotic drugs and even of addicts themselves are suggested.

Such legislation, the report continues, should provide for a complete record of narcotics distributed through legal mediums in the form of triplicate order blanks upon which doctors, druggists and other users should obtain their supply from the manufacturers or jobbers. Every user should be required to keep a copy on forms supplied showing just what was purchased and how and when it was sold says the report.

To complete the triplicate system the committee asks that the new law provide that a copy of the blank be sent to the dealer and another copy to the State Board of Health. A further regulation asked is that a complete and accurate inventory of all narcotics sold by wholesalers or jobbers in the state be kept on file with the State Board of Health. This, it is suggested will help to keep track of all the narcotics in the state, and will enable inspectors, to a certain degree, to find out who the illegal users are.

The committee has been in session in New York for several months.

PHARMACEUTICAL PERSONALS

WILLIAM B. STRONG OF MILWAUKEE

Loyalty to one's alma mater, as shown by "the wave of unadulterated gladness" experienced by William B. Strong when the football aggregation representing Carleton College of Minnesota descended on Chicago last fall and carried away the honors of a gridiron contest with the representatives of Chicago University, furnishes the "peg" on which a writer in a recent issue of the *Sentinel* hangs the life story of "one of the men you meet in Milwaukee." Mr. Strong completed his education at Carleton College more than a quarter of a century ago, and the loyalty he has always maintained toward the institution, has been one of his striking characteristics in business and social life.



WILLIAM B. STRONG

Mr. Strong is well known in the drug trade as the vice-president and treasurer of the Milwaukee Drug Co., wholesale druggists. He is a native of Minnesota, and after graduation,

decided to enter the railroad business, which he did, working for a time with the C. B. & Q., and later with the Chicago, Milwaukee & St. Paul line. He then tried the Illinois Steel Co., but finding the work uncongenial, entered the employ of Green & Hutton, an old established wholesale drug house, which later became the Jerman, Pflueger & Kuehmsted Co., and subsequently reorganized as the Milwaukee Drug Co. He began at the bottom of the ladder and has occupied successive positions of trust and responsibility until attaining his present official standing, which carries with it the active management of the company's business. He has served as vice-president of the National Wholesale Druggists' Association, and is a frequent attendant at the annual meetings of that organization. In his city he is identified with a number of social activities. He is a member of the Milwaukee Club, the University Club, and the Milwaukee Athletic Club, besides holding membership in various Masonic bodies.

FAREWELL DINNER TO ERNEST BERGER

Ernest Berger, of Tampa, Fla., a member of the Florida Board of Pharmacy since 1901, and for a number of years its president, was recently tendered a farewell dinner by his associates on the occasion of his retirement from the board by reason of the expiration of his term of office. At the function given in honor of Mr. Berger, W. D. Jones, president of the board, expressed the regrets of the board members who would be deprived of Mr. Berger's fellowship in an official capacity, and as an evidence of their appreciation and good-will, presented him with a solid gold Knights Templar charm. The address which accompanied the charm was signed by all members of the board and included the names of W. D. Jones, president; Leon Hale, H. H. D'Alemberte, and D. W. Ramsaur, secretary and treasurer.



ERNEST BERGER

Mr. Berger is an enthusiastic member of the A.Ph.A., and has an extended acquaintance throughout the drug trade. He has served the A.Ph.A. as vice-president, and was president of the National Association of Boards of Pharmacy in 1913-14.

WYNN L. EDDY, DRUGGIST-LEGISLATOR

Increasing interest in the political affairs of their respective communities is shown by the large number of names of druggists that are to be found in the membership directories of legislative and municipal bodies throughout the country. Some of these pharmaceutical worthies were no doubt born to this greatness, but most of them have attained these positions by reason of their personal qualifications and the good-will of the electors in their respective localities. One pharmacist who has all of the qualifications implied in the foregoing remarks is Wynn L. Eddy, of Brigham, Utah, a member of the American Pharmaceutical Association since 1908, and now a representative in the State Legislature from Boxelder County.



WYNN L. EDDY

Mr. Eddy is a Wolverine by birth, but early went to Texas where he attended the Blanco high school and Baylor University. In 1890 he entered the drug business at Winlock, Wash., where he remained until 1894, when he moved to Brigham City and opened a drug store. He took an active part in the campaign for securing statehood for Utah, and has been a delegate to every city, county and State Convention of the Democratic party since. He has always been actively engaged in the affairs of the Utah Pharmaceutical Association, which he served as president in 1909 and 1910. He has also served on the State Board of Pharmacy, as member of the city council for a number of years, and as chairman of his party county committee. He was elected to the Legislature last November. His activities for attempting to secure amendments to the pharmacy law in that State are well-known.

FERD. A. MUELLER OF INDIANAPOLIS

Ferd. A. Mueller, a druggist of more than forty years standing, is being prominently mentioned in the newspapers of the Hoosier capital as a candidate for mayor on the Democratic ticket. He was born and reared in Indianapolis, and with the exception of the time he spent in the Cincinnati College of Pharmacy, has always resided in his native city. He has taken an active part in promoting the interests of the Indiana Veterinary College and the Indianapolis College of Pharmacy, and is a life member of Murat Temple of Shriners. He is president of the German Orphans' Home Board and belongs to virtually every German society in Indianapolis. He also is a member of the Indiana Democratic Club and was one of the originators of the Continental National Bank. He recently declared that if he consented to make the race for the mayoralty, and is successful in being nominated and elected, he will stand for economy in city affairs and for law enforcement.

OUT FOR BOARD OF PHARMACY MEMBERSHIP

Philip V. Erard, president of the Springfield Pharmacists' Association, and a member of the Board of Health of that city, has announced his candidacy for appointment as a member of the Massachusetts Board of Pharmacy, and he believes that he stands a good chance of being one of the three men whose names will be recommended to the Governor by the State association. Mr. Erard is a Republican in politics and is a vice-president of the Massachusetts Franco-Republican Club which has 5,000 members throughout the Commonwealth and exerts considerable influence in State politics. He operates two drug stores in Springfield.

PERSONAL BREVITIES

—CHARLES R. SHERMAN, of the Sherman-McConnell Drug Co., Omaha, Neb., represented the druggists of Omaha and of the State at a recent hearing of the special prohibitory committee of the Legislature and urged the lawmakers to make it impossible for druggists to sell liquors. Mr. Sherman said that reputable druggists now in business do not want to sell liquor after May 1st, and that they want it made impossible for "bootleggers" to disguise themselves as druggists. He believes that the law should prohibit a druggist from selling any liquor but alcohol, and then only when so modified as to make it unavailable as a beverage. The Committee, it is said, will not report a "bone dry" law, but will propose a measure which will prohibit "bootlegging" as nearly as possible.

—CLIFFORD W. BASS, who established a drug business in Portsmouth, N. H., in 1904, has sold his pharmacy to O. J. Allinson of New York, and will go into the oil business in Oklahoma. Mr. Allinson was connected with the Riker-Hegeman and Caswell-Massey companies in New York for many years, and for the last five years ran a drug store in Newton, N. J., which he sold last July.

—DR. D. B. McMAHAN, druggist of Denver, Col., and his assistant Ralph J. Coombs, were the victims of a daring hold-up early in February. Dr. McMahan was shot by the bandit as the latter forced both men to hold up their hands in the prescription department of the store. The hold-up was made while several women were in the front part of the shop listening to some new phonograph records.

—J. D. COOPER, who has been in the drug business at Fordsville, Ky., for thirty years, has sold his drug store to Sam. Bennett, whose son, a graduate of the Louisville College of Pharmacy, will conduct the business. Mr. Cooper was elected cashier of the Fordsville Bank, and assumed his duties on February 1st.

—CAPT. ISAAC E. EMERSON, head of the Emerson Drug Company, of Baltimore, has been re-elected commodore and president of the Baltimore Yacht Club, with Parker Cook, of the same company, as a member of the Board of Governors.

—ADOLPH SPIEGEL, head of the A. Spiegel Drug Co., Milwaukee, Wis., is recovering satisfactorily following an accident January 22d, when he broke a leg in crossing a downtown street to reach his store. Mr. Spiegel is resting easily at his home in that city.

—LOUIS I. SCHREINER, vice-president of the United Drug Co., is chairman of the building committee in charge of erecting a \$50,000 clubhouse for the Commonwealth Country Club at Chestnut Hill, Mass.

—CLAUDE M. COOK, of San Jose, Cal., was fatally injured early this month when he was hit by an automobile. He received a fracture of the skull and concussion of the brain besides minor injuries.

—ALEXANDER ROTH will be new manager of the Lorain Drug Company store in Lorain, Ohio. W. B. Rathbun, present manager, has returned to Lakewood where he will open a store of his own.

—EUGENE A. SAYRE, proprietor of the Economy Drug Store of Elgin, Ill., has been elected president of the Elgin Merchants' Association, a position of some importance in the watch city.

—C. E. ROBERTSON, of St. Charles, Ill., recently bought out a new drug store, but since completing the deal has been ill with pneumonia and has not opened the store for business.

—LUDWIG SCHIFF, general manager of the Western Wholesale Drug Company, is building one of the most beautiful homes in the Windsor Square section of Los Angeles.

—FRANK AMICK, a druggist of Denver, Colo., shot at and killed a man who was breaking into his store at night. Amick was released when he had told the court his story.

—JOHN H. BEISE, of Fergus Falls, Minn., is a new member appointed to the board of pharmacy by Governor Burnquist. He succeeds Robert L. Morland of Worthington.

—P. N. HALL of Springfield, Mass., has announced his candidacy to succeed William E. Martin of Holyoke as a member of the Massachusetts State Board of Pharmacy.

—D. A. NYWALL, for many years prominent in the drug trade of Scandia, Kansas, has purchased a large store in Formoso, Kansas, and will at once return to the business.

—G. D. ELLYSON, of Des Moines, is the delegate for the American Association of Pharmaceutical Chemists to the National Chamber of Commerce in Washington, D. C.

—CALDWELL SWEET, of Bangor, Me., celebrated his 42d anniversary as a druggist in January. A special anniversary sale was a feature of the observation ceremonies.

—W. E. AULT of Claremore, Okla., has sold his store there and will move to Kansas where he will locate a new store in one of the numerous small Kansas towns.

—EDWARD O'DONNELL of the Cobb-Hersey Co., Boston, is backing a new drug store to be opened soon at Essex street and Atlantic avenue, opposite the Hotel Essex.

—DALE G. KILBURN, who has been in business for 13 years, in Quincy, Ill., is to move to Olney. Mr. Kilburn is one of the best known druggists of the state.

—WALTER JOHL, of 4601 North Clarke street, Chicago, was visited by robbers who "cleaned out" his cash till and took a large amount of his drug supplies.

—JULIUS BAUER of Des Moines, has sold his drug store there and is planning to go to South America. He is thinking of opening a store in Buenos Ayres.

—O. T. ERHART, of Birchwood, Wis., has been elected president of the newly formed commercial club of the town. Mr. Erhart is a well-known druggist.

—HARRY BEILING, president of the Graham Drug Company, has announced himself as candidate for Mayor on the Republican ticket in Jeffersonville, Ind.

—HARRY M. CHURCH for many years a New Bedford, Mass., druggist is a candidate for treasurer and collector of taxes in Mattapoisett, a nearby city.

—JOSEPH F. DALEY, for 20 years proprietor of a store in Hartford, has purchased a new store and will continue in the business on Maple avenue.

—D. I. MILLS, a prominent druggist of Pine Bluff, Ark., was operated upon for appendicitis late in January. He is on the road to recovery.

—G. H. HARDING, of Ansonia, Conn., has had on exhibition all of the 219,150 prescriptions filled by the store since it was founded 71 years ago.

—MRS. A. L. COOKE, of Ponticello, Idaho, has sold the drug store she has owned in that town for many years to G. W. Deer, B. M. Hines and B. F. Hough.

—GEORGE LOWE, of High Point, N. C., has resigned his position with the Hart Drug Company and will study pharmacy in Philadelphia.

—H. HENRY KNIPPLE has sold the City Drug store, 6-8 West Sixth street, St. Paul, to P. W. Morton, a real estate dealer of Winthrop, Minn.

—C. C. BECHTEL, who has for many years operated a drug store in Wooster, Ohio, has retired from the trade. His store will be closed.

—SOL A. ECKSTEIN of Milwaukee, has just completed his 43rd year as a druggist. Mr. Eckstein is president of the Wisconsin Ph.A.

—HUGH McCLAY, of Joplin, Mo., has left that city and will go into the drug business with his father in Plainville, Kansas.

—E. P. SHRADER of Grinnell, Iowa, has sold the drug store he has operated in that city for 15 years to Bates and Godbey.

—I. N. IRWIN celebrated his 40th year in the drug business in Decatur, Ill., during the last few weeks of January.

—ABEL BAYNON, of Scranton, Pa., was married to Miss Hazel Deitz, of Throop, Pa., early in February.

—SIR JOSEPH BEECHAM, the noted pill manufacturer who died last summer left an estate of \$5,000,000.

—P. W. BABCOCK of Lewiston, Me., has been chosen president of the Maine Rexall Club.

DEATHS IN THE DRUG TRADE

DR. WILLIAM C. ALPERS

Dr. William C. Alpers, dean of the Cleveland School of Pharmacy of Western Reserve University, and president last year of the American Pharmaceutical Association, died at his home in Cleveland on February 21. He had been in poor health for more than a year, and it was by great effort that he performed the duties of presiding officer at the meeting of the A.Ph.A. held in Atlantic City last August. His presidential address delivered on that occasion, was one long to be remembered by all of those who heard it, for its elements of censure, criticism and voluninousness, while its delivery furnished one of the most dramatic situations in the history of the association.



DR. W. C. ALPERS

Dr. Alpers was born in 1851 at Hamburg, Germany. When about 12 years of age he went to Hanover, where he spent some time in the "gymnasium," which was later followed by two years of special work in mathematics and chemistry at the Hanover School of Technology. In 1870 he began his service in the German army, taking part in the Franco-Prussian war and participating in some of its most important battles. He was twice wounded, and on completion of his term of service, was discharged with the rank of lieutenant. He then entered the University of Goettingen, where he remained until 1872, when he came to the United States. For a time he taught mathematics in a private school in New York City, but soon moved to Bayonne, N. J., where he opened a pharmacy. In 1894 he was appointed a member of the New Jersey Board of Pharmacy, and two years later was selected as manager of the retail pharmacy which Merck & Co. established in connection with their laboratory in University Place, New York City. When the pharmacy was discontinued in 1899, Dr. Alpers bought many of the fixtures and opened a professional pharmacy in the Imperial Hotel building, New York, continuing it with considerable success until June, 1906, when he disposed of it to the Caswell-Massey Co., remaining for a time with the company as manager. He later became identified with the Alpers Chemical Co., 15 Wall street, New York, and also, for a time operated a pharmacy on Columbus avenue.

For years Dr. Alpers was prominent in the German-American life of New York City, and was a frequent contributor to German periodicals. He had received many honors from pharmacists in recognition of his ability. He served as president of the Manhattan Pharmaceutical Association; as chairman of the New York Branch of the A.Ph.A., and during his residence in New Jersey, was one year president of the State Pharmaceutical Association. He was also identified with many other organizations of a scientific character. He was elected dean of the Cleveland School of Pharmacy in 1913, a position which he filled while carrying on his duties as an editor of the *Deutsch-Amerikanische Apotheker Zeitung* of New York. He was also the author of a number of books and monographs on pharmacy and allied subjects. He received the degree of Doctor of Science from the University of New York in 1899. He was twice married, his first wife dying about ten years ago. His wife by his second marriage and four children by his first wife survive him.

—C. W. DANNELL, 47 years old, of St. Paul, Minn., an employe of Noyes Brothers and Cutler, died of pneumonia at Bethesda Hospital late in January.

NATHANIEL J. RUST

Nathaniel J. Rust, for nearly 50 years well-known in the drug trade of Boston, and prominent in politics as a Republican from 25 to 40 years ago, died February 6th, at his home, Boston, aged 84. Born in Gorham, Me., November 28, 1833, he first became interested in pharmacy while a student in Gorham Academy and Oxford Normal Institute at Paris, Me., and was assistant in the drug store of his brother, Dr. William Rust. In 1851 he went to Boston. For seven years he was connected with the wholesale drug firm of Weeks & Potter. His prominence in the drug business naturally drew him into other lines of activity. He became president of the North End Savings Bank, Dorchester Gas Light Co., the Manchester Mills, the Lincoln National Bank, Boston Storage Warehouse Co., Carver Cotton Gin Co., and was a director in many other commercial and financial institutions. He served in the state legislature in 1874, '75 and '76; in the city council in 1878 and '79, as alderman in 1891 and '92, and was for many years a sinking fund commissioner of Boston. He was prominent in Masonry. Mr. Rust was married in 1863 to Miss Martha C. Carter of Gorham, Me., and to them four children were born: Martha C. Rust, Mary Alice Rust, Edgar Carter Rust, and Nathaniel J. Rust, Jr.

JOHN LEADBEATER

John Leadbeater, one of the best known druggists in his section, secretary and treasurer of the Retail Drug Corporation, Inc., passed away at his late home at 504 Prince street, Alexandria, Va., from Bright's disease, on January 29th. Mr. Leadbeater who was 46 years old was a graduate of pharmacy of the National College of Pharmacy, Washington, D. C., and had been identified with the wholesale drug business since his graduation. He had been in poor health for some time past, although it was but a few days prior to his death that his illness necessitated his confinement to his home. He was first vice-president of the Columbia Fire Engine Company and a former member of the City Council from the first ward. Mr. Leadbeater was the son of Lucy and the late Edward S. Leadbeater. His wife was Miss Mary Morrill of Conway Center, N. H., who, with three sons and three daughters survives him.

WILLIAM R. HALL

William R. Hall, former Mayor of Manistee, Mich., founder of the Hall Drug Company, and for many years a leader in civic work in that city, died suddenly in the railroad station of Manistee. Mr. Hall was born in Painesville, Ohio, in 1847 and began in the drug business in Manistee in 1868 as a clerk. In 1869 he bought his own store and from that time until 1914 was active in the trade. He was elected Mayor of Manistee in 1912.

MRS. HELEN A. NOYES

Mrs. Helen A. Noyes, widow of Daniel R. Noyes, founder of the wholesale drug firm of Noyes Brothers & Cutler of St. Paul, died at her home, 366 Summit avenue, St. Paul, February 10th. Mrs. Noyes was born in Alton, Ill., seventy-five years ago. Her husband died in 1908. Surviving are three daughters and two sons: Mrs. W. A. Brown, N. Y. City; Mrs. Rollin S. Saltus, Mount Kisco, N. Y.; Mrs. Thatcher M. Brown, Red Bank, N. J.; D. Raymond Noyes, New York, and Winthrop G. Noyes of St. Paul.

JACOB S. FRANTZ

Jacob S. Frantz, for more than thirty-five years a retail druggist in Danville, Ill., died in Jacksonville, Ill., on January 27th. He had been in a sanitarium for a number of months. He was born in Elderton, Pa., on November

8, 1840, but went west in 1868 and settled in Sydney. In 1867 he was married and soon after went into the drug business as a clerk. Later he took over his own store and for 35 years has been a well-known man in the trade. He established the first pharmacy in Oaklawn as a branch of his Danville store. He is survived by his widow and one daughter.

W. H. MCGARRAH

W. H. McGarrah, a resident for half a century and one of the oldest druggists of Scranton, Pa., died on February 17th, following a three days illness of bronchial pneumonia. He was born in New York City in 1848 and entered the drug business in Scranton forty-five years ago, becoming a member of the firm of McGarrah & Thomas, a partnership which continued until a few years ago. It is said that many of the prominent druggists of Scranton had received their early training under the eye of Mr. McGarrah. He was a 32d degree Mason and a member of Schiller Lodge, F. & A. M. Four children survive, William H., Jr., a druggist of Philadelphia, Russell, a teacher of chemistry, Donald, a student, Henry, an electrical engineer, and Mrs. C. E. Swartz, all but the first-named being residents of Scranton.

RECENT DEATHS

—CYRUS P. CALVERT, president and treasurer of the Calvert Aniline and Chemical Co., Cincinnati, Ohio, until ill health necessitated his retirement from business a year ago, is dead at the age of 72. He had been engaged in the drug and chemical business for fifty years, and was mayor of Hartwell in 1902. He was born in Burlington, Ky., and was a friend of Prof. John Uri Lloyd, who is said to have found inspiration for his story "Stringtown on the Pike" in their acquaintance. Mr. and Mrs. Calvert celebrated their golden wedding in October, last year.

—ANTHONY B. McCARTY, of the McCarty Drug Co., Joplin, Mo., died of a complication of diseases on February 6th. He was born in New Jersey in 1838 and moved to Missouri in 1858, opening one of the first drug stores in Joplin in 1876. He was a veteran of the civil war, serving in the 137th Illinois infantry. He had also served the city as mayor. He is survived by his widow, two brothers and one sister, his brother L. C. McCarty being connected with him in the drug business at Joplin.

—J. F. LLEWELLYN, a former president of the Missouri Pharmaceutical Association, and a leading druggist in Northeast Missouri for more than forty years, is dead at Mexico, that State. He was a frequent contributor to various pharmaceutical journals and was local observer for the U. S. weather bureau. He was 71 years of age. He joined the A.Ph.A. in 1867 and later became a life member of that organization.

—GEORGE R. COLLIER, proprietor of the Collier Drug Co., one of the oldest drug houses on the Maryland peninsula, died at Salisbury, Md., on January 21st of pneumonia. He was 51 years of age, and a great lover of blooded horses. He was identified with the National Trotting Association, and was an official at many of the race meets held on the Eastern Shore of Maryland and Virginia. He leaves a widow.

—HARRY A. REINDOLLAR, who for twenty-five years conducted a pharmacy at Stricker street and Lafayette avenue, Baltimore, Md., died recently after an illness of about a month from kidney trouble. He was born in Carroll County, Md., in 1873. His widow, three sons and two daughters survive. A brother, Frank Reindollar, is a druggist of Baltimore.

—DR. ARTHUR LAMSON, of Upton, Mass., for 12 years a druggist there and at one time an officer of the Massachusetts Pharmaceutical Association, died at his home in his forty-fourth year. He was born in Hinsdale, N. H., and was educated there. He was a selectman in Upton for many years. His widow and two sisters survive him.

—JOHN R. MILLER, aged 61, for years engaged in the drug business in Indianapolis, Ind., died on February 9th. With the exception of a few years when he was president of the Indianapolis Drug Co., he was in the employ of the Daniel Stewart Co., and the Kiefer-Stewart Co. He was born in Hamilton, Ohio.

—AIME JOSEPH LA CHAPPELLE, 30 years old, of Turners Falls, Mass., died at his home. He was a native of the town and had spent his life there. He was graduated from St. Hyacinth, P. Q. and the Massachusetts College of Pharmacy. He was proprietor of the Opera House Pharmacy.

—M. B. SOTOLOFF, a druggist of Philadelphia died February 7th. He was 32 years old and had been in the drug business 10 years. He was a graduate of the Philadelphia College of Pharmacy and was one of the organizers of the Maccabees. Mr. Sotoloff is survived by his widow and one child.

—JOHN F. SULLIVAN of Fall River, Mass., died in January at his home there. He was one of the most prominent druggists of the mill city and was owner of the "Silver Front" pharmacy. He served for a number of years in the army. He was once a city councilman.

—E. N. LOOMIS, druggist of Hannibal, Mo., was found dead in bed in his room above his store on February 5th. Death was due to heart failure. He was about 68 years of age, and had been a resident of Hannibal for about 45 years. He is survived by one daughter.

—MARTIN L. MILLER died February 3d in Steubenville, Ohio, where he had owned a drug store for many years. He was born in Pittsburg and studied pharmacy in that city. In 1854 he opened a drug store there but later went to Ohio. He leaves four children.

—ANTHONY SCHNITZLER, 38, for fifteen years a druggist of Long Island City, N. Y., died on February 15th from Bright's disease. He was a member of Queensboro Lodge of Elks and of Island City Lodge, F. & A. M. He is survived by his widow.

—D. GEORGE BURR, for many years a member of the firm of Gilman Brothers, wholesale druggists in Boston, died February 9th. He was 68 years old. Mr. Burr was born in West Fairlee, Vt. His widow, two sons, two daughters and a sister survive him.

—PETER J. PRIOR, JR., died after an illness of several months in Hartford, Conn. He was born in Plainville, Conn., and had been owner of a drug store there for 10 years. He leaves his father, postmaster of Plainville and two brothers.

—JOSEPH WALKER SCOFIELD died in Chicago. He was born in Waterford, N. Y., in 1842, and entered the drug business of Chicago in 1868. He was secretary of the Fuller and Fuller Company. His wife and two children survive him.

—DR. PEARCE KINTZING, who introduced the carbolic acid treatment into Baltimore and who was the author of a number of textbooks died January 30th in Chicago. He was a native of Lock Haven, Pa., and was 55 years old.

—GEORGE W. COVINGTON, druggist of Chestertown, Md., died February 2d. He was in his 83d year. Mr. Covington was born in Middleton, Del., but entered a store in Chestertown in 1851. He is survived by three children.

—JAMES J. KERWIN, of Manchester, N. H., died at his home on February 4th. He was 44 years old. He had been the head of the firm of Kerwin and Sheehan for 14 years. His widow and four children survive him.

—WILLIAM F. PLAYER, salesman for Bruen, Ritchey & Co., wholesale druggists, New York City, died on January 25th at his home in Brooklyn, N. Y., aged 54. He was a Past Noble Grand of Magnolia Lodge, I.O.O.F.

—J. A. FULLER, aged 60 years, for many years a druggist of Omaha, Neb., and recently a special agent of the Standard Oil Co., in that territory, is dead. He is survived by a widow, three sons and one daughter.

—MALCOLM HALSEY, 36 years old who conducted a drug store at Bellport, L. I., and was formerly a village trustee died February 6th. He was survived by his widow, his father, two brothers and two sisters.

—EVERETT F. CORLISS, for thirty years storekeeper and pharmacist at the State institutions in Howard, R. I., is dead after an illness of about two years. He was born in West Newberry, Vt., 59 years ago.

—JOHN N. DILLE, 83 years old, a druggist of Prosperity, Pa., died February 5th. For many years he conducted a drug store in Washington, Pa. He is survived by two sons, one daughter and a brother.

Phonographs—Do They Bring Trade?

The old-fashioned talking machine is as much a thing of the past as is the druggist who doesn't take a profit from the needs of his neighborhood through a paying sideline. Progress has developed the phonograph as well as the drug business and it begins to look as if the druggist might be still further developed by taking a certain proportion of his growth along with the phonograph.

There are many arguments that can be brought out on both sides when the question of phonographs as a side line is brought up for debate. At first blush they don't look feasible and their popularity in such a position is doubtful. But there is a chance for the druggist who dares to handle them. An agency is usually available, and it would seem that phonograph handling by the drug store had better be done in that way.

Neighborhoods are progressive and slightly antagonistic. It is human nature for Mrs. Brown to want what Mrs. Jones has, only something a little better. If Mrs. Jones has a phonograph, and Mrs. Brown has none, it's not a bad bet that Mrs. Brown will go to the city and get her a machine as soon as her husband's pay envelope is at hand. Unless the druggist carries a stock. Of course, such a procedure is not always bound to happen, because Mrs. Brown may be conscientious enough to pay her butcher's bill before she gets the machine. But if there is a way to do it, she is going to have a machine, and have it before Mrs. Jones changes hers for a player piano.

To be frank, the field for phonographs is a limited one and it holds all sorts of difficulties. In limited ways, the druggist in a medium sized city, a suburban town, or even a section of a large city, and certainly in the country, could make it pay and pay big.

The more expensive machines, which retail for from \$100 to \$500 are out of the question. In the first place they tie up too much money in stock. In the second place, customers will rarely pay for them in cash. The installment plan involves an intricate system of bookkeeping, to say nothing of the danger from bad debts. It also means the engagement of an expert salesman, for to make a \$100 or a \$500 sale one must know what he is doing. Then, too, such machines would not sell rapidly. The commissions to be made as agent would not cover the expenses of the sale. Here are some approximate figures which go to prove that handling the expensive machines is not good business.

Book-keeping on the sale (including salaries)	\$15
Interest on installment plan	2
Express, overhead, stock room, etc.	2
.....	\$19
Commission 10 per cent on \$100	10

Even if the commission granted were larger than 10 per cent, as it almost certainly would not be, it would hardly be 20 per cent, and to sell the expensive machines at \$100 and more the druggist will have to get at least 20 per cent to give him a profit.

Money in Lower Priced Machines

Where the money lies in phonographs is in the smaller boxes. The \$15, \$25, \$50 and perhaps \$75 types can be made to pay. In those there will be no bookkeeping, because the buyer will pay cash. There will be no money lost on investment and interest through the time pay plan. And the commission for sales will be a bit higher.

Perhaps the greatest advantage in a phonograph department, however, lies in the records and the possibilities to be found there. A good line of records is a paying proposition. Not only can you sell your own machine customers but you can use those who have bought their phonographs elsewhere. They all want records. And the druggist can supply their needs.

There is profit in records. Most every music store, which specializes in machines and records, finds itself making its best money from the latter. That is because there is a steady demand. Just as it is true of percolators, modern people are buying phonographs not as a luxury but as a need.

Going even further than buying and selling. Phonograph records are the best advertising medium that can be used within the four walls of the store. They are better than cards, they are better than "word of mouth" evangelism. They are interesting, and they combine the best there is in music, which has a charm for every man, woman and child, with the opportunity to talk directly about your own goods. It is the easiest thing in the world to have a special record made. Such a record, shaped interestingly, telling the story of your store in such a way as not to bore hearers, will cost perhaps \$10.

Indirectly the advertising value of a phonograph department is more important. There are nights, in your store, when you wonder why people don't come out. They stay at home because there is no place to go. There are afternoons when the women customers lack interest. If a woman dropped into the store and found two or three of her friends listening to a good machine play a good, high-class record, and knew that there was to be a concert for an hour more, she'd remain. If she remained, she'd buy her pills there later in the evening when her son got an acute stomach ache from too frequent trips into her neighbor's orchard.

One of the big phonograph makers in New York runs periodical concerts. In front of the building are always a line of big automobiles. The advertising is invaluable. You might not get a line of machines in front of your drug store, but if you give a phonograph concert, carefully choosing your records, you'll not only attract people but you will sell your machines and the records that go with them.

There is a possibility in talking machines. They must be carefully handled, of course, all stock of high price must be looked after in that way. If some sort of care is given them, however, they ought to show something of a profit for the druggist who carries them.

USE OF ASPIRIN AS A TRADE-MARK CLAIMED

The patent on acetyl salicylic acid held by the Bayer Company, Inc., of New York, which product has been marketed in the United States under the trade-marked name "aspirin," expired on February 17th, and now any manufacturer is at liberty to make the acid and sell it under its chemical name. The Bayer Co., however, does not propose to permit the use of the word "aspirin" to any other than those of its own choosing, and has served notice on the trade that it has the sole right to the use of this name as a trade-mark, even though the patent has expired, and that any violation of these rights will be vigorously prosecuted.

Under the patent laws of the United States the Bayer Company has held a monopoly on acetyl salicylic acid by virtue of a product patent granted for a term of seventeen years, thus preventing the manufacture of the substance by any other process that might be devised. Now, it has been announced, a number of American manufacturers will early begin to supply the domestic article, at least under

its chemical name. Whether any one other than the Bayer Co. will attempt to use the name "aspirin" for acetyl salicylic acid remains to be seen. The argument is made by some in the trade that aspirin is a name and not a trade-mark or brand; that the product was introduced as aspirin and not as aspirin brand of acetyl salicylic acid, and therefore the name by such usage should belong to the substance and not to the inventor of the name. The Bayer Co. stoutly asserts that the trade-mark "aspirin" is its exclusive property, and therefore only acetyl salicylic acid manufactured by it can be marketed and sold as "aspirin."

A. B. HUESTED & CO. INCORPORATED

One of the oldest retail pharmacies in the central section of New York, that of A. B. Husted & Co., Albany, was incorporated on February 5th, with capital stock of \$50,000, the charter authorizing the company to deal in and to do everything necessary to the conduct of a wholesale and retail business. The directors are Garrett V. Dillenbach, Edward Loeb and A. L. Dillenbach.

SARGOL MAKERS FINED \$30,000

Promise Not to Appeal Fake Advertising Case

United States District Judge Ray, sitting in Auburn, N. Y., on February 17th fined Wylie B. Jones and Herbert E. Woodward, makers of Sargol, the proprietary medicine, \$30,000. The defendants promised not to appeal the case in return for the leniency of the court in not imposing a lengthy jail sentence.

The trial had gone on for thirteen weeks. It was actually a trial on the charge of using the mails to defraud, but it amounted to a battle between clean and "fake" advertising. The Sargol company advertised that its preparation would make people who weighed too little to be normal, perfect in that respect. It did not do it. That in a nutshell was the case against the company although it was charged that they persisted in using the mails to tell prospective buyers of its advantages.

There was a "money back" clause in the contract, but during the trial it was brought out by several witnesses that no money was forthcoming unless the purchaser produced two witnesses who would sign a letter stating that he had used the medicine and it had done him no good. He had to return the box cover in addition to that. While the demand for the box cover was on the packages, there was no mention of the two witnesses.

The company pleaded "not guilty" to the indictment of 11 counts brought against them. They called hundreds of witnesses to show that they were not guilty. But the jury, after thirteen weeks of listening to the trial found them guilty in about four hours' time.

During the trial the financial affairs of the Sargol makers were gone into with great care. It was shown that the profit from the medicine had been great. During its course, the books of the concern were shown to the jury and each day's earnings for over a year were carefully examined. Practically all of the correspondence of the company was on hand and it took two trucks to bring everything to the courthouse. There were 25,000 exhibits.

One of the contentions of the company was that many people had written to it telling of the great good Sargol had done them. These endorsers, to some extent were in court, but in more cases it was found impossible to reach them. One, a mysterious "Dr. Smith," who wrote that it was the best thing he had ever seen could not be found, although his commendatory letter was offered. It was not accepted, Judge Ray ruling that there was no evidence that such a person ever existed.

Ingredients of Sargol

There were many "high lights" to the trial, of course. Chemical experts analyzed the product and found that it contained, essentially, the following ingredients:

Extract of sabal	80 grains
Calcium hypophosphite	20 grains
Sodium hypophosphite	10 grains
Potassium hypophosphite	10 grains
Lecithin	5 grains
Extract of nux vomica	3 1/3 grains

Medical experts went over the preparation with great care. There was considerable discussion as to the value of hypophosphites in growing fat. The doctors for the defense contended it was of great value while the experts for the prosecution were as insistent against its use. From a medical viewpoint and in the character of evidence produced by both parties, the trial was one of the most interesting that has been held, especially at this time when other cases brought by the government are about to be tried on similar charges.

In sentencing the defendants, Judge Ray said:

"In the opinion of the court the jury were justified in finding the verdict which they did. The imposition of a heavy fine with imprisonment would be justified in this case were it not for the fact that the evidence also shows that one of the United States postal inspectors, not now in the service, was informed of the nature of this business long before this action was started, and that he took no action.

"These defendants have borne a good reputation, and the evidence is that this is their first offence, although it is one that was long continued. To be sure the amounts

they received were small, but they covered the entire country.

"The evidence shows that there were thousands who reaped no benefit from the treatment, but who preferred to keep silent rather than to have the fact that they had lost their money become known. The evidence shows that Sargol could not and would not do what they claimed for it."

The following sentence was then pronounced: "In the case of Wylie B. Jones, that he shall pay a fine of \$10,000 on the first count, one of conspiracy, and on the second, third, fifth, sixth, seventh, eighth, ninth, tenth, eleventh and twelfth counts the sum of \$1,000 each—the fourth count was withdrawn during the trial.

"In the case of Herbert E. Woodward the sentence is that on the first count he pay a fine of \$2,000, on the second, third, fifth, sixth and seventh counts \$1,000 each, and on the eighth, ninth, tenth, eleventh and twelfth counts \$600 each.

"These fines," continued the judge, "make an aggregate of \$30,000, and this sum will not half pay the expenses which the United States has been to in the prosecution of this case, nor does it make restitution to any one. I feel sure, however, you gentlemen, with the reputation which you have heretofore borne, will show the people of Birmingham, or wherever you may be, that you intend to be and will be upright and honorable citizens, and that this was a misapprehension of the law and that you will be law-abiding citizens, worthy of the respect of your fellow men."

PROPOSED AMENDMENTS IN ILLINOIS

What is popularly called Governor Lowden's "consolidation bill" has been passed by the Illinois House of Representatives at Springfield, and it is expected also that the bill will be soon passed by the Senate. It is a measure in which the governor has taken the greatest interest. The enactment of the proposed law will change very materially the status of the Illinois State Board of Pharmacy.

It provides that five examiners shall be appointed by the governor and that all of them shall be druggists. Their duties will mainly consist, it is said, of examining candidates for registration as pharmacists in Illinois and in determining the fitness of such applicants; but the work of the pharmacy board will be done under a new state department, which is to be known as the Department of Registration and Education. Parts of the Consolidation Bill, which touch upon the State Board of Pharmacy are the following:

Neither the director, assistant director, superintendent of registration, nor any other officer in the department of registration and education shall be affiliated with any college or school of medicine, pharmacy, dentistry, nursing, optometry, embalming, barbering, veterinary medicine and surgery, architecture or structural engineering, either as teacher, officer or stockholder, nor shall he hold a license or certificate to exercise or practice any of the professions, trades, or occupations regulated.

No member of an advisory and non-executive board shall receive any compensation.

Each officer whose office is created by this act shall be appointed by the governor.

Nothing in this act shall be construed to amend, modify, or repeal the state civil service law.

The Department of Registration and Education shall have power: To exercise the rights, powers and duties vested by law in the State Board of Pharmacy.

The Department of Registration and Education shall wherever the several laws regulating professions, trades and occupations which are devolved upon the department for administration so require, exercise, in its name, but subject to the provisions of this act, the following:

1. Conduct examinations to ascertain the qualifications and fitness of applicants to exercise the profession, trade or occupation for which an examination is held; and pass upon the qualifications of applicants for reciprocal licenses, certificates and authorities;

2. Prescribe rules and regulations for a fair and wholly impartial method of examination of candidates to exercise the respective professions, trades or occupations.

For the pharmacists, five persons, each of whom shall be a competent registered pharmacist, in the state, and shall have had ten years experience in the dispensing of physicians' prescriptions since said registration.

The action or report in writing of a majority of the persons designated for any given trade, occupation or profession, shall be sufficient authority upon which the director of registration and education may act.

Sixty-Three Years a New York Druggist

Gustavus Balsler Recalls old Days in City

THERE is a section in cosmopolitan old New York that furnishes food for imagination. One has but to walk through it to think that he is not so far away from the Steppes, the cities of lower Russia or the capitol of some most foreign country. He rarely hears a word of English, and when he does it is with an accent that shows the force of the Russian language, or perhaps, now and then, the more Gaelic twang of an Irishman.

The Irish do not live in the section, that is certain. But an all-wise Police Commissioner has sent Irish policemen into it to keep order, and that's why one hears an outburst of Gaelic every now and then. The rest, however, is the guttural and nasal combination of the Russian Jew, whose children know the English language, and even the more hybrid American, but every shop window, every street corner and every tenement house has a "song note" decoration on it somewhere.

What has that to do with drugs, or the drug trade? Nothing actually, but in the midst of New York's congested Jewish section there is a drug store of the old class, a breath of the "before the war days," a store that takes visitors back to the time when the East River was used by ship builders and when Avenue B was a street of aristocrats.

The owner of the store is Gustavus Balsler, a druggist of the old school, and he has been at the same place of business for 63 years. He is the oldest druggist in the city, and his clerk comes very near to being the man who has remained longest in one place of all the clerks in the city.

Mr. Balsler's store is a relief. It is a pharmacy pure and simple. It is in nowise a modern city drug store. It has one department and only one—prescriptions. And although he does not know much of the Jewish language, Mr. Balsler can fill prescriptions for the most orthodox and does it. He does not do a large business, but he does what he does do very well.

Store Opened in 1854

The store was opened at 137 Avenue B in 1854. There was a garden behind the building and from the windows of the work shop Mr. Balsler could look to the river and see the ship building, then an important New York industry. Now there is a tenement house packed in against the fence of a small back yard, and the only view possible is a clothes-line of doubtful age and a kitchen of doubtful efficiency.

Modern times have changed the neighborhood. When the Balsler store opened the clientele was "American, and good American at that," he says. Then came the strike among the ship builders, the consequent riots of 1860, the war * * * and Germans. After the Germans, who were of a high class, came French of the same standing. About 1872 the neighborhood began to change again, and Irish and Irish-Americans began to find homes there. It was built up. The low brick buildings of the early 80's gave way to tenement houses in 1895 and the Irish wouldn't remain.

As Hibernian wanderers folded their tents and ordered furniture vans, a new race came in. The Jews were finding a resting place. They began to come in 1895 and 1900 and they've been coming ever since. The lower East side is the home of the Jew now, and the Balsler store, identically the same as it was in 1854 is catering to them as it did to the American neighborhood of the earlier time.

Perhaps there have been a few repairs to the store, but there have been no changes. When it was opened, Mr. Balsler elected to use hard wood in his fixtures, and the hard wood has stood the test. Its arched cabinets and high, inconvenient shelves are still there. Its heavy drawers with clear white handles lettered in gilt are still much in evidence. Its small show window, with weird show globes of brilliant liquids still attracts, and the only

sign on the whole shop front is the little name plate on the door—just as it was in 1854.

It is natural that Mr. Balsler should have worked up a friendly and intimate trade in his early days as a shop keeper. He did not expect to keep that trade when the families moved away, but even today he has customers from great distances.

Customers Have Stuck by Him

"Some people come over here from Jersey City and Brooklyn," he says. "Others come down from way uptown New York. And they are not all the ones who traded with me when they lived down here themselves. Some of them are sons and daughters. The younger generations of the old families have done what their parents did, and I fill many prescriptions from Jersey and even further away.

"I have always compounded my drugs carefully. I do very little, I may say no proprietary medicine business, and have built my reputation on my prescription work. The doctors who lived here in the 70's and who have good practises uptown or in Brooklyn often send me patients for prescriptions because they know my work and don't know that of more modern druggists.

"These days there are no more pharmacists in New York. You may run across one now and then, but it is seldom. The old style chemist has gone and in his place has sprung up the small department store that calls itself a drug store just to have a name. Those who do prescription work don't do it in the old way.

"Why, here I have what I believe to be the only drug store distillery plant in the city. When we began business it was a necessity, now it is done away with. Yet I have distilled and purified every drop of water that has gone out of this store in 63 years myself.

"There's another thing about prescriptions that is peculiar. In the old times a doctor could write. Now he seems to try to figure out just how unreadable he can make his order. My books, which have every prescription I have ever filled in them, 52,069, show the difference.

"The neighborhood doctors of 30 years ago wrote clearly and simply. The new ones who have come in lately write atrocious hands. The newer the practitioner the worse his writing is what I have found. And the simpler the formula wanted the worse the writing is. That fools the people, you see."

Sees Need of Prescription Druggists

Mr. Balsler is a big man, with gray hair that flows back from his forehead in waves. He impresses one as a man who knows what he says, and he insists that New York City, at least, needs more purely prescription druggists.

"Most of the druggists of today compound very few drugs. They fill prescriptions, but with drugs already compounded. Perhaps they are not exactly proprietary medicines but they are easy to procure. The physicians are forgetting how to prescribe as they formerly did. And I believe it is because the druggists don't know how to put up what is wanted."

Along with his recollections of the drug trade in the city—he won't say it is a drug trade growth—Mr. Balsler tells other interesting features of the life he has led. When he was a boy of ten years old, for instance, he left his farm home at Greenwich and Liberty streets—now a closely packed corner that hasn't an inch of dirt to boast—with "Bill" Cody, who was better known as Buffalo Bill and who died recently, to go hunting.

Mr. Balsler says that Bill Cody's residence in New York is not well known. Yet when both were ten years old, Cody lived here for a few months and was even then a great hunter. Later he went west with his family and it was then that fame began to come to him.

The veteran pharmacist did not want to go into the drug business. He had studied under private tutors to

become an engineer and dealing with sick people was something he had no desire to do. His father and two brothers were physicians and were successful, but Mr. Balsler couldn't bear to be around a sick bed. He felt he could not be a good doctor and would not try it.

His brother founded the store at 137 Avenue B, and shortly after it was founded was given a Federal position of importance.

"Trapped as a Druggist"

"That ended me as an engineer," says Mr. Balsler, "I was trapped and before I knew it I became a druggist. I took the store for him for awhile and then the war came and he went to it as a surgeon. I went as an assistant to the medical staff and when it was all over I came back here and settled down again as a druggist.

"I've been a pharmacist ever since. I've had only one clerk and he is here now. I've done some traveling and I am happy. I have known many famous surgeons and was very friendly with Dr. Jacoby when that worthy first came to this country. We studied a bit together and I have followed him closely ever since.

"Then, too, I have done some teaching in Columbia, when that college was downtown. When it moved uptown I didn't go along because I was only a teacher by proxy in a way. When they couldn't get any one else to go and talk to the boys, I'd go, and we got along very well."

Frank M. Austen is the clerk. For 27 years he has been with his employer and most of the 27 years he has traveled from East New York—in the furthest reaches of Brooklyn—to Avenue B. Such a trip is not easy, but bright and early every morning Mr. Austen has turned up, and has worked all day. Then he has taken a long trip via street car or "L"—when he first began his employment it was a long walk.

The Balsler store is an oasis in a difficult part of the city to appreciate. It is also a relief among drug stores, because, whether one agrees with his theory of a merely prescription business or not, it is refreshing in a certain way to find such a store.

SEND MONEY WITH TELEGRAPH ORDERS

The Western Union Telegraph Company has instituted a new scheme whereby money can be sent with orders forwarded over the telegraph wires. The new system is designed to aid both buyer and seller and is as simple as can be devised.

Heretofore, when money was sent by the wire, orders or instructions relating to the remittance had to be sent in separate messages. That meant that the sender had to pay for two messages. Now, money transfers between United States points may include orders or instructions as to what the money is to cover.

The new order is particularly helpful to the druggist. It is a truism that money sent with an order will hurry the order. The druggist who suddenly finds himself short in some of his most important stock, may order it and pay for it in a hurry that assures him prompt delivery. It is even possible to use code. The cost of the messages is the cost of sending the money plus one cent a word charge for the order. Already the Western Union has found that the new plan has simplified business arrangements.

PHILADELPHIA DRUG EXCHANGE

At the 56th annual meeting of the Philadelphia Drug Exchange last month, Clayton F. Shoemaker, chairman of the committee on legislation, presented on behalf of the board of directors his annual report, detailing the general conditions of business, with special reference to the interests of the drug and chemical trade and the rapid growth in exports by reason of war conditions. Treasurer Anthony M. Hance presented the financial report.

The following officers were elected for 1917: President, John Fergusson; vice-president, Harry B. French; secretary, Joseph W. England; treasurer, Anthony M. Hance; directors—Charles E. Hires, A. Robinson McIlvaine, Dr. Adolph W. Miller, Harry K. Mulford, Adam Pfromm, Clayton F. Shoemaker, Richard M. Shoemaker and Walter V. Smith. Addresses were made by Adam Pfromm, Walter V. Smith and George E. Bartol, president of the Bourse.

KNOW YOUR CUSTOMERS BY NAME

They Are Flattered and Remember You, Too

Can you say to the man coming into your door:

"Good afternoon, Mr. Jones?"

And realize that you have the name exactly right and that he realizes it, too?

If you can do that, you've gone a long way towards the heart and trade of Mr. Jones. If you can do the same thing for Mr. Smith, Mrs. Brown, Mrs. Robinson, Mr. Green or Mrs. Black, you've made inroads on their custom, too.

The simplest form of good public service is flattery. When politics first became a profession or a menace, it depends upon who is in control of your town, flattery of voters entered the field. It still holds sway. If you wanted to start a dancing class you wouldn't write letters to everybody and anybody; you'd find out whom you wanted and then tell them that the fate of the class depended upon them. Which is flattery.

If you have a good prescription department in your store, you want to use it. Why don't you become acquainted with the people who will help you? You do, to some extent. But if you could call each one by name, and each one knew that when he went into the store, he was going to a place where he was known, you could use it easier.

Knowledge of customers' names doesn't begin and end with prescriptions, of course. It is easy to follow throughout the whole business.

Of course it isn't good business to let the customers know you are flattering them, and you and they may not even think you are. But it does flatter just the same, to be able to go into a store and know that you are known.

The other day a Brooklyn woman went into a drug store she had traded in just once before. There are two stores near each other. She had chosen the second store because it was a block nearer her home, but she went into the first because she was passing at that particular time. The owner called her by name. Now she walks the extra block and trades there. This is a true incident because it is entirely possible to produce the man who pays the bills.

There are two things which really do happen in a store in which the customers' names are known. The first is that the customer feels at home, and has a feeling of security. The second is that the druggist knows with whom he is dealing and can talk his stock a great deal better.

It is easy enough to learn names. First there is the telephone directory, that ever helpful source of profit. Then there is the gentle method of diplomacy. Then there are the butchers and grocers of the neighborhood whose charge accounts will be of assistance. Again there are the policemen of the "beat." And there are the servants. Last but not least, there is your own discernment, which can pick up honorable knowledge from scraps of paper, such as letters held in the hand, the name on other packages, etc. It is really too easy.

For the amount of mental labor expended, call it detective work if you will, there is much to be gained. Once a person feels secure in your store, he will want to trade there. Don't you feel better yourself when you can go into a place and be called by name? Of course, reverting back to the opening statements, it is a form of flattery, but it is a workable form. It means trade.

There is a druggist in Cambridge, Mass., who has worked out the "knowing names" scheme to an even greater extent. But he has had a peculiar situation to work in, of course. He is situated in Harvard Square, directly opposite the university and his trade is largely university trade. He hasn't the name of every Harvard student on his finger tips, but he knows so many of them that you can drop into the Billings and Stover store at almost any time and learn if Bill Brown has been seen around lately.

His idea is simple. He believes that if he knows the Harvard students his place will be a clearing house for news about them. He makes Harvard his center. The result is that nine times out of ten the man who wanted Bill Brown will do all his trading in the Billings and Stover store, and Bill Brown will do it, too.

Business Catchers

*What the Pushers
Are Pushing. . .*



FLATBUSH, which is one of the most residential of Brooklyn's residential sections, has become accustomed to a motor cycle to the side of which is attached a carrier car. The motor cycle with its delivery attachment is presided over by a gentleman of color who wears a uniform and a happy inviting smile. The machine is painted red, with white lettering, and the adage the motor cycle carries through the streets of the district is "Reid & Snyder, druggists, 741 Flatbush avenue."

The motor cycle is not in itself a remarkable thing. New York has plenty of them. But the point is that Reid & Snyder have caught a lot of business through its use, and are daily catching a still larger amount. It is of course the delivery wagon for the company. A telephone system which has been so carefully used that all of Flatbush knows the number, is the background for the motor cycle and it has now come to pass that Reid & Snyder do almost as much business over their telephone as they do over their counters.

It is merely a question of education. The firm set out to teach Flatbush that the Reid & Snyder drug store was one of the best places to trade within the city limits and it has succeeded in doing very nearly that. At least, it is no unusual thing to see either the delivery motor cycle or the Ford delivery car which the concern also operates as far down as Coney Island or even way down in the center of Brooklyn. When a purely district store in a city like Brooklyn can do such a trade outside the section it is supposed to serve, there must be something in the delivery wagon.

The Reid & Snyder store itself is a fine place. It is a pleasure to do business there and to watch business being done. The partners are both young men who believe in modern ideas. Everything about the store is in the best of shape. The soda fountain is a handsome thing from which it is more than a real pleasure to drink. It is presided over by a gentleman of color who wears a clean natty uniform and who never fails to smile while mixing a drink. Did it ever occur to you that there is a great business value in a smile?

In any event, the Flatbushite who wants a package of talc powder or shaving soap, reaches for the telephone and calls up the firm. The order is accepted and put up, and in a surprisingly short while, the motor cycle dashes up to the house door, he signs and pays for his purchase and then decides that hereafter he'll buy everything from Reid & Snyder's. A decision which Reid & Snyder have no objection to aiding in every way at their command.

Modern stores demand modern ideas. It is certainly impossible to point out that fact too often. In the Reid & Snyder store there are modern ideas, and there is an atmosphere of profit and success. A motor cycle costs \$100 or perhaps a bit more as an original outlay. It will soon pay for itself. In the case of the Flatbush store it has come very nearly paying not only for itself but for the automobile the concern also uses.

Out in Madison, Wisconsin, Henry Lewis, who has a drug store on State street has a novel means for attracting people to his shop and so making them customers. Mr. Lewis is a curio collector, and he has turned his hobby to good account, which is something that doesn't often happen with hobbies. His collection of curios is on exhibition in his store. It is easy to imagine how many people stop at that counter to look over the collection, and later buy something just because they feel interested.

There are over 500 old coins of various sizes and denominations, old newspapers, yellow with age are there, old style watches, stamps, knives, pistols of a century or 50 years ago, badges and emblems of former generations, letters, "fake" money, peculiar prescriptions and even sales tickets for slaves are there. It is not only a valuable collection from the advertising standpoint, it is a valuable exhibition of curios.

One of the most interesting of the newspapers is the Vicksburg Daily Citizen of July 2, 1863. The copy was printed on wall paper of a faded hue and was circulated evidently to encourage the soldiers and citizens besieged in the town which fell two days later. It is an interesting copy in every detail, but perhaps the best reading in it is the comment of the publishers on the condition of the "Yankees" and the comment of the self-same Yankees, made in a foot-note. The Citizen says that the Union soldiers are "deserting. Fever, dysentery and disgust are their companions and Grant is their master. The boys are deserting daily over the river in the region of Warrentown, cursing Grant and the abolitionists generally. The boys are down on the earth and burrowing in hot weather and with bad water."

This collection of curios has attracted a great many people into the Madison store. It is certainly odd to find such a thing in a drug store, but it is as important a trade bringer or business catcher as the circulating library, the telephone booth, the stamp seller, or the periodical counter. Mr. Lewis believes that it brings people into his place and that once they get in they can be sold goods. Since most people feel a bit backward about enjoying such an exhibition free, there is every likelihood that they will stop in and buy something. Mr. Lewis, in airing his hobby, has certainly been able to catch a good business catcher.

DRUG STORES CONSERVING STOCK

A situation has developed in New York, and it is reported to be true all over the country, markedly so in the Eastern states, which is causing the jobbers and manufacturers considerable worry. The retail druggists are doing everything they can to conserve stock, are buying as close to the mark as possible, and in many cases, are cutting down from 50 to 75 per cent on normal orders. Not only is this true with drugs, chemicals and medicinal preparations, but it appears to be true, to some extent, in goods more easily classed as side lines.

International conditions are given by the jobbers as being at the bottom of the difficulty. The theory is that the retailers are taking no chances. Unsettled business finds the druggist in just as much trouble as it finds other retailers, the jobbers say, and the druggist will not put in a large stock of anything that he can not turn over quickly.

The jobbers are very careful, of course, to point out the fallacies of the stand. But their sales sheets show that the education is not exceedingly successful. Another thing that worries them, along with the conservation wave, is that when retailers do buy they purchase goods of a cheaper variety wherever possible. One of the big New York manufacturers who puts up a tooth powder which sells over the counter in 15 and 25 cent packages, has found that recent orders almost entirely are for the 15 cent size. Another instance, they point out, of "taking no chances."

SCHOOLS AND COLLEGES

OKLAHOMA UNIVERSITY

Dedicatory services for the new chemistry hall were held at the University last month, the ceremonies being opened by Governor Williams and followed with addresses by State Superintendent R. H. Wilson, President Stratton D. Brooks of the University, and William A. Noyes, director of the chemical laboratories at Illinois University. The new building is drawn from the plans of Dr. Edwin DeBarr, vice-president of the University, after an inspection trip covering the leading universities and scientific laboratories of the United States and Europe. The building is the second largest to be added to the campus within the past four years, and was made possible through an appropriation of \$125,000 by the 1915 legislature.

An effort is being made by the University to secure an appropriation of \$7,500 from the present legislature to purchase a standardization equipment bureau and to establish a State laboratory of this kind. It is now necessary to send all scales and measuring apparatus to Washington to be tested by the Government.

Military surgery and medicine is a new course to be given to the University medical students, according to word received by Dean Leroy Long from General Gorgas, surgeon-general of the army. The course will commence at once, an army surgeon being on his way from the East to take up the work of instruction.

An enrollment of 1,500 is expected for the 1917 summer session according to present indications. Several courses in pharmacy and chemistry for pharmacy students will be given. The work will be in charge of the regular members of the University faculty.

JERSEY CITY

The College of Jersey City on February 7th celebrated the hundredth anniversary of the discovery of selenium by Jons Jakob Berzelius, the great Swedish chemist, who enriched chemistry by his investigations. The main feature of the exercises was a lecture entitled: "The Centenary of the Discovery of Selenium and its use in Pharmacy, Medicine and Industry," presented by Friedrich Klein, Ph.D., director of the chemical laboratory of the college, and who has made selenium a lifelong study.

Dr. Klein gave the origin of the name, from the Greek *selenē*, meaning "moon," and also told of its discovery. Selenium was first observed as a red powder deposited in the leaden chambers used in the manufacture of sulphuric acid at Gripsholm, Sweden. The speaker also called attention to the valuable uses of selenium in pharmacy, medicine and industry, one of its principal applications that has been brought forward of late is in the treatment of malignant growths or cancer. The lecture was illustrated by numerous experiments, and was well attended by students, members of the alumni association, and representatives of the pharmaceutical, medical and dental professions. A lively discussion followed the lecture and Dr. Klein was given a rising vote of thanks.

IOWA UNIVERSITY

The Summer Session Committee of the University has announced that a four weeks' course of lectures will be given during August upon pharmacy and the changes of the new Pharmacopoeia. The work will be in charge of Dean Teeters and Prof. Kuever, and four lectures a day will be given.

F. F. Ingram, Jr., grand secretary of the Phi Delta Chi fraternity, is announced to give an illustrated lecture at the college of pharmacy on February 16th on the subject of "Collecting Material from the Ends of the Earth for Use in American Perfumes."

Dr. Robert P. Fischelis, representative of the H. K. Mulford Company, Philadelphia, addressed the students of the college on February 9th on the "Cultivation of Medicinal Plants." The lecture was illustrated.

I. A. Anderson, of Randall, Iowa, received the degree of Ph.G. at the mid-year convocation.

The College is represented in the present Iowa legislature by Senator J. M. Lindly, of Winfield, and Representative W. M. Becker, of Elkader. Both hold the chairmanship of the committee on pharmacy in their respective branches of the legislature, and are members of the appropriations and other important committees.

MASSACHUSETTS

The senior class of Massachusetts College of Pharmacy has elected these officers: President, Percy A. Leddy of Calais, Me.; vice-president, Miss Edna M. Follensby of Southboro; secretary, Stanley W. Foulser of Boston; treasurer, Cecil L. Holden of Hudson; valedictorian, Elmer H. DeLoura of Edgartown.

An association has been formed to have general control of athletics at the college. The governing board is a council of five members, four from the student body and one from the faculty, as follows: Joseph Sullivan, president; H. C. Bernner, vice-president; H. C. Muldoon, secretary-treasurer; Raymond Mulveny, and Saul Shalit. Basketball, hockey and bowling teams and a rifle club have been formed.

ST. LOUIS

The course of special lectures to students of all classes organized at the St. Louis College last autumn was continued on January 10th, when Oscar G. Salb, a graduate of Purdue University and at present active in biological research in St. Louis, delivered an evening lecture on "Physiological Testing of Drugs on the Lower Animals," illustrated by practical demonstrations. Aconite, cannabis indica, ergot, and digitalis were the drugs selected, and their action was shown by experiments so carefully selected that the audience readily grasped the principles underlying their application.

On January 25th a visit was paid to the Missouri Botanical Garden under the guidance of Prof. Hemm and Associate-Prof. Suppan, fifty-eight members of the classes being present. G. A. Pring, superintendent of the collection of orchids and other exotics at the garden, showed the general arrangement of the various departments and pointed out a number of plants of medicinal and economic interest. The expedition was chiefly of an explanatory nature, to enable the students to find the position of any particular medicinal plant or plants which they might desire to study in the growing state. When the weather becomes favorable for the outside growing of plants, another visit will be made to the garden.

NARCOTICS COMMITTEE HOLDS HEARING

At a hearing held at Albany on February 6th by the New York State Legislative Narcotic Committee, of which Senator George H. Whitney is chairman, a number of witnesses declared that the sale and use of habit-forming drugs were slowly decreasing throughout the State as a result of the Boylan law, and that corrective legislation designed to prevent the importation of these drugs from other states or foreign countries was the only absolute preventive.

Charles Gibson, of Walker & Gibson, wholesale druggists, stated that in his opinion, the general consumption of drugs had decreased during the past two years since the Boylan law had been in effect. He estimated there were between 100 and 150 addicts in Albany. He declared that the sale of heroin through his firm at present was negligible, while the consumption of morphine was only fifteen per cent of what it had been before the results of the law became apparent. Dr. E. Von Salis, chief chemist of the Bayer Co., Rensselaer, manufacturers of chemicals, dyestuffs, etc., said his company only sold drugs to reputable wholesalers.

WHOLESALE DRUG FIRMS COMBINE

Bruen, Ritchey and Schieffelin & Co. in Merger

Bruen, Ritchey & Co. will go out of business on April 1st of this year. The wholesale drug firm will be absorbed by Schieffelin & Co. after 78 years of business in New York City.



Dr. W. J. SCHIEFFELIN

William P. Ritchey, at present head of the Bruen, Ritchey & Co. firm will retire from active business but he plans to maintain a position, in an advisory capacity, with Schieffelin & Co. He is to be vice-chairman of the executive board of that concern.

No announcement has been made, nor will be made yet, according to Mr. Ritchey, as to the financial details of the merger. It is understood that Schieffelin & Co. purchased all the stock and good will of the other concern and that all the details have been practically arranged. Nothing more remains to be done except the formal transfer on April 1st.

The combination brings together two of the oldest and best established wholesale drug firms of New York. Both have been in business for many years, although the organization of Schieffelin & Co. far antedates that of the Bruen, Ritchey & Co. The business of the former was actually established in 1781, but it was not until 1794 that the Schieffelin family became actively interested. Then it was purchased from Effingham Lawrence by Jacob Schieffelin and since that time has always had a Schieffelin at its head, Dr. William Jay Schieffelin, the present president, representing the fifth generation in direct line. The Schieffelin Company is incorporated and has the following officers: President, Dr. William Jay Schieffelin; first vice-president, William L. Brower; second vice-president, Schuyler Schieffelin; third vice-president, Howell Foster; secretary, Henry S. Livingston; treasurer, Henry S. Clark.

Bruen, Ritchey & Co., which enters the merger, is also a firm of long standing. It was organized in 1839, and on April 1st, the date fixed for the consolidation, it will have completed seventy-eight years of active business life. The late Albert Bruen, who died in September, 1914, became identified with the business in 1850, associating himself with Israel Minor who then conducted a wholesale business at 214 Fulton street, the present location of the firm. In 1857 he bought out Mr. Minor's interest and operated the business with other partners until William P. Ritchey entered the company, when the name was changed to Bruen, Ritchey & Co., a firm in which Charles C. Bruen, a son of the late Albert Bruen, is a partner, and who with Mr. Ritchey, for years has been actively identified in the management of the company's business.



WM. P. RITCHEY

Both concerns have long been members of the National

Wholesale Druggists' Association, and have contributed of their forces to fill important official positions in the work of that organization. Dr. Schieffelin has served on various committees and was president of the association in 1910, while for a number of years Mr. Ritchey has been chairman of the committee on proprietary goods.

The company's plans are yet to be announced, but there is no question but that these will represent modern and progressive ideas. The men behind the merger believe that such ideas will go a long distance towards making the new venture successful, a subject on which Mr. Ritchey said he felt quite sure. But he would not discuss any other subject in connection with the deal. Officers of both companies would not talk of the plan of consolidation, and when asked if it was a purchase outright by the Schieffelin Co. with no stock being left for members of Bruen, Ritchey & Co., representatives of both concerns said it was too early to discuss the matter.

NEWS OF THE BOARDS

KENTUCKY

The Kentucky Board of Pharmacy examined a class of twenty-two applicants for registration at its January meeting held at Covington. Nine of the applicants passed as registered pharmacists, and five qualified as assistants. The next examination will be held in Louisville on April 10th and 11th, and applications must be in the hands of the secretary at least ten days before the meeting.

ILLINOIS

At the January meeting of the Illinois Board of Pharmacy held in Springfield, twenty of the fifty-five applicants for registered pharmacists' license; seven of the eighteen candidates for assistant pharmacist license, and four applicants for local registration passed successful examinations. The next meeting for the examination of applicants for registration as pharmacists will be held in the County Building, Chicago, on March 6th. Applicants for registration as assistants will be examined by the board on March 8th.

VIRGINIA

The Virginia Board of Pharmacy examined thirty-three applicants for registration as pharmacists at the meeting held in Richmond on January 16-17th, seven of whom were successful and were granted full registration, while four were granted registered assistant's certificates on the examination. Two applicants who applied for the registered assistant examination were successful. The next examination will be held on April 24th and 25th, this examination beginning on the fourth Tuesday of the month instead of the third Tuesday as heretofore, on account of the annual meeting date at that time being fixed by law. All other examinations will be held on the third Tuesday of the month as announced.

MISSOURI

As a result of the examination of the Missouri Board of Pharmacy held at Jefferson City on January 8th and 9th, six applicants successfully passed as registered pharmacists, and four as assistants. The next meeting of the board will be held on April 9th at Kansas City.

NEW YORK

Warren L. Bradt, secretary of the New York State Board of Pharmacy, Albany, has just issued a list containing the names of 51 candidates who successfully passed the September, 1916, examinations, as registered pharmacists.

MASSACHUSETTS

As a result of the January examinations by the Massachusetts State Board of Registration in Pharmacy, sixteen applicants were given full registration and nine were given assistant's certificates.

MEDICINAL MANUFACTURERS CHANGE NAME

Biological Section Organized at Annual Meeting

The National Association of Manufacturers of Medicinal Products held its last annual meeting under that name in the Waldorf Astoria, New York, February 6th and 7th. From now on it will be known as the American Drug Manufacturers' Association.

Among the other important matters of business which were passed was the organization of a biological section. Reports of officers and delegates to other conventions were heard and approved. The formation of the biological section marked the first of the branches planned by the organization. As the association grows older other sections will be formed so that the field will be covered in detail in every way.

The election of officers resulted in the selection of Charles J. Lynn to succeed himself as president; R. C. Stofer of Norwich, vice-president; Franklin Black of New York, treasurer and W. J. Woodruff of Detroit, secretary.

Among the resolutions that were adopted was one creating an advisory committee on standards and deterioration, to be composed of one representative of each of the member companies and firms. This committee will work in co-operation with, and will be supplemental to, the smaller standing committee of the association. The task of setting up standards in the drug trade, which will be practicable not only in the laboratory, but also in quantity production, will, it was stated, require a long period of careful investigation. The object of perfecting these standards is not merely to aid manufacturers but to give to the public the benefit of new discoveries which will not be available until industrially practical standards are determined.



C. M. WOODRUFF



C. J. LYNN

The association passed a resolution endorsing the establishment of a convention, such as is now being considered, for the international registration of trade-marks, particularly as the scheme applies between the United States and South American countries. Another resolution created a bureau for the recording of trade-marks and labels which could not be registered under the United States law by the Government.

George Simon, delegate to the metric conference held in connection with the recent convention here of the American Association for the Advancement of Science, recommended in his report that the association apply for membership in the recently organized association for the advocacy of the metric system. The medicinal association expressed itself heartily in sympathy with this movement.

Charles M. Woodruff gave a detailed account of the nine resolutions passed by the National Drug Trade Conference at Washington and Dr. A. R. L. Dohme went into like detail in discussing the Atlantic City convention of the A.Ph.A. The reports made by the other delegates summed up the work done by the various conventions.

Dwight T. Scott, who was delegate to the League to Enforce Peace and Henry C. Lovis, delegate to the World's Court Congress, had two of the most interesting reports to offer, because of the international situation at the present time. Mr. Scott told of the development of the

League and pointed out why such an organization would soon become of prime importance. The members of the Association were exceedingly interested in the report.

An interesting feature of the convention was the address by Dr. Charles F. Herty, formerly president of the American Chemical Society, who discussed the adoption of the tariff on coal-tar products and sulphur colors and the exceptions that were put in the bill at the last moment. As the bill now stands, he said, there is no payment of a specific duty of five cents a pound on all indigoids, and it was his contention that chemists of this country would be greatly injured by the provision. He said that only one man, a consumer in South Carolina who does not produce any indigoids had asked to have the duty removed, and characterized the provision as a "joker" slipped over at night. Dr. George Simon responded but admitted he did not know that the duty clause had been removed.

H. C. Lovis reported for the committee on industrial preparedness that he had been in conference with Federal authorities and experts and predicted that great progress in medicinal development would be made the coming year. He touched lightly upon diplomatic conditions, and added that domestic preparedness in the industrial field meant that there was little to worry about in the drug field.

Franklin Black, treasurer of the Association reported that the working funds were in good order and President Charles J. Lynn told of the work that had been done. Reports of committees followed and in the evening there was a smoker and private vaudeville show.

The Executive Committee offered resolutions opposing in general form, the new New York state narcotic law which requires filing of registration of products and the triplicate filing of prescriptions filled from narcotic drugs. The committee also recommended a closer relation between medicinal manufacturers.

The banquet Wednesday evening was a leading feature. Major General Leonard Wood, commander of the Department of the East, traced the surgery and medicinal work that was done in Porto Rico and at Panama in an interesting manner but kept off the subject of preparedness. Rear Admiral Bradley N. Fiske, of the Naval War College made a plea for patriotism and solid backing for President Wilson. Marcus M. Marks, President of Manhattan Borough, spoke on his favorite topic, "Daylight saving" and Dr. Nehemiah Boynton, pastor of the Central Congregational Church, of Brooklyn, made one of the clever speeches for which he is famed. President Charles J. Lynn was toastmaster at the banquet. At noon, on each of the convention days, a luncheon was served in the Waldorf Apartments.

The membership committee of the Association reported, as the convention ended, that there were only four medicinal manufacturing firms in the country which are not members of the Association. Eleven firms were taken in at this convention and the total membership is now above forty.

CARTER, CARTER & MEIGS JUBILEE

The Carter, Carter & Meigs Co., of Boston, gave its first annual jubilee for its 250 employees, February 1st, in Convention Hall, Boston. The jubilee opened with a dinner, with Frederick W. Alexander, toastmaster, and addresses by President Howard D. Brewer of the company and President Henry L. Tafe of the Employees' Mutual Benefit Association. Mr. Brewer told of plans to occupy a new building, which, he said, would mark the start of a new era for the firm. A vaudeville programme followed. General dancing followed, in charge of Fred White, floor director, and R. E. Tilley, Joseph F. Ryan, John F. Murphy and W. E. Calder, aids.

TRADING STAMP REGULATIONS

Three legislative bills for either the abolition of trading stamps in Massachusetts, or their regulation by the state, were advocated by Charles C. Hearn and Frank J. Campbell, on behalf of the Massachusetts State Pharmaceutical Association, at a hearing before the Legislative Joint Judicial Committee, February 7th. Mr. Hearn said that pharmacists regard trading stamps as unfair competition. Mr. Campbell said that newspaper advertising is fair competition.

RUNNING CHEMICAL SWINDLE DOWN

Bismuth Subnitrate Deal Interests Authorities

The District Attorney of New York county, private detectives from two concerns and various other investigators are searching for information, in and around New York, concerning a swindle in bismuth subnitrate that startled the chemical world last month. A "John Doe" inquiry has already been held by the city and there is a probability that the Federal government may take the case up under the Interstate Commerce act.

The swindle was uncovered when 100 packages of "bismuth subnitrate" bearing the Merck & Mallinckrodt labels were found by a St. Louis manufacturer to contain nothing but precipitated chalk. Five pound packages weighed but four and a fraction pounds.

Investigation was immediately started and it was learned that the goods had been purchased by the New York office of the manufacturer through a broker, Samson Rosenblatt of 261 Broadway. The deal had been put through by telephone. It then developed that one or two other New York concerns had purchased the bismuth from Rosenblatt or a man named Weiss, of Wall street. When the deal was called to his attention, Rosenblatt sent checks covering the losses and began another investigation of his own.

Rosenblatt told his story to a representative of this paper. He also offered a package of the alleged bismuth as a sample. It weighs much less than five pounds, although it is clearly stated on the label that that is the weight of the package.

"I bought my first lot of the stuff from a man named Lifschitz of 221 East Broadway," said Rosenblatt, "When I needed some more I purchased it from this man Weiss. He also bought from Lifschitz, so that we together got 500 pounds from him. Lifschitz does a small wholesale drug business under the name of the Lifschitz Drug Company."

Investigation of the Lifschitz company disclosed the interesting fact that Lifschitz occupies some sort of desk room in his wife's dress making establishment in a back apartment on East Broadway near Clinton street—the lower East side. There is no sign on the doors, and nothing to indicate that Lifschitz is to be found there except his wife's dress making advertisement. The telephone book shows that Lifschitz is at 224 East Broadway. He is actually across the street at 221.

It was difficult to locate Lifschitz, but he was finally found in the offices of A. Swedish at 10 Hester street, in the drug store of a man named Aaronwitz, Swedish's brother-in-law. Lifschitz said he had not actually purchased the bismuth subnitrate but that Swedish, who was formerly his partner had done it. Swedish said he bought it, using part of his own money and part of Lifschitz'. Both of them were summoned before Assistant District Attorney Ryttenberg for examination.

Swedish told the investigator the following interesting story:

"I bought the stuff from a man named Sol Gardener of 37 Spring Valley road, Hackensack, N. J. He delivered it and we paid him cash right here in this store. I've never seen him since and I went to Hackensack with a private detective to look him up and there is no such address.

"I met Gardener in the United Drug Exchange. I was down there smoking one afternoon talking to a friend of mine when this well dressed stranger came up. He quoted some prices on quicksilver and bismuth to my friend and they went away to talk in private. I had heard the prices, however, and they interested me. So I went downstairs and waited for the stranger to come out. When he did I asked him for quotations.

"He said then that he didn't have much to offer at that particular time. But he said he would write. I asked for his address and he gave it to me but told me that I mustn't write there because he was often on the road and rarely in his office. When he had some goods he would communicate with me, he said. A few days later I got a postal card (he said Lifschitz had the card but neither produced it) quoting me mercury and bismuth subnitrate. The bismuth was quoted at \$2.10 a pound."

CAPITALIZING PATRIOTISM IS POSSIBLE

Much Can Be Done by the Keen and Honest Druggist

America is waiting for developments, as America should wait. But throughout the country there is a seething patriotism that is beginning to be felt. Further and further backward is fading the hope of peace built upon the foundations of freedom from military service of the past. Preparedness is in the air.

These are days in which peace is a desirable thing, but in which some martial spirit is necessary. The United States is not ready, of course—but preparations to make her ready are going on. It is patriotism that is behind those preparations. It is a fine patriotism and it is one in which this country is going to grow.

There would never be a question as to the technical right to capitalize peace. There should not be such a question in capitalizing patriotism. One need not make a profit out of government supplies to capitalize patriotism. But he can do it, by merely watching the trend of events and modeling his business to meet the requirements of that trend.

This is not an editorial, although it may sound that way. It is an idea that got its germ in a window display in a hardware store. In that display were American flags, a picture of an American warship, another of a big gun, and a copy of President Wilson's speech to the American Senate in which diplomatic relations with Germany were officially broken. The hardware man had presented a window that was absolutely foreign to his business, there wasn't a wrench, a pan or a nail on exhibition. But there was patriotism. He had capitalized the feeling in his neighborhood, you see, and was getting attention, and by unbreakable laws was getting trade, through his patriotic window display.

It is simple for the druggist. Even such an effort as was made by this hardware dealer is of value. If that sort of display gains nothing else, it brings attention to the store. That is a form of advertising that is not to be despised and one which brings results. In the last analysis advertising of the general and more common kind is little more than an attention getter for the retail drug store. But a window display has the advantage of propinquity. It can reach out and drag people inside, or it can put up a warning hand and turn them away. It's dollars to doughnuts, however, that in the case of a "patriotic window" in these, seething times, people will be brought inside, where their presence will do the most good.

Other Capitalization Possibilities

While such a window display offers advantages, there are other things that can be done to help. It isn't such a bad idea to decorate the entire store in the National colors. Of course, most druggists are pacifists just as are other people, but there is the noise of war in the air. Peace is a bit further away than it was before February 1st. So a tastefully decorated store is in the scheme of things and makes a buyer feel that he is in the midst of a shop where the United States and her difficulties are an important consideration.

Now, the possibilities grow greater as you consider the question longer. You can revert to the National holiday specials at the soda fountain. If you are really alive, you can have printed (getting your copy from any newspaper files) the notes and papers that have passed between the United States and Germany. These may be given away as souvenirs or extras with purchases.

Again, it is entirely possible to boom preparedness in every conceivable way. There are very few towns, now, which haven't either a militia company or some sort of a training corps. In the town, somewhere, there is a body of men who are getting ready. To that body the druggist can appeal with posters, ads, and such things.

The further one goes in consideration of the capitalization proposition the more he becomes assured that it can be made to pay. Here's another idea. Women are already getting in line to help if they are needed. Many of them want to do Red Cross or First Aid work if it becomes necessary. You have the help to give them in their searching for instruction.

PATENTS & TRADEMARKS

PATENTS

Granted January 23, 1917

- 1,213,142—Jonas W. Aylsworth, East Orange, N. J.; Adelaide M. Aylsworth and the Savings Investment and Trust Company, of East Orange, executors of said Jonas W. Aylsworth, deceased. Production of phenol and other substances.
- 1,213,143—Same as preceding. Apparatus for organic chemical reactions.
- 1,213,235—Paul D. Meiers, Granite City, Ill. Cover for tooth brush.
- 1,213,261—Erich Rietz, assignor to Synthetic Patents Co., Inc., New York, N. Y. Cholic-acid formaldehyde condensation product.
- 1,213,307—Walter Wachs and Rockwell L. Gallup, Chicago, Ill. Bottle washing machine.
- 1,213,452—Wilson M. Brady, Baltimore, Md. Stopper extractor.
- 1,213,464—Alex B. Davis, Indianapolis, Ind., assignor to Eli Lilly & Co., Indianapolis, Ind. Compounds of cinchona alkaloids and 2-phenyl-quinolin-4-carboxylic acid.
- 1,213,465—Alex B. Davis, Indianapolis, Ind., assignor to Eli Lilly & Co., Indianapolis, Ind. Cresol condensation product.
- 1,213,486, 1,213,487—Harold Hibbert and Harold Arthur Morton, Pittsburg, Pa., assignors to Union Carbide Co., New York, N. Y. Method of making acetaldehyde.
- 1,213,724—Oscar T. Zinkeisen, assignor to Fore Chemical Works, Inc., New York, N. Y. Process of purifying crude acetate of lime.
- 1,213,740—George Calvert, London, England. Manufacture of formaldehyde.

Granted January 30, 1917

- 1,213,921—Otto Liebknecht and Alois Schaidhauf, assignors to Roessler & Hasslacher Chemical Co., New York, N. Y. Stable hydrogen peroxide and method of making the same.
- 1,213,939—Adam Ostheimer, Cleveland, Ohio. Thermometer.
- 1,213,959—Aaron Segall, New York, N. Y. Sanitary bottle cap.
- 1,214,008—Edgard Ciselet and Camille Deguide, Brussels, Belgium. Treatment of natural calcium phosphate.
- 1,214,026—Frederick Hachmann, assignor to Fred C. Schoenthaler, St. Louis, Mo. Bottle closure.
- 1,214,206—Cornelius J. Marvin, assignor to The Braun Corporation, Los Angeles, Cal. Process of generating hydrocyanic acid gas.
- 1,214,229—Frederick Sharpe, Liverpool, England. Apparatus for carbonating lead oxid.
- 1,214,324—Henry Kraut, Summit, N. J. Non refillable bottle.
- 1,214,329—Simon Lazarus, Louisville, Ky. Non refillable bottle.
- 1,214,414—Ludwig Berend, Amoneburg-on-the-Rhine, Germany. Condensation product from phenols and formaldehyde.

Granted February 6, 1917

- 1,214,519—Jean Demuth, Le Muy, France. Machine for sorting corks.
- 1,214,550—John D. Karle, Roselle Park, N. J. Bottle stopper.
- 1,214,556—Nate Le Vene, San Francisco, Cal., and Esa Fee, Chicago, Ill. Sanitary tooth brush.
- 1,214,734—George A. Williams, assignor to The Williams Sealing Corporation, Waterbury, Conn. Bottle and cap.
- 1,214,746—Thomas S. Bell, Baltimore, Md. Bottle cap.
- 1,214,802—Theodore H. Low, New Haven, Conn. Bottle opener.
- 1,214,924—John Karrer, assignor to Farbwerke vorm. Meister Lucius & Bruning, Höchst-on-the-Main, Germany. Complex arseno compounds and process of making same.
- 1,214,938—Hugh Metcalfe, Almonte, Ontario, Canada. Poison-bottle guard.
- 1,215,023—Andrew J. Hitchcock, Nashville, Tenn. Non refillable and self closing bottle.

Granted February 13, 1917

- 1,215,351—Charles A. Doremus, assignor of one-half to John S. Hoyt, Darien, Conn. Process for producing aluminum hydrate.
- 1,215,495—Charles W. Crum, Olney, Ill. Bottle bracket.
- 1,215,517—Frederick C. Gillen, assignor to William A. Krasselt, Milwaukee, Wis. Process for obtaining potash from potash rocks.
- 1,215,544—Louis C. Jones and Fred L. Grover, assignor to The Solvay Process Co., Solvay, N. Y. Process of recovering potassium chlorid from alkaline deposits.
- 1,215,545—Same as preceding. Process of recovering borax from alkaline deposits.
- 1,215,546—Same as preceding. Process of recovering potassium and magnesium chlorids from natural deposits.
- 1,215,576—John D. Pennock and Louis C. Jones, and Fred L. Grover, assignors to The Solvay Process Co., Solvay, N. Y. Process of separating mixed potassium chlorid and borax.
- 1,215,737—George Stahl, Jersey City, N. J. Closure for bottles, jars, and other receptacles.
- 1,215,798—George E. Hager, Brooklyn, N. Y. Non refillable bottle.
- 1,215,812—Jacob J. Illian, Milwaukee, Wis. Bottle capper.
- 1,215,823—Isabel M. Lewis, Washington, D. C. Medicine administering device.
- 1,215,903—Benjamin T. Brooks and Irwin Humphrey, assignors to Gulf Refining Company, Pittsburg, Pa. Manufacture of glycols.
- 1,216,036—Erastus E. Winkley, Lynn, Mass. Bottle filling and capping machine.
- 1,216,045—James Allen, Washington, D. C. Stopper for bottles or the like.
- 1,216,046—Robert A. Archibald, Oakland, Cal. Lymph-gland extract and method of making same.
- 1,216,095—Robert B. Dula, Tarrytown, N. Y. Apparatus for dispensing packages.

- 1,216,159—Raleigh R. Oldham, Laurel, Wash. Knock-down tooth brush.
- 1,216,174—Winfield B. Sifton, Westminster, London, England. Process for the production of toluene.
- 1,216,177—Thomas C. Spelling, New York, N. Y. Stopper.
- 1,216,199—Ernest S. Barker, assignor to United Drug Co., Boston, Mass. Dispenser for liquids.

TRADE-MARKS

Published January 23, 1917

- 80,871—Sam Anthony, Johnstown, Pa. A remedy for rheumatism.
- 89,766—James H. McCormick, Comstock, Mich. Headache, neuralgia and rheumatism tablets, etc.
- 92,650—Salux Drug Co., St. Louis, Mo. Perfumes, cold cream, etc.
- 94,389—O-Mi Specialty Co., Chicago, Ill. A polish for the finger nails.
- 97,146—Philo Hay Specialties Co., Newark, N. J. Talc, nail polishers, deodorizer, etc.
- 98,156—George Borgfeldt & Co., New York, N. Y. Face powder, toilet powder, etc.
- 98,815—The Sherwin-Williams Co., Cleveland, Ohio. Medicinal lused oil for human and animal use, and paraitranilin.
- 98,829—Capa Drug Co., Washington, D. C. Ointments and salves, etc.
- 99,243—George C. V. Fesler, St. Louis, Mo. A remedy for coughs, colds, and la grippe.
- 99,523—Mary Lewey, New York, N. Y. Freckles, blackheads, and similar diseases of the skin.
- 99,540—Mary Gladys Farley, North Bergen, N. J. A depilatory.

Published January 30, 1917

- 82,222—Louis P. Wickland, Genoa, Ohio. Hair tonic.
- 90,491—Mae Tynion, New York, N. Y. A preparation for the treatment of lumbago, rheumatism and swollen joints.
- 95,072—Davis & Geck, Inc., Brooklyn, N. Y. Germicides, medicated lubricating jelly, etc.
- 95,410—Antonio Centanni, Chicago, Ill. A liniment for rheumatism, neuralgia, etc.
- 96,077—The Bromo Remedy Co., Chicago, Ill. Rheumatic remedies.
- 97,569—The Armand Co., Des Moines, Iowa. Face powder, cold cream, etc.
- 97,841—Marion Stock Remedy Co., Ocala, Fla. A blood modifying preparation.
- 98,172—The United Alkali Co., Limited, Liverpool, England. Caustic soda, caustic potash, manganate of soda, etc.
- 98,390—The New York Shield Co., New York, N. Y. Perfumery, toilet waters, etc.
- 98,670—The Rike-Kumler Co., Dayton, Ohio. Toilet water, talcum powder, etc.
- 99,016—Pildoras Nacionales Corporation, New York, N. Y. Antimalaria pills.
- 99,522—L. A. Howard Co., Minneapolis, Minn. Preparations for the treatment of rheumatism, catarrh, etc.
- 99,534—Alexandre Berube, Berlin, N. H. Tooth powder and cream.
- 99,651—Joseph C. Devlin, Lynn, Mass. Tooth powder and paste.
- 99,687—Parke, Davis & Co., Detroit, Mich. Peptic coagulant.
- 99,699—Frederick W. Clements, Rochester, N. Y. A medicinal tonic, blood and tissue builder.
- 99,727—The Herolin Medicine Co., Atlanta, Ga. Hair dressing.
- 99,800—The Warren Laboratories Co., Marietta, Ohio. Liniment for rheumatism, sciatica, lumbago, etc.
- 99,889—Faxon & Gallagher Drug Co., Kansas City, Mo. Perfumes, etc.
- 99,904—Titas Company, Detroit, Mich. A remedy for dandruff, eczema, etc.
- 99,936—Fairchild Bros. & Foster, New York, N. Y. A pharmaceutical preparation for relief of indigestion.
- 99,987—John L. McKenna, New York, N. Y. An antiseptic powder.
- 99,988—John L. McKenna, New York, N. Y. A treatment for the hair and scalp and eczema.
- 99,998—E. D. Blaisdell, Minneapolis, Minn. Pile ointment.

Published February 6, 1917

- 97,607—George E. Theodopoulos, New York, N. Y. Tooth powder.
- 98,248—George Schmitt, Newark, N. J. A non poisonous balsam for burns, scalds, bruises, etc.
- 98,636—Albert F. Marks, Park Falls, Wis. Headache powders.
- 98,999—Mary E. Phillips, Indianapolis, Ind. Hair grower.
- 99,118—The Baptisine Pharmaceutical Co., St. Louis, Mo., An antiseptic lotion.
- 99,141—Lulu O'Dell, St. Louis, Mo. A preparation used in dressing and growing hair.
- 99,235—Charles Brizzolaro, Richmond, Va. A medicine for treatment of rheumatism and gout.
- 99,242—Louis A. Foix, Ysleta, Tex. A remedy for indigestion.
- 99,397—Pierce A. Dietrich, Philadelphia, Pa. Corn and callus plaster, headache and neuralgia powders, etc.
- 99,519—The Flash Co., Greenville, S. C. Hair and scalp remedy.
- 99,554—Edward J. Moore Sons, New York, N. Y. Capsules for diseases of the urinary organs and bladder.
- 99,621—The Dental and Toilet Products Corporation, New York, N. Y. A mouth wash, antiseptic and astringent.

Published February 13, 1917

- 96,201—Frazar & Co., New York, N. Y. Manganese salts.
- 96,591—McKesson & Robbins, New York, N. Y. Perfumery, talcum powder, etc.
- 99,895—H. S. Lambdin, Peru, Kans. An ointment for skin eruptions.
- 99,946—Reade Manufacturing Co., Hoboken, N. J. A medicinal salve for burns, scalds, cuts, etc.

THE DRUG MARKETS

OPIUM ADVANCED TO RECORD PRICES

Market Unsettled and Prospective Conditions not Reassuring—Many Staples Moving Upward

NEW YORK, February 21—The seriousness of the international situation as reflected in the news despatches from day to day since our last report, has been provocative of an excited and unsettled market, and one possessing many of the features which characterized the buying and selling of two years ago. The shipping situation has become more uncertain on account of the declaration of a ruthless submarine warfare by Germany, while the embargoes put into operation by most of the railroads operating in this part of the country have curtailed the shipments of goods, even were stocks in plentiful supply, which they are not. As it is, the trade is waiting developments, not only from abroad but also on the action the United States Government may take.

Perhaps the significant feature of the market has been the sharp advance in the price of opium, the stocks of which are so low that manufacturers are holding supplies for making morphine, which has also advanced to record prices, a position that is likewise held by codeine and its salts. Quinine is also advancing, manufacturers not knowing whether cinchona bark is being shipped from Amsterdam or not, the censorship of cablegrams from abroad preventing the usual means of getting this information. Mercurials, too, have followed the upward trend of mercury, which has advanced under active buying by munition makers and speculators. Under an active buying movement, glycerin has moved upward, while such staples as citric and tartaric acids and many of their salts have been advanced. Among other important advances in prices are the quotations given for cantharides, buchu leaves, caffeine, lycopodium, menthol, Haarlem oil, Epsom salt, oil of sandalwood, potassium chlorate and permanganate, thymol, distilled extract of witch hazel and Hubbock's English oxide of zinc.

Declines in prices are restricted to but few articles. Acetphenetidin, salicylic acid and salicylates, iodine and iodides, phenolphthalein, are lower, while a small number of other commodities are reported as being easier.

OPIUM—Stocks are so low that manufacturers are holding supplies for making morphine, and have practically withdrawn all offers during the past week. Previously the market had advanced sharply, and in some quarters, prices are quoted "nominal." A few dealers quote as high as \$25 per pound for natural, thus establishing record high prices for this narcotic. The replenishment of stocks is causing importers some concern, owing to the German submarine blockade of ports of shipment abroad.

MORPHINE—Owing to the continued uncertainty of future supplies of opium, this alkaloid and its salts have been repeatedly advanced during the month, jobbers now quoting for sulphate \$10.75@12.95 per ounce in ounces, and \$11@13.20 per ounce in ½ths. Other salts have been advanced as follows: Acetate, \$13.20; hydrobromide, \$16.45; hydrochloride, \$13.20; meconate, \$13.20, each per ounce in ½th-oz. vials. Alkaloid is held at \$16.45 per ounce in ½th-oz. vials. Manufacturers are refusing to hook orders or contracts for forward delivery.

CODEINE—This alkaloid has also advanced sharply, due to the position of opium, and manufacturers are not booking contract orders. Latest jobbing quotations are as follows: Codeine, \$14.65@18.15; hydrochloride, \$13.20@16.40; nitrate, \$13.20@16.40; phosphate, \$11.10@13.65; sulphate, \$12.80@14.55.

QUININE—The market for this salt is erratic, and prices are advancing, jobbers quoting on the basis of 85c@97c per ounce in 100-oz. tins; 95c@1 in 5-oz. cans, and \$1@1.05 in 1-oz. cans. Price schedules have also been revised as follows: Alkaloid, \$1.64; acetate, \$1.81; arsenate, \$1.60; arsenite, \$1.60; bisulphate, \$1.04@1.07; citrate, \$2.47; glycerophosphate, \$2.47; hydrobromide, \$1.42; hy-

drochloride, \$1.42; hypophosphite, \$1.61; phenolsulphonate, \$1.44; lactate, \$1.61; salicylate, \$1.39. Owing to delay and censorship of cablegrams, it is stated, manufacturers do not know whether cinchona bark is being shipped from Amsterdam and are even in doubt about the price of quinine abroad. It is advancing in London, but nothing definite may be known until after the auction sales at Amsterdam on February 23d.

CAFFEINE—This alkaloid has advanced to \$13@13.25 per pound, with scant supplies and steady buying inquiries reported. Citrated is also higher at \$8.55@9 per pound.

CAMPHOR—Holders of domestic refined have advanced prices and the market shows strength. Jobbers are quoting .93½c@95c per pound in bulk and ¼-lb. squares. Powdered 98½c@1; Japanese, 98½c@1.

GLYCERIN—The market for refined has materially strengthened under an active buying demand, C.P. being held at 57c@58c per pound in bulk, drums and barrels included; cans, 58c@59c; less, 62c@70c. A contributing factor of some importance is the increased demand and higher prices for fats and a renewal of buying orders.

MERCURY—In sympathy with higher prices of mercury, all schedules have been revised and quotations have sharply advanced for all mercurials, as follows: Mercury, \$2.05@2.30; ammoniated, pure precipitated, \$2.40@2.60; bichloride (corrosive sublimate), \$1.66@1.76; powdered, \$1.61@1.71; bisulphate, \$1.64@1.74; cyanide, \$5; chloride, mild (calomel), \$1.77@1.98; iodide, green (protiodide), \$4.70@4.90; red iodide (precipitated biniodide), \$4.75@5; red oxide (red precipitate), \$2.35@2.47; yellow oxide (oz.), 20c; sulphate (Turpeth mineral), \$3.40@3.55; sulphocyanate, \$3@3.25.

CANTHARIDES—Scarcity of supplies and the uncertainty attending future shipments from abroad are responsible for higher prices, jobbers now quoting \$4.75@5 for Russian sifted, and \$5.25@5.50 for powdered. Chinese is offered at \$1.50@1.60 for whole, and \$1.70@1.80 for powdered.

BUCHU—Both long and short leaves are higher, jobbers quoting as follows: Long, whole \$1.45@1.55; powdered, \$1.55@1.60; short, \$1.50@1.60; powdered, \$1.60@1.70.

LYCOPODIUM—Under an active demand and curtailment of stocks, prices have sharply advanced to \$1.40@1.50.

MENTHOL—There has been a steady buying movement and spot supplies are well cleaned up, jobbers quoting \$4@4.50 per pound. Cables from Japan indicate a steady market.

HAARLEM OIL—Small arrivals from Holland and an uncertainty of obtaining future supplies, coupled with larger buying orders, have resulted in an advance of prices, Dutch being held at \$3.85@4.25 per gross.

OIL OF SANDALWOOD—English is in scant supply and prices have advanced to \$12@12.75 per pound. West Indian remains at \$4.75@5 per pound.

OIL OF CARAWAY—Prices advanced on account of scarcity, quotations now obtaining being \$4.75@5.25 per pound. The scarcity of stocks and a good inquiry have forced prices upward, 65c@70c per pound being asked for whole seed; powdered, 70c@75c.

CASTOR OIL—Leading pressers recently announced an advance in prices, based on light supplies and a firm market in Holland. Jobbers quote 22½c@24c per pound for American oil.

OIL OF BENNE—Imported (sesame), is held at \$1.45@1.60 per gallon.

OIL OF EUCALYPTUS—Revised prices show a narrower range, quotations being \$1@1.10 per pound.

OIL, NEATSFOOT—Is also higher at \$1.30@1.50 per gallon.

CITRIC ACID—Following an advance in manufacturers' prices and an active demand, jobbers have marked up

their quotations to 80c@81c per pound for crystal in bulk by the keg, and 85c@90c for less than a keg. Granulated is held at from 90c@\$1 per pound. A few of citrates have also been marked up.

TARTARIC ACID—Manufacturers have announced an advance in prices for both crystal and powdered, due to higher cost of production. Jobbers quote 83c@90c for crystal, and 82c@89c for powdered.

CREAM TARTAR—In sympathy with the advance in the price of tartaric acid, cream tartar has also been advanced to 51c@55c for powdered.

SEIDLITZ MIXTURE—In sympathy with the higher prices for basic materials, this preparation has also been advanced in price, jobbers quoting 30c@35c per pound.

CHAMOMILE FLOWERS—Notwithstanding first hands report a lack of stocks and stronger primary markets, quotations show a downward revision for Hungarian, which are held at 65c@70c per pound. Roman or Belgian flowers are higher, 80c@85c being asked.

CINCHONA BARK—Prices are tending upward, red bark being quoted at 55c@60c per pound. As stated above, manufacturers of quinine do not know whether bark is being shipped from Amsterdam or not; while recent importations here have been small. Besides the advances noted for quinine and its salts, cinchonidine alkaloid has been marked up to \$1.32 per ounce, while cinchonine alkaloid shows a decline, 74c@82c per ounce being asked. The sulphate of the last-named alkaloid is also lower at 50c@57c.

IODINE AND IODIDES—Iodine is in better supply and prices have been marked down to \$3.60@\$3.65 per pound for resublimed. In sympathy with this decline, all iodides are also lower, a revision of the schedules showing the following quotations: Ammonium, \$4.10@\$4.60; bismuth (subiodide), \$5.15@\$5.50; cadmium, \$4.75@\$5.50; calcium, \$4.10@\$4.60; lithium, (oz.), 48c; potassium, \$3.05@\$3.55; sodium, \$4.25@\$4.50; zinc, (oz.) 28c@32c.

SALICYLIC ACID—Increased output on the part of domestic manufacturers, and the easier position of phenol, have caused prices to decline to 90c@\$1 per pound in cartons, and 90c@95c for bulk. A corresponding decline is noted for the salicylates, sodium being held at \$1.05@\$1.10 per pound; salol, \$1.75@\$1.85; methyl salicylate (synthetic oil of wintergreen), 95c@\$1.

POTASSIUM CHLORATE—Spot stocks are scarce, and prices are higher, 71c@80c per pound being asked for crystal, 95c@\$1.05 for granulated, and 75c@80c for powdered.

POTASSIUM PERMANGANATE—Has reached the highest price it has attained since the beginning of the war, if not the highest price ever quoted for this chemical. The interruption of importation of supplies from Germany, and the lack of manufacture here, together with the scarcity of the basic potassium, are responsible for these conditions, and as a result many processes in which this chemical was formerly employed have been superseded by processes using other oxidizing agents. Jobbers quote \$5@\$5.50 per pound.

DISTILLED EXTRACT OF WITCH HAZEL—There is a distinct scarcity of supplies reported and dealers have advanced their prices to 73c@90c per gallon; by the barrel, 57½c@60c per gallon. Witch hazel leaves are quoted at 15c@20c per pound.

ARNICA FLOWERS—Smallness of spot stocks and the uncertainties surrounding the arrival of future supplies have caused a spectacular advance in the price of these flowers, jobbers now quoting \$2.20@\$2.30 for whole; \$2.30@\$2.35 for powdered, and \$2.25@\$2.30 for ground.

CUBE BERRIES—Higher primary markets and light spot stocks have caused prices to advance to 70c@75c for sifted berries, and 85c@90c for powdered.

DIACETYLMORPHINE—A marked advance is noted for this derivative, the alkaloid being held at \$13.95@\$14.50 per ounce and \$12.60@\$13.25 for hydrochloride. Heroin is also correspondingly higher.

CELERY SEED—Following reports from Marseilles and the uncertainty attending the future arrival of supplies, this seed has advanced at 38c@40c per pound.

STORAX LIQUID—Offerings have been extremely limited and \$5.75@\$6 is quoted by jobbers.

THYMOL—Available supplies are firmly held and the market is decidedly higher at \$14@\$15 per pound.

JUNIPER BERRIES—Are slightly easier, recent arrivals of supplies causing dealers to lower their prices to 13c@17c.

LACTUCARIUM—Has advanced to \$5.50@\$7.50 per pound.

NOW THE MOUNT-MIZE DRUG CO.

The stockholders of the Wherrett-Mize Drug Co., wholesale druggists, Atchison, Kansas, held a special meeting on February 12th and adopted a resolution to change the



C. J. MOUNT

name of the company to that of the Mount-Mize Drug Co., which will take over all of the assets and liabilities of its predecessor. The change in name is a recognition of the services of C. J. Mount, the stockholders' resolution stating that Mr. Wherrett had not been connected in any capacity with the business for more than two years, and that Mr. Mount had put it on a paying basis.

Mr. Mount has been president of the company for several years and is well and favorably known to all the drug trade throughout the Missouri River territory. The Mount-Mize Drug Co. announces

that the change in name effects no change in the ownership, officers or policy of the company, as the business has been constantly increasing ever since the adoption of the Mount sales contract about two years ago.

PROPOSED LEGISLATION IN OHIO

Theodore D. Wetterstroem, secretary of the Ohio Pharmaceutical Association, has taken up with the Ohio Legislature, on behalf of the organization, what he referred to as "the promiscuous and unrestricted sale of poisons and such drugs as have power to upset or derange the functions of the human anatomy," declaring that present regulations have not proved sufficient to stop the traffic, and that the proposals to license the traffic, under measures now before the Legislature, are inadequate. Mr. Wetterstroem said further:

"There is nothing to prevent an irresponsible manufacturer from putting up in package form any poison and calling it some fancy name and placing this in the hands of the unqualified dealer to sell to the consumer at an alluring profit. This situation now exists. It is no wonder that they object to disclosing their formula, for their wonderful discoveries usually dwindle down to the cheapest and commonest drugs and their sales would discontinue, for the public usually wants a run for its money.

"The manufacturer of patent or proprietary medicine who will not disclose the character of his product hasn't a leg to stand upon and should not receive favor from any dealer or the public, no matter what the profits may be. This may be a little ahead of the times, but Ohio always has been in the lead, and this is only another step to safeguard the public welfare as well as its pocketbook."

In this connection the Ohio Pharmaceutical Association has presented to the Legislature certain measures for the regulation of the drug traffic. Dr. Frank Cain, dean of the Queen City College of Pharmacy, has appeared before the Legislature on behalf of these measures, and has secured the promise of support by the Hamilton County delegation for them.

Louisville Chapter, No. 11, W.O.N.A.R.D., held its January meeting at the main Library. Miss Mattie Tucker gave an interesting talk on "Development of Education in Kentucky." Among the recent social activities of the Chapter was a delightful Christmas Jack Frost Party at Teapot Inn. Jack Frost was present in person with his elves, and presented every child with a goodly supply of candy icicles and a snow cloud which proved to be a white balloon. Refreshments were served.

ESTABLISHED 1887

THE PHARMACEUTICAL ERA

AN ILLUSTRATED MONTHLY PUBLICATION FOR THE DRUG TRADE

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SUPPLIES FOR NATIONAL DEFENSE

The drug trade will be interested in the statement from Washington that the Council of National Defense has organized a sub-committee on the standardization of drugs, surgical supplies and equipment necessary to outfitting the American Red Cross, hospital corps and other organizations for the attention of the ill and wounded in wartime. The committee which is to deal directly with medicines, sanitation, etc., is to be headed by a military surgeon, an arrangement which is as it should be, but the suggestion has been made that the effectiveness of the committee could be greatly increased if its membership was made to include a man experienced in the purchasing, testing and distribution of medical supplies. It is the intention of the Council to prepare further for the standardization of all equipment for hostilities by calling in all manufacturers in order that war supplies may be issued with the least possible delay, and the necessity of having an experienced man to represent the Government in the drug and chemical line seems to be as obvious as it is imperative.

PREPAREDNESS TRAINING IN COLLEGES

As told in our news columns this month, the students of the Massachusetts College of Pharmacy have organized a company for instruction in the duties of pharmacists in military organization, and hereafter will hold weekly drills and give as much time as possible to acquiring some knowledge of the duties that will be required of them should they be called upon to defend their country. The scope of the pharmacist's duties, should the country call him to its defense, was fairly well indicated by Dean Bradley who said that he must not only fight for the lives of his own countrymen, but also for those of the enemy who may happen to be taken prisoner. Indeed, it will be surprising if his work will not take on a wider range once hostilities begin, and in the mobilization of the Nation's manhood and materials we shall find him in the various lines of work that his training and experience particularly fit him for. His acquaintance with handling medicines and sanitary equipment should enable him to take his place in the great depots where such supplies are distributed, and when one begins to talk of the medical requirements of an army of 750,000 or more men, the services of many pharmacists will be needed.

From other institutions come reports of a similar

interest in the Nation's need at this particular time, and if these have any value whatsoever, the average citizen can rest assured that the colleges of pharmacy will do their share in the work necessary to meet whatever conflict may come. The warfare of the Twentieth Century is a contest that calls into requisition all of the resources of applied science, and if he be needed, the pharmacist, as well as the engineer, chemist, and medical man will have plenty of places to fill in the grand mobilization of the country's fighting equipment as represented in units of men and materials.

How the Government can utilize the services of the pharmacist to best advantage is a problem that the authorities doubtless have well considered. If his aptitude and training are to be utilized to the fullest extent, he should be assigned to duties in keeping with his professional education. His knowledge of antiseptics, surgical dressings, and the remedies and paraphernalia of hospital work will cause a demand for his services in the hospital corps, while he should be available in helping to unravel the multitudinous details of manufacturing and distributing such supplies. If each man can best serve his country in the position for which he is trained, it is evident that the graduate in pharmacy will not be found "driving a four-mule team while his place as pharmacist is filled by a mechanic."

THE ERA KEY TO THE U.S.P. AND N.F.

The kindly reception accorded the Era Key, and its record of thousands of copies sold since its first publication a quarter of a century ago, is a positive tribute to its usefulness. Without pretending to take the place of the Pharmacopoeia, it has enabled physicians and pharmacists to acquire in epitomized form the principal facts needed for prescribing and dispensing. In recent years, however, and particularly since the Federal Food and Drugs Act became effective and named both the Pharmacopoeia and the National Formulary as official guides, there has been a demand for similar information concerning the last named work, as that book is now of equal importance to the Pharmacopoeia in the matter of standards.

In preparing a new edition of the Era Key, which, as announced on another page of this journal, is now ready for delivery, cognizance has been taken of this demand, and the new edition not only contains the salient facts of the Ninth Revision of the Pharmacopoeia, but also those of the Fourth Revision of the National Formulary, the practically simultaneous publication of these standard works making such treatment possible. This departure, while it has greatly increased the number of pages in the book, is none the less of direct value for those who use it. As will be apparent from the specimen pages shown in the advertisement, the "Key" contains a complete alphabetical list of the drugs, chemicals and preparations in the U.S.P. and the N.F., giving Latin titles, official abbreviations, English names and synonyms; definitions and drug strength; therapeutic properties, average doses in metric and apothecaries' systems, and in the case of drugs, their habitat, constituents, and the official preparations made therefrom.

This information concerning official drugs and preparations in epitomized form, is just what physicians, pharmacists and students need, for this knowledge is suggestive and helpful to the first-named, for it encourages them to prescribe official remedies, and legitimate pharmacy can have no better support than that which accompanies such prescriptions. To the student, it represents in vest pocket form the salient features of both U.S.P. and N.F.

PROF. C. LEWIS DIEHL

In the death of Prof. C. Lewis Diehl, of Louisville, Ky., pharmacy loses one of its grand old men. For half a century he had served almost continuously as reporter on the progress of pharmacy of the American Pharmaceutical Association, a work exacting enough for the average mortal, but which with Diehl was only one manifestation of his tireless energy and versatility. Member of the Pharmacopoeial Revision Committee, chairman of the N.F. Revision Committee, teacher in a college of pharmacy, board of pharmacy member, soldier in the Civil War and chemist in the United States Laboratory, he typified in no slight degree the extended ramifications of modern pharmacy. It is difficult to estimate the value of his life's work, but to many he exemplified the ideal character of the "Master in Pharmacy," an honorary title which his Alma Mater saw fit to confer upon him in 1887.

The story on a buying club for druggists, which has been appearing for the past two issues of the ERA does not appear this month. Lack of space and pressure of time made it necessary to exclude the story. In the May issue, however, another installment will appear.

Pharmacists who have been in business for a number of years are aware that at recurrent periods both old and new legislators cast about for subjects worthy of their distinguished consideration. Too frequently they think they discover a mote in the eye of modern pharmacy and straightway proceed to remove it by legislative methods or else prescribe treatment which neither relieves the patient nor benefits the body politic. Out in Illinois a bill was recently introduced in the Legislature which provided that "all liquids now recognized as poisons should be placed and kept in three-cornered bottles." The bill was advanced to third reading when a senator asserted there was a patent on the particular style of bottle prescribed, and that one concern controlled the entire supply. Result, the bill is "resting," while some of the senators are trying to find out whether any inventor really has a "corner" on the bottles or not. About seventeen years ago New York pharmacists had to fight a similar bill in the Legislature at Albany, and the Illinois incident goes to prove that "there is nothing new under the sun," and that law-makers will have to be watched as closely and constantly this year as ever before, if deleterious legislation is to be prevented.

The constitutionality of the "Goldwater formula disclosure ordinance," otherwise known as Sections 116 and 117 of the Sanitary Code of the Board of Health of New York City, is yet undecided, papers for the proper presentation of the test cases brought by E. Fongera & Co., Inc., et al, having recently been filed in the Appellate Division of the Supreme Court. Whatever the outcome of the litigation may be, many in the trade will continue to believe Government officials already have sufficient authority to reduce the regulation of all proprietary medicines to satisfactory working basis.

Why Druggists Ask Prerequisite Legislation

By DEAN FREDERICK J. WULLING, Pres. A.Ph.A.

[As most ERA readers know, the pharmacists of Minnesota through the Minnesota Pharmaceutical Association have been conducting a very active campaign in that State to secure an amendment to the pharmacy law which would require graduation from recognized colleges of pharmacy as a prerequisite to examination and registration by the board of pharmacy. At the recent annual banquet of the association, held in St. Paul, Dean Frederick J. Wulling of the University of Minnesota College of Pharmacy and present president of the American Pharmaceutical Association, was called upon and delivered the following address, which although extemporaneous, quite clearly reflects the views of many pharmacists in other States, especially in New Jersey, Iowa, and one or two others, where efforts are being made to secure such legislation. Through the courtesy of Dean Wulling, the ERA is able to present the address which was taken down by Reporter R. J. Smith.—Ed.]

I REGARD the pharmacists of Minnesota as a group of most unselfish men and women. They rarely ask anything for themselves; they have always had in mind the quality of the service that they expect to give to the people of the state.

All legislation relating to pharmacy that is on the statute books has had its initiative in the state association. This legislation has made it more difficult for the pharmacists to practice. The pharmacists have always recognized that they were organized for the purpose of rendering an acceleratingly efficient service to the people.

Now, what about the kind of service they are rendering? In my humble opinion it is a service almost identical with that rendered by the medical profession, and I think it is regarded as a most humanitarian service. I therefore assert, affirm and claim that the service is not an humble service.

In order to give that kind of service a certain minimum of qualification is necessary. The pharmacists feel at this time that the efficiency of the calling must be raised. If the pharmacists are to be consistently classified, they must be regarded as medical specialists. I believe their service is next to medical service in quality. We know that it is not so held in the estimation of the people. There must be a reason for that. The reason lies with the pharmacists themselves. I believe, as a group, we have not sufficiently recognized the intrinsic value of our calling to mankind. We are now beginning to realize what we ought to stand for and we are beginning to make efforts to obtain that recognition. Pharmacy at the present time is in the ascendancy everywhere in this country. There are many evidences of that. Some may take issue with me and say there are many who think that there is disintegration in the multiplication of the commercial activities of the pharmacists. If I had time, I could point out to you and prove that this is not true. Everywhere in this country, especially in the larger cities, purely pharmaceutical establishments are constantly increasing in number—those kinds of establishments which are employing themselves with the prime object of practicing professional pharmacy. The pendulum has almost swung to the other end of the arc and it is coming back by virtue of a natural law. The practice of pharmacy will return to and exceed the professional status that it occupied not very many years ago.

I have no fault to find whatever with the pharmacists during the past three or four decades. I could prove to you, I believe, if I had the time, that some pharmacists who are selling row-boats, pianos, etc., or conducting undertaking and embalming establishments, are, in a way, justified in this sort of business. They have been compelled by circumstances to enter into that kind of activity.

I want you to take it for granted that these are just as good citizens as other members of the community. Many of the pharmacists who are commercial at the present time, in their hearts wish they could be strictly professional pharmacists, and it is those pharmacists especially who are today asking help to assert their professional status. There are many ways in which they feel they can return to their proper sphere. One of them is the elevation of the requirements for the practice of pharmacy. This state is on record as having always recognized the need of a sufficient training in all callings. There has been a difference of opinion from the very beginning as to the minimum of the requirements—never as to the requirements—but merely as to the amount of the requirements. Pharmacists were at one time quite content with a very low standard, but they have raised that standard continually. They have now arrived at a point where they are expressing a conviction that another step is necessary and are asking the legislature, through this organization, to enact a prerequisite law making high-school or college training a prerequisite for the practice of pharmacy. That is a request that comes from the pharmacists themselves. What will be the result if it is granted? Gradually the service of the calling will improve and its benefit will accrue to the people of the state. The pharmacists, therefore, are asking for an opportunity to give better service. It is in the hands of the legislature to grant this, not only because it is asked by the pharmacists, but because it is the inherent duty of every citizen of this great Commonwealth including the legislators to support and stimulate any upward trend that makes for better service, and that makes life safer in the state. That is one reason why I believe the pharmacists have a right to expect the support of every member of the legislature who is in any way interested in the welfare of the people.

Education to Help Druggists

We who are educators recognize that most upward steps are connected with education. Think for a moment what the country would be without education. Realize, if you will, that our form of government which our wise forefathers regarded and established as the best in the world, and which is still so regarded, is based entirely upon a minimum average intelligence which must reach far beyond the minimum intelligence under most other forms of government. This government will continue only so long as the average intelligence is fairly high. The disintegration of a republic is always preceded by a lowering of the average intelligence. I think our average intelligence, without referring also to the necessity of a high moral average, is the outgrowth of a high sense of duty toward our neighbor, and to many other factors that enter into the development of civilization such as we have in this great country of ours.

The average intelligence that we are enjoying in this country is the result of compulsory education through the grades, high schools, universities and other institutions of learning. These are basic and fundamental. The republic is built upon high aims and purposes. The profession of pharmacy so far has built very wisely. It wants to build another story to its structure, and it wants to make that firm and solid. It wants to do it wisely. It has had this subject under consideration for a long



PROF. F. J. WULLING

time. The pharmacists of the state, through this association, have determined that this is the next step. Taking it will not work a hardship on the poor boy. I believe there are no financially poor boys in this state. If you will allow me to define a poor boy, as I understand that term, I will say he is a boy who is poor in initiative, poor in spirit, poor in stability, etc.; he is a poor boy who will not acquire a training or an education in this practically education-free country. We do not want such a boy to become an applicant for entrance to our calling.

The boy who is poor in dollars may be and usually is rich in natural endowment and may become a most successful member of the calling if he will make a sufficient effort. There are many of very humble origin who have achieved some success. We have with us tonight as one of our guests a gentleman from Philadelphia who is an example, as I am, and as many of us are, of the evolution of the dollar-poor boy into one who has earned the esteem and respect of his fellows. The efficient poor boy is the one who will make his own way, who will utilize every resource and make every honest endeavor to succeed. He is the boy who depends primarily upon himself. It does not matter that he has no money. Lack of money cannot deprive him of an education. So, I cannot see how the enactment of this proposed prerequisite law would work any hardship. We must feel this way: that we are now in possession of a trust which has been handed down to us by our predecessors. We are administering upon this trust. We love our calling. Many of us have devoted our lives to it. Many of us are foregoing wealth, in a degree, for the ideal that we stand for.

Some of us are subject to ridicule because we have ideals and stand by them. I would rather be among those who stand by their ideals to the end, than among those who would give up their ideals for the things that are material, because there is a greater reward. This trust is in our hands for a brief time only. We must hand it down to our posterity, and it is a duty incumbent upon us to take this trust, as it is handed to us, to develop it and to hand it to our successors in a much more highly developed condition. If we do not do so we are not contributing anything toward the development of civilization; and while I do not know the purpose of this life, I do feel convinced there is a duty devolving upon us; the duty to do our very best with the things that we have, to stimulate this evolutionary process in such a way that when we are gone it can be said that we have done something for posterity; that we have employed our abilities and our time in a way that meets the approval of those who succeed us, for our judges are those who will come after us. That, as you know, is the lesson and the duty that history teaches.

First Appearance for Propaganda

I said a year ago that I would not take any part in the prerequisite propaganda. This is the first time I have spoken in behalf of this particular measure. I think I am perfectly consistent in speaking to you this evening as I have because I have waited until the pharmacists have expressed themselves. I am an educator and if this prerequisite measure passes, more students will come to the college and thus increase my work which is already almost burdensome. In advocating the prerequisite I am not thinking of my personal comfort. Surely there will be no personal advantage to me. I am willing that the call of higher pharmacy and the ultimate result of the elevation of that calling and hence better service to the state, be upon me your humble servant who is always at the command of the calling.

I think at this time I am entitled to speak upon this prerequisite measure because the pharmacists have gone on record by their votes—over eighty per cent of the pharmacists of the state have recorded an affirmative vote in favor of this measure.

I shall not speak more, except to give you this last thought. We are often confronted with the necessity of obtaining the advice or service of those who know: those who have had experience; those who are experts. This is illustrated by the way many boards of directors solve their problems. They say, "Who is the best man in the country to carry out this work?" No one mentions names. A committee is established to find the best man and secures him, usually on his own terms. The point is

to get the best man to render the particular service, one who will do the work expertly. I believe that is the way we should do many of our things. What would happen if we did all our things that way? They would be done by the best talent available for them. That is what the pharmacists want at the present time. They want the country drug store, the middle-of-the-block drug store and the corner drug store to be administered by a man who is an expert. We have many such now, but they are not as universal as they might be. We are recognizing this and admitting it. We want that condition to change so that there will be an expert pharmaceutical practitioner in every drug store and I believe we have a right, as a group of men who have been loyal to the interests of the commonwealth in every other respect, to expect from those who have it in their power to grant this to bring about the conditions desired.

SUPPRESSION OF THE OPIUM TRAFFIC IN CHINA A BATTLE OF TEN YEARS

Government Closes More Than 1,000,000 Dens— Moderate Smokers Cured by Medical Treatment— Victims Over 60 Exempt—Work of International Commission

China's edict against opium, issued in 1907, provided that the traffic was to come to an end in ten years, and March 31, 1917, marks the end of the drug evil so far as government recognition of the trade is concerned. Charles Stirrup writes in the *New York Sun*:

"During the last two or three years only old and elderly people and the weakest and worst victims of the habit have used opium. Smokers have been held up to public scorn and the secret pill eaters in Government service have been dismissed from office. Growers who have produced the poppy in remote places have been severely punished.

"Notwithstanding rioting and bloodshed in many cities and widespread destruction of property by mobs the work of reform has been relentlessly pushed ahead. In one city alone 7,000 dens were closed and between 1,000,000 and 2,000,000 scattered all over the country have been put out of business. No longer are the passenger steamships encumbered by the sprawling forms of men who have smoked themselves insensible. Huge bonfires of pipes have been publicly burned in every city to the applause of men who formerly spent one-fourth or one-third of their small wages on the drug that impoverished them.

"Moderate smokers are treated in a manner both drastic and effective. The cure is either swallowed or administered hypodermically and is given the patient at the time he takes the drug. If the ravages of the habit have not been extensive and his stomach only is concerned he is so nauseated that in as short a time as five days he will give up the indulgence. The Government cure includes 15 per cent tincture of belladonna, fluidextract of prickly ash (*xanthoxylum*), and fluid extract of *hyoscyamus*.

"The regulations laid down in the decree that has now reached its point of completion, included the following: Smokers to report themselves and take out licenses; Government officials under 60 years of age to cleanse themselves of the habit within six months; all dens to be closed after six months; no pipes or lamps to be made or sold after six months; the cultivation of the poppy in China and the importation of the drug from abroad to be steadily diminished; shops for the sale of the drug to be closed on March 31st, 1917, when the entire traffic was to come to an end.

"A vice of such magnitude was not to be banished without a tremendous, sustained and uncompromising fight and it was feared that even the resolute men who formed the Government would find the task they had set themselves beyond their power of accomplishment. But they never wavered and found strong support in the International Opium Commission, which, representing the United States and Great Britain as well as China, met in Shanghai in February, 1909, and agreed to do all in its power to help to end the opium curse. This commission was largely the outcome of American leadership and its chairman was an American, Bishop Brent."

Buying Club aid to Retailers and Jobbers

This Organization Has Made Important Steps Forward

By JOHN L. MEYER

Detroit, Chicago, Milwaukee and other cities have local buying clubs of retailers. Information both from the "inside" and outside absolutely proves that these clubs are succeeding. They are growing comfortably, which in a measure answers the question of future prosperity.

Another interesting feature to an investigator who is not a druggist, but who has been a student of retailing for many years and in many lines, is this:

How are they started, and kept agoing?

No doubt many a retail druggist who is not within reach of such an organization, frequently wonders about these items when he gets to thinking about his own buying problems.

Let's take a typical buying club, such as the writer has just had an opportunity to investigate deeply and thoroughly. This is going to be a true story, even if "no names are mentioned." It is not even a composite story—which is one reason for not mentioning names! Modesty, we will say, forbids!

Now, let us go back to the days of two years ago. At that time the buying problems of the retail druggist undoubtedly reached an interesting point of development, second in interest only to the period not so very long after, and sometimes known as the war-price period.

A druggist in the city where this story has its source had just fallen down on a deal for the sale of his store. He failed to get within a *few thousands* of his price. In a way, he felt insulted. So he called up four fellow retail druggists and asked them to go bowling. Every one of the four responded.

At the bowling party a few things cropped out which— to make it short—led to the establishment of regular bowling nights, and a buying club!

At first it was a recalcitrant infant. Some of the early manoeuvrings are interesting. There was no formal organization. Bill Jones, we will call him, laid out the plot. "You," he said to Henry, "are strong on photographic and stationery sales because of the college near you. And you, John, are in the foreign section of the town and I guess your sales are pretty well centered on certain lines. Now, Albert, you are on the outskirts near the community market, and you do a whale of a business in seeds and farm requirements. Jimmie is downtown.

"Each one of us is a specialist. I think I have it on all of you for prescription business and staples. Now, each specialist, myself included, will take orders from all of us for supplies in his own line that he knows best how to handle, then total up, buy and distribute. It's cash on delivery. No overhead, of course, and each profits only on the goods he himself sells, not on what he passes along."

Understanding to Fill In Shorts

That was the beginning. Coupled with these arrangements was an understanding to mutually fill in shorts and help each other in every other way. Ideas were exchanged. While not directly applicable always the ideas could be amended or changed to suit conditions of each store.

Today the club has an office and a regular name although not in the directories. The office is also a warehouse, and there are sometimes \$8,000 worth of goods in it. Not long after the club was started, each "member" put in \$100. When the room was engaged, everybody put in another hundred. The affair is now participated in by 38 members. A young lady attends to the office. Each participant gets his own deliveries. The buying is still handled about the way that it was at the start. One participant, however, is elected to be a sort of a chief factotum—a head buyer, if you please—for six-month periods. The job rotates. Only a very little accounting is necessary, and the overhead is gratifyingly near nothing.

The club has the hearty support of most of the local jobbers, and of some that are located in other cities. They give the quantity discounts cheerfully on many lines. Of course, the aggregate of the business handled through the club with the participants is only a small percentage of the total business that the jobbers do with the individuals in the ordinary way. Some manufacturers do not allow their quantity contracts with retailers who agree to buy a certain volume per year or six months, to be used for the club. No attempt has been made to violate such arrangements. There are a plenty of opportunities to buy all that is sought and bought.

Other manufacturers, of course, decline to recognize the proposition or to sell to it at quantity prices. Some do not give quantity prices in any event and the club is not interested in them as a club.

Now and then, particularly during the recent days of rising prices and shortages of goods, the club has made a "nice killing," by hitting the market just right. It was not all guess work, either. Among the 38, or any division of the number, there is always a sufficient amount of foresight, or even "hindsight" to know what is going on and how to meet it.

A big feature, as has been indicated, is found in the dispatch with which orders are handled; another pleasing time-saver refers to handling shorts. This applies to club headquarters as well as to the individual stores. There is, in other words, a greater feeling of mutuality. Recently, a druggist in an outlying section was called on for a quantity of chloride of gold, something that he had never had in his store. It was wanted right quickly, too, in a matter of life and death. The young lady at the office got it for him in less than an hour. She happened to know of a store which had a goodly supply.

No club buying is done except of goods that experience has shown to be really desirable for the club proposition. Those goods—staples and others—that quite regularly appear as shorts in most of the stores, are kept in stock and watched with perhaps a little more care than the others, to avoid untimely exhaustion of supplies at headquarters. Experience has been capitalized thoroughly.

The jobbers, in the course of events, have co-operated. In the city of this story, the jobbers have developed into specialists to an extent. The club has this in mind, which expedites buying. Good tips are often received from the jobbers. They find that credit and collections matters have been simplified. So far as the club is concerned, it is "cash on delivery" as a rule. The amount of delivery is charged against the \$200 in the pot, and the two hundred must be filled out again without delay. But, no collection is made while any of a member's goods remain in storage. It is not until purchases are actually withdrawn that the money for them must be paid over, and then only to the extent of the withdrawal.

DRUGGIST FAVORS BUYERS CLUB

THE PHARMACEUTICAL ERA,
New York.

Gentlemen:—

I think the Idea of a National Buying Club is the best thing for a retail druggist that can happen, and it will be necessary for this idea to be carried out if the retail druggists expect to make money or in some cases even exist.

Lafayette has no such organization, and I would like to inquire if I can get in touch with any club for this purpose now?

R. C. SNODDY,
W. Lafayette, Indiana.

OBLIGATIONS AND OPPORTUNITIES

Dr. Henry Kraemer Points Them Out—Speaks to Enthusiastic Baltimore Meeting—Microscope as Aid to Druggist—Need of Study and Work

BALTIMORE, March 15—One of the most interesting and largely attended meetings of the Baltimore Retail Druggists' Association was that held last Monday evening, with Prof. Henry Kraemer of the Philadelphia College of Pharmacy as the drawing card. It had been widely announced that Professor Kraemer would discourse on "Obligations and Opportunities" and he took up wholly the professional and scientific side.

He laid great stress on the druggist knowing thoroughly the products which he sells and familiarizing himself intimately with the properties and the structure of drugs, roots, herbs and other articles. As for the opportunities, that is, the chances of gaining the knowledge regarded as essential, Dr. Kraemer said they were far greater and better than ever before. The speaker was not so much disposed to lay stress upon chemical analyses as a means of determining quality and strength, but declared far better and more accurate results could be obtained by close inspection, taste and other physical means. A great aid in the work of determination was the microscope, which showed minutely and plainly the specific structure of different substances and made mistakes impossible. By way of illustration Dr. Kraemer threw upon the screen pictures of microscopic specimens and explained carefully the differences that presented themselves to the practiced eye.



DR. HENRY KRAEMER

He projected side by side with pictures of certain roots and other articles illustrations of substitutes or adulterants to prove how easy it was to detect impurities. Many of these adulterants, he explained, were not intentionally added, but got mixed up with the genuine galenicals perhaps in the gathering, but the microscope showed them clearly. Smell, taste and knowledge of appearance, he said, were far better guides, aided by the microscope, than chemical analyses, and they were means within the reach of every pharmacist, requiring no elaborate apparatus or specialized knowledge.

Dr. Kraemer, however, also touched upon some of the more commercial aspects of pharmacy by giving with regard to various substances their formulas. Thus he took up face powder, and showed how the microscope afforded an accurate test, and in this connection he showed how cheaply face powder could be made and how big a price the druggist could get for it. There were other illustrations hardly less striking, this coming within the scope of the up-to-date and thoroughly equipped pharmacist's opportunities.

Among those present were Dr. Charles Caspari, Jr., pure food and drug commissioner for Maryland; Henry P. Hynson and others of the Department of Pharmacy, University of Maryland, and many of the most prominent druggists in the city.

R. E. Lee Williamson, president of the association, presided.

SARGOL DENIED USE OF MAILS

Not content with imposing a \$30,000 fine on the makers of Sargol, the remedy that was found fraudulent last month after a lengthy trial, the United States Government has denied the production the use of the mails. All mail addressed to the company in Binghamton will be held in local offices and then forwarded to the Dead Letter Office in Washington, while the company will not be permitted to send mail under the firm letterheads.

DETERMINING ALCOHOLIC PERCENTAGE

Dr. Clifford O. Miller Explains Method at Baltimore Branch Meeting — Detailed Explanation — New President Chosen

The principal feature of the February meeting of the Baltimore Branch of the A.Ph.A., held in Harris Hall, of the University of Maryland, was a talk on "The Determination of Alcoholic Percentages of Pharmaceutical Preparations," with practical demonstrations by Dr. Clifford O. Miller, of the State Board of Health.

Dr. Miller made a general statement concerning the determination of alcohol by the evaporation method, but pointed out that this method does not give altogether satisfactory results where the evaporation of the alcohol causes the separation of substances which do not dissolve in the added water. He showed the general types of distilling apparatus in use, such as the goose neck, the Kjeldahl distilling bulb, and the Hempel column. He then demonstrated a column he had devised, stating that this column is extremely useful where very small quantities of alcohol are present and where concentration of the alcohol in the distillate means a more accurate determination of the alcoholic percentage.

In this apparatus a thermometer is used to record the temperature of the vapor and this serves to show the character of the distillate, as well as the completion of the distillation, the temperature dropping to approximately 30 degrees C. when the vapor no longer contains alcohol.

A pycnometer fitted with a thermometer is used to obtain the specific gravity of the distillate, 25 degree C. being found a more convenient temperature at which to work than 15.56 degree C., as given in the U.S.P. IX.

Dr. Miller explained the use of the immersion refractometer in the accurate and rapid determination of the percentage of alcohol in the distillate, as well as the detection of any methyl alcohol which may be present. If the reading of the refractometer indicates a percentage of alcohol agreeing with that obtained from the specific gravity it may be assumed that no methyl alcohol is present. If however, there is an appreciable amount of methyl alcohol present, the low refractometer reading will indicate the fact at once.

After presenting the general method of alcoholic determination, Dr. Miller gave methods for overcoming some difficulties likely to arise. A carbonated liquid may be freed from carbon dioxide before distillation by pouring from one vessel to another. The foaming of new wines may be overcome by the addition of tannic acid or paraffin, the paraffin being more satisfactory as it forms a layer over the liquid and almost entirely prevents foaming.

The bumping which often occurs in distillation can be overcome by adding a few pieces of pumice which have been heated to red heat, plunged in distilled water, and left under water until used. Pieces of broken glass or glass beads, or capillary tubes closed at one end also serve very well.

In cases where the preparation contains fats, volatile oils, soap, volatile bases or acid, or other volatile substances such as ether, iodine, etc., these are eliminated before the distillation is carried out. In those preparations containing volatile acids the acids are best fixed by sodium carbonate, added to the distilling flask. Those containing ammonia are best fixed with phosphoric acid.

Preparations containing free iodine are first freed from iodine by decolorizing with zinc and adding a few mils of sodium hydroxide solution. The iodine may be eliminated by means of sodium thiosulphate, but in this case sodium hydroxide solution must also be added to prevent the sulphur from distilling over with the alcohol. If volatile alkaloids are present, these may be fixed with tannin.

Volatile oils, camphor, oils, fats, and soap are removed by adding saturated salt solution and shaking out with petroleum ether. The petroleum ether extract is washed with saturated salt solution and the washings are added to the distilling flask. In soaps containing ammonia acidified salt solution is added, the acid being used to fix the ammonia. Alcohol-ether mixtures are miscible with either water or petroleum ether alone, but with the simultaneous addition of both, the alcohol mixes completely with the water and the ether with the petroleum ether.

The Biologicals of the U. S. Pharmacopoeia

How Vaccines and Antitoxins are Officially Treated

F. E. STEWART, Ph.G., M.D., Phar.D.*
(Concluded from the March, 1917 ERA, Page 84)

AS FOR the efficacy of diphtheria antitoxin, there are very few physicians, and fortunately the number is growing even fewer, who are not fully convinced of its efficacy for the treatment of what used to be considered the most fatal of children's diseases.

The antitoxin treatment of diphtheria came into use in the year 1895. After it had been on trial for about one and one-half years, with reports coming from scientific observers both in hospital and private practice in all parts of the world, the subject was taken up for official discussion by the New York Academy of Medicine. In this discussion Professor William H. Thompson, M.D., LL.D., called attention to the fact that the verdict about any alleged remedy must depend upon the findings of a jury, whose members should not only be competent but also so numerous and of such difference in locality and nationality that all personal and local influences can be safely left out of account. It was proved, by the accumulation of evidence resulting from the investigations of many competent observers, that diphtheria antitoxin reduced the mortality from diphtheria in the localities where it was being used, fully one-half. The testimony brought before the Academy was overwhelmingly in its favor. Since that time favorable testimony from all over the world has been steadily increasing, and untoward results claimed for it by its detractors have been proved to be due to causes other than antitoxin. The verdict of the profession at the present time is that diphtheria antitoxin has reduced the mortality from about 40 per cent diphtheria to less than ten per cent.

Importance of Antitoxin

This verdict is now unanimous, and the discovery of the antitoxin treatment of diphtheria stands alongside the discovery of vaccination for smallpox as a triumph of scientific medicine.

These wonderful results, however, can only be secured when diphtheria antitoxin is used in a proper manner. Two things are requisite; namely, properly prepared diphtheria antitoxin, and proper application of the product for the treatment of diphtheria.

It is true that the adoption of a common standard established by the U. S. Public Health Service has minimized the difference between the various brands of diphtheria antitoxin on the market, but it is not true that all brands of diphtheria antitoxin are the same in quality. Nothing can take the place of special skill and care in the preparation of the product, so there will always be reason for discriminating in ordering or prescribing diphtheria antitoxin.

When diphtheria antitoxin is given on the first day of the disease, the mortality does not exceed 0.34 per cent; when not given until the second day, the mortality is 1.46 per cent; third day, 3.24 per cent; fourth day, 10.8 per cent; later than the fourth day, 23.1 per cent.

The above statement is taken from the Bulletin of the Chicago Health Department, February 13, 1904.

Dr. Jules Comby, the famous pediatricist of Paris, in his paper entitled "Serotherapy," read before the Fourteenth International Medical Congress in 1903, stated that the use of diphtheria antitoxin decreases the mortality of diphtheria 75 per cent (three-fourths), and if employed during the first forty-eight hours, abolishes the mortality entirely.

Dr. Zahorsky reported in his paper entitled "Mortality of diphtheria in private practice under antitoxin treatment," *Medical News*, December 5, 1903, that a mortality of only 1.5 per cent in 1,610 cases justified the belief that no patient with diphtheria should die if antitoxin is used in a proper manner; namely, in full doses and early in the case.

The subsequent use of diphtheria antitoxin by the profession has only strengthened the evidence contained in these reports.

Dosage of Diphtheria Antitoxin

The question of dosage of diphtheria antitoxin does not depend so much upon the age of the child as on the severity of the symptoms. As pointed out in an editorial published in the *Medical News*, October 29, 1904, and many times since verified by competent observers, even for an infant, if there are threatened symptoms of extensive nasal or laryngeal involvement, 5,000 antitoxic units should be given at once. Repetition of the dose depends entirely upon the effect that is secured. If there is a drop in temperature, relief in breathing, a quieter pulse, and generally a more comfortable condition, especially if the membrane assumes a granular appearance and begins to disintegrate or clear up, the dose need not be repeated. If these favorable changes are not noted beyond the usual time for repeating the dose, it means that the toxins are not neutralized. If in doubt, when there has been but a partial reaction and only a slight remission of symptoms, it is better to be sure than sorry, and repeat the dose. Failure to do so means the assumption of an undue responsibility of the part of the physician.

The experience of the profession since the publication of this editorial has demonstrated that the dosage recommended at the time of its publication was not sufficient.

According to Levinson, *Medical Record*, January 6, 1912, the amount of antitoxin to be administered should be much larger. "For instance," he says, "a physician gives 5,000 units in a nasal or laryngeal case and then wonders why the patient does not recover, although it is plain that the child did not receive enough antitoxin. Our work at the Contagious Diseases Hospital has taught us several things that can be laid down as a rule: (1) a prophylactic dose should not be less than 5,000 units; (2) curative doses in tonsillar diphtheria should not be less than 10,000 units; (3) curative doses in nasal or laryngeal diphtheria should not be less than 25,000 units." He advises against the fear of giving too much antitoxin, and says: "If the heart does not degenerate as a result of the diphtheria toxin, the antitoxin will do no harm. We have cases on record in which patients have received as high as 85,000 units and have recovered without any bad effect on the heart."

Use for Immunization

State Commissioner Dixon of Pennsylvania reports records of dosages of 52,000, 57,000, 63,000, 68,000 and 117,000 units, resulting in recovery without renal or cardiac complications.

The limits of this paper will not permit further discussion of antitoxin dosage, except to call attention to the statements of Dr. William H. Park, of the New York Board of Health, made in the Cutter lecture on preventive medicine delivered at Harvard Medical School, March 13, 1912. He said:

"During last year the lowest mortality of both Boston and New York was attained, Boston having 18 and New York 28 per 100,000. For the first two months of 1912 the mortality in New York has been less than that of last year by 20 per cent, so that if this rate continues it will be only 22 per 100,000. Now, when you think that in 1903 and 1904 we had an average of 150 deaths per 100,000, while last year in New York we had an average of only 28, and that this year, if the remaining ten months are like the first two, it will be only 22, you see that there is reason for enthusiasm in our further efforts practically to eradicate this disease."

"It is now the common practice to have the children immunized in any family where diphtheria is found, and frequently the adults also. I am sure that to the immunization, as much as to the treatment of actual cases, is due the fall in the mortality of New York City, so that, instead of an average of 150, only 28 out of 100,000 persons die. The immunization dose advised by the Health Department is 1,000 units in diphtheria and 1,500 units in tetanus. This should be repeated in ten days if danger of infection still exists."

*Director, Scientific Department, H. K. Mulford Co.

Dr. Park further states that after much experience he recommends the following dosage:

Very mild cases2,000- 3,000 units for first dose
 Moderately severe cases..4,000- 6,000 units for first dose
 Very severe cases8,000-10,000 units for first dose

He calls attention to the importance of giving antitoxin promptly and in large initial doses, with the object of getting as quickly as possible, enough antitoxin into the blood to neutralize any toxin present there, so that no further toxin is able to pass out to the tissue cells.

Method of Administration

Finally, Dr. Park calls attention to the necessity of adopting the intravenous method in severe cases, in the following words:

"Before closing I wish to urge the intravenous injection, not only in cases of malignant diphtheria, but in all cases of tetanus. The difference during the first day in the amount of antitoxin in the blood when injected intravenously is ten times greater than when injected subcutaneously. At the end of six hours one has by the subcutaneous method 2 units, and by the intravenous method 20 units in each c.c. of the patient's blood. As the hours pass the one diminishes and the other increases, but even at the end of 24 hours you have 12 units against 6 units. I feel certain that 5,000 units given intravenously has as much effect as 20,000 given subcutaneously. Intravenous injections of refined antitoxin have been made by us in nearly 200 cases and have given no bad results. We have given a large number of children and adults other serums, intravenously, in large amounts, and in all our experience we have had only one patient who showed bad symptoms. In little children one must cut down on the vein, but with adults and larger children it is a very simple method. The serum must always be warmed to blood heat before injecting.* I think that in all cases of septic diphtheria we should give a dose intravenously, but in mild and early cases it is sufficient to give it subcutaneously. Intramuscular injections are absorbed in about one-half the time required by the subcutaneous ones when the serum stays in the muscle substance, but in practice it often escapes."

Tetanus Antitoxin

Finally, in regard to tetanus antitoxin, it has long been known that the prompt injection of 1,500 units after the reception of a wound will, as a rule, produce sufficient immunity to prevent an attack of the disease. This was the belief before the beginning of the great European war. This belief was largely justified by the experience of the profession, but it has been somewhat modified by the history of tetanus antitoxin as used by the armies in France where the ground is loaded with tetanus spores due to fertilization by animal manure.

Early in the European war, the mortality from tetanus was a menace to both armies engaged in the great conflict. We have as yet no reliable statistics on the subject, yet it has been stated that about ten or twelve per cent of all the wounded were attacked by the tetanus bacillus and about 90 per cent of them died. The prophylactic injection of tetanus antitoxin was therefore adopted as a routine measure in every case of gunshot wound, and the mortality rate was immediately enormously reduced. Yet in spite of this measure a certain number of cases of tetanus continued to occur.

It therefore became quite important that a special study should be undertaken by the Medical Department of the British Army to determine the true value of tetanus antitoxin as a prophylactic agent against tetanus and also to ascertain the best method for using antitoxin in such a manner as to obviate the fear of harmful effects from repeated injections of horse serum.

A study of statistics by Sir David Bruce of the British Army, after sufficient time had elapsed to accumulate evidence concerning this practice, demonstrated that the protection afforded by single injections of tetanus antitoxin is not complete; therefore, repetition of the injection at intervals of seven days was recommended as a precautionary measure in order to keep up the protection.

Occasionally this precaution was neglected because of the fear of harmful effects from repeated injections of horse serum and for that reason cases of tetanus occurred

which would have been prevented if the dose had been repeated at seven day intervals as recommended.

The results of further studies are reported in papers published in the *Lancet*, London, January 20th and 27th, 1917. They include reports from Colonel Sir William B. Leischman,† of the Army Medical Service, and Major A. B. Smallman‡ and Captain H. Burrows,§ both of the Royal Army Medical Corps.

Commenting on these papers, the editor of the *Lancet* calls attention to the important points brought out by these investigations which may be summarized as follows:

Summary of Investigations

1. It is incontestably proved that a prophylactic dose of tetanus antitoxin has a really wonderful effect in preventing the disease.

2. Even in cases where the dose of antitoxin has been, insufficient to prevent the disease but sufficient to modify it, almost as striking results have been obtained.

3. The investigations of Leischman and Smallman show that the death rate from the disease was very definitely less when the dose was given within 24 hours of the infliction of the wound as compared with the death rate in those cases in which the injection was given later.

4. The statistics indicate clearly that the earlier the dose is given the longer the incubation of the disease; consequently success in the treatment of tetanus occurring as a result of insufficient prophylactic dosage is proportionately augmented.

5. The danger of anaphylactic shock from the injection of tetanus antitoxin is negligible when the prophylactic dose is contained in such a small quantity as 3 c.c. of horse serum, whatever the interval after the preceding injections. Highly concentrated serum, in doses sufficient to maintain protection, may be repeated at weekly intervals as long as it is considered advisable, without any fear of the occurrence of anaphylaxis.

Therapeutic Use of the Serum

In the opinion of the editor of the *Lancet*, the most important conclusions to be drawn from the work of Colonel Leischman and Major Smallman are these:

1. In the treatment of tetanus when it has once declared itself, the intramuscular and subcutaneous routes should be selected in preference to any other.

2. The intrathecal (intraspinal) route is by no means free from danger and of doubtful efficiency.

3. The intravenous route is no more efficacious and is certainly more dangerous than either the intramuscular or subcutaneous methods.

4. The dose for intramuscular and subcutaneous routes should be not less than 10,000 units per day for the first few days.

5. After the therapeutic use of the antitoxin, careful examination of facts seems to show that the mortality after dosage of 20,000 units is less than when smaller dose has been given.

6. It is advisable that the administration of the antitoxin should not be abandoned too early for there may be a recurrence.

7. There appears to be proof that any operation after tetanus has declared itself, has a tendency to increase the mortality; therefore, it is wise to give a dose of antitoxin before operating should operation be needed.

8. The larger doses of horse protein necessary for administration in using tetanus antitoxin therapeutically may become a source of anaphylactic phenomena. This can be entirely avoided according to Captain S. Wyard, R.A.M.C., in the following manner:

"A small rectal injection of the serum should be given within 12 hours, which renders the individual safe from anaphylaxis no matter how large a dose is given subcutaneously; or, if this amount of delay is thought inadvisable, the same result can be obtained by a succession of subcutaneous doses beginning with a very small dose and rapidly rising to a large and efficient one."

The editor of the *Lancet* says that observation of these precautions should be sufficient to remove all risks of

(Continued on Page 141)

†Sir William B. Leischman, C.B., F.R.S., F.R.C.P., LL.D., K.H.P., Col. Army Medical Service, and

‡A. B. Smallman, D.S.O., M.D., D.P.H., Maj. Royal Army Medical Corps, *Lancet* Jan. 27, 1917, page 131—Recent cases of Tetanus in the British Expeditionary Force.

§H. Burrows, M.B.B.S., London, F.R.C.S., England, Capt. R.A.M.C. Modified Tetanus, *Lancet* Jan. 27, 1917, page 139.

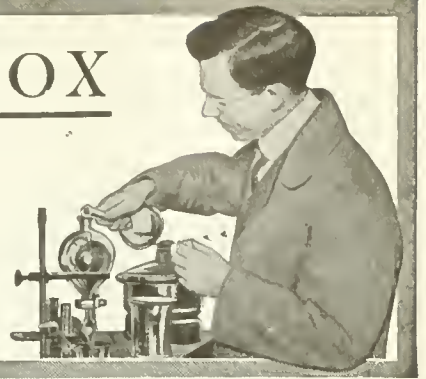
*Care must be exercised not to bring the serum to a higher temperature than 98 deg. F., on account of the tendency to coagulation.—Ed.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Therapy and Uses of Corn Oil

(S. D. Co.)—So far as we are able to discover, corn oil or oil of maize has not been much used as a therapeutic agent, although it is said to possess properties similar to those of rape seed and olive oils. It has also been stated that it may be satisfactorily employed pharmaceutically to replace cotton seed oil, over which it is said to possess the advantage of being more easily absorbed by the skin. It has been employed in the preparation of ointments, as diachylon, nitrate of mercury, etc., and in liniments in place of cotton seed or olive oil. It has never been employed to any great extent for internal administration as a medicine.

According to Lewkowitsch ("Chemical Technology of Oils, Fats, Waxes, etc."), well-refined maize oil is used for edible purposes (salad oil). He states that since its "grainy" taste is objectionable, the edible quality is mostly mixed with edible cotton seed oil and other edible oils. It is also used in the manufacture of oleomargarine, and of "compound lard," replacing cotton seed oil. Maize oil which cannot be employed for edible purposes, is used for making soft soap for which it is said to be eminently suitable. A "cotton softener," largely used in the United States, contains maize oil soap. For hard soaps, maize oil is not suitable. Lower qualities are used as burning oil. The oil has been recommended for lubricating, but on account of its gumming properties, it cannot be usefully employed for the purpose. Lewkowitsch also says that notwithstanding many statements to the contrary, the oil cannot be used as a paint oil on account of the poor drying properties which paints prepared with it possess. Before soya bean took its place, it found extensive employment in the United States for the manufacture of vulcanized maize oil.

When expressed, the oil is golden-yellow, but that obtained by extraction has a brownish color. The peculiar odor and taste are said to be due to the presence of a volatile oil. It is readily soluble in acetone, and difficultly soluble in alcohol and glacial acetic acid. It contains the glycerides of palmitic, stearic, arachic, oleic and linoleic acids, and if poured in thin layers on an exposed glass plate at 50 degrees C., it dries perfectly in 18 hours. Its saponification value lies between 191 and 193, and its iodine value between 113 and 120. Subjected to the elaidin test it produces a mass of lard-like consistence ("National Dispensatory"). Lloyd ("American Dispensatory") recommends its use in the preparation of ammonia liniment. We can find no reference to its use in emulsions, and from the considerable literature consulted, we can find no data that would lead us to believe it possesses any particular properties other than those noted above.

Protecting Seed Corn from Crows

(X. Y. Z.)—"Please publish a formula for a preparation to put on seed corn that will prevent crows from pulling up the sprouted grain and which will not interfere with germination, nor become sticky like tar?"

We have made some inquiry and have searched considerable literature relating to growing crops in the hope of finding a method which would come within the limitations of this request, and have concluded that if there is any better method than that of coating the seed corn with tar, which seems to have been quite extensively employed, it has not received the publicity it should deserve. In fact

the tar method has been recommended by an expert of the United States Department of Agriculture in preference to any other, and he states that in his experience, not a single kernel of tarred corn was disturbed by crows, while rows of untarred seed immediately adjoining were almost entirely destroyed. In a study of the habits of grain-eating birds, the expert found that dry, hard corn was not palatable food for the crow, but that corn that has been softened and sweetened in the process of germination is a favorite food and is eagerly sought by the crows. He states that the tarring process is the only satisfactory remedy he can suggest, and if it is properly done it is a preventive, as it neither injures the vitality of the grain nor prevents the use of machinery in planting. If any subscriber of the ERA has knowledge of any method that will conform to the specifications stated in the above query he is asked to communicate it to the Question Box for the general information of readers.

Making Castor Oil Capsules

(C. E. C.)—As a rule, castor oil capsules are produced by manufacturers who make a specialty of such products on a somewhat extended scale, the empty capsule to contain the oil being first made in suitable sizes, and the oil being then run in by means of a pipette, burette, or other suitable device. Castor oil is usually dispensed in soft capsules which are made of gelatin with enough glycerin added to the capsule mass to make the empty capsule when completed flexible and slightly elastic. As described in most text books on pharmacy, the capsules are oviform and in one piece, with an elongated neck at one end. When ready to be filled the necks are cut off, and the capsules stood on end in sockets of wood or plaster of paris. The liquid is then dropped in with a pipette or burette, care being taken not to get any on the outside. The capsules are sealed, either by melting the detached necks and applying the hot melted fluid to the open end of the capsule, or by pressing a hot spatula on the open end, which melts the gelatin and causes it to flow together.

The empty capsules are manufactured by dipping an appropriate mold into the mass, which is made by dissolving gelatin in a mixture of hot water and glycerin in such proportions that the mass is fluid when heated on the waterbath, and solid when cold. Into the melted mass an appropriate mold, made of bone or ivory, is dipped, with the result of coating each mold with a layer of gelatin. When the molds are taken from the molten mass and placed in a cool place, the coating of gelatin rapidly solidifies, and the solid dry capsules are stripped from the molds by the fingers of the operators. By increasing the quantity of glycerin, as stated above, the capsule is made elastic. Practically all of the capsules made in this country are made by the manufacturer who specializes in this work, and who in most instances can produce them more cheaply than can the retail druggist. Some manufacturers have very intricate and highly specialized machinery for this work. Outside of the contributions that are to be found in periodical literature, and chapters on the subject in works on practical and dispensing pharmacy, we know of no book wholly devoted to the manufacture of gelatin capsules. Among the manufacturers who make gelatin capsule machinery are the Arthur Colton Co., Detroit, Mich., and the F. J. Stokes Co., Philadelphia, Pa.

Protecting Walls from Moisture

(Dr. M. F. A.)—Waterproofing building material belongs to the department of chemical engineering rather than to pharmacy, and the best we can do is to give you a few formulas taken from our files for protecting walls, etc., from moisture:

(1)

Dissolve $\frac{3}{4}$ pound of mottled soap in one gallon of water. When dissolved, apply the solution over the brickwork, using a large flat brush, and being careful not to allow the application to form a lather or froth on the surface. Then let the wall dry for twenty-four hours. Prepare another solution by dissolving $\frac{1}{2}$ pound of alum in 4 gallons of water, allow to stand for twenty-four hours, then apply the solution over the coating of soap on the wall, using the brush as before. The work should be done in dry weather. In the reaction which follows the application of the solution of alum, an aluminum soap is formed which is impervious to moisture.

(2)

Damp proof composition—Mineral naphtha, 20 gallons; mineral turps, 10 gallons; rosin, 112 pounds; dammar siftings, 28 pounds. Run the rosin, take away from the fire when melted, and add the turps and naphtha; add the dammar siftings, and mix until dissolved. When thoroughly mixed, add $2\frac{1}{2}$ gallons of boiled oil, and strain. The mixture can be tinted by using from $1\frac{1}{2}$ to 2 pounds of an ordinary pigment like zinc sulphide, Brunswick green, Venetian red, etc.

(3)

Talc, 90 parts; white dextrine, 11 parts; plaster of paris, 11 parts; calc spar, 4 parts; alum, 4 parts; cooking salt, 2 parts. Powder thoroughly and mix intimately. To use, stir 4 parts of the mixture in 3 parts of boiling water until a cream-like semi-liquid results. Any desired color can be stirred in. The creamy mixture can be put on any surface that it is desired to protect; it is claimed that the application can be easily and evenly effected, and that the coating is "proof against fire and water, and will not scale off."

Zacaton

(Importer)—Zacaton, known botanically as *Epicampe macroura*, is an unusually hardy, heavy cropping perennial grass of profuse growth in Mexico and Central America. The roots are used in the manufacture of brushes. The tops form a possible source of pulp, which, it is said works up into excellent machine-finish book paper. The pulp is soft, bulky and short fibred and could probably be used in the same manner as soda poplar pulp. According to experts of the U. S. Department of Agriculture, it would appear possible to grow zacaton as a crop in the United States.

Making Potassium Oleate

(E. C. A.)—Potassium oleate, used in the formula for preventing moisture on eye glasses, March ERA, page 91, can be obtained in the market, but it may also be quite easily made by the interaction of oleic acid with potassium hydroxide. This method is that employed in making the ordinary soft or green soap, which is prepared by heating olive oil, the chief constituent of which is olein or the glyceride of oleic acid, with potassium hydroxide and water, and allowing the mixture to cool. The resulting product or soap, consists chiefly of potassium oleate, but also contains the glycerin formed in making it. In practice it is quite probable that this soap could be employed in place of the potassium oleate directed in the formula, due allowance being made for the small quantity of glycerin in the soap.

Or you can make a potassium oleate by neutralizing oleic acid with potassium hydroxide, 100 parts of KOH being required to saturate 503.6 parts of oleic acid (100% $\text{HC}_{18}\text{H}_{33}\text{O}_2$), as shown in the following equation and statement of proportion:



From these data we get the proportion; 56.11 : 100 :: 282.27 : x, in which x = 503.6.

Potassium oleate can also be made as follows:

Potassium bicarbonate	75 grams
Oleic acid	210 grams

Add the potassium bicarbonate gradually to 3,000 Cc. of boiling water. When effervescence has ceased and the bicarbonate has been converted into normal carbonate of potassium, add the oleic acid, stir well, and continue heating the mixture gently, add more water, if necessary, until saponification is complete. The resulting solution can be evaporated (or diluted with water) to bring it to the desired consistency.

Potassium oleate, $\text{KC}_{18}\text{H}_{33}\text{O}_2$, forms a transparent, jelly-like mass, which is far more readily soluble in water, alcohol, and ether, than sodium oleate. One part of potassium oleate requires for complete solution 4 parts of water, or 2.15 parts of alcohol, or 29.1 parts of boiling ether.

Bon-Opto Tablets

(X. Y. Z.)—We cannot give the formula for this proprietary preparation which is claimed by the manufacturers to "improve the eye sight and to allow the user to dispense with eye glasses." However, we find that the preparation has recently been investigated by the New Hampshire Board of Health, a report of which appears in the January Bulletin of the board, as follows:

"This preparation, which sells for one dollar, consists of a 'solution bottle,' a small aluminum eye-cup, and a vial containing fourteen tablets each weighing six grains. The analysis showed common salt, 39.52 per cent; crystallized zinc sulphate, 6.83 per cent; boric acid, 39.69 per cent; menthol, a small quantity. There is nothing peculiar, unusual or expensive about the essential ingredients, which are common salt and boric acid, together with a little astringent zinc salt and cooling menthol. Exception must be taken to the recommendations of the makers that this product be used as a prophylactic for normal eyes. Thus they state that 'comparatively few people appreciate the need of an eye-cup and Bon-Opto to use as an eye bath. But both should be in every bath-room and possessed and used at times by every individual. Parents should teach their children to cleanse the eyes just as they teach them to cleanse the face and hands. Bon-Opto eye-cup and solution are as much toilet necessities as tooth brush and tooth paste. This is true even when the eyes are in no way afflicted.' Although calculated to boom the use of salt and boric acid at one dollar per vial, such advice, as applied to healthy normal eyes, is not only absurd but pernicious. The makers also issue a series of progressive 'eye exercises' extending over a period of six months, some of which are decidedly amusing. Based upon a theory that nearsightedness, farsightedness, squinting, and astigmatism have their origin in a mental state rather than representing an actual physical infirmity, the promoters urge that you 'therefore make up your mind with determination that with the assistance of Bon-Opto you will overcome your eye troubles.'"

Bedbug and Roach Destroyer

(P. Mfg. Co.)—We have printed quite a good many formulas for bedbug and roach destroyers, and also reports of a number of commercial preparations on the market recommended for the purpose, and have yet to find one that has proved satisfactory to everybody. The consensus of opinion and experience seems to indicate that the most effectual remedy is gasoline, but as its use is attended with great danger on account of its inflammability, its employment in most places is practically prohibitive. A non-inflammable insecticide of this type recommended by some, is the following:

Carbon tetrachloride	1 pint
Denatured alcohol	3 pints

Mix. Use with a sprayer by which the fluid may be injected into the haunts of the vermin. It is claimed that it is effectual for getting rid of bugs that infest rooms, beds, closets, etc., and will not injure the colors of fabrics, curtains, etc.

It is reported that some of the commercial powders contain varying proportions of sodium fluoride, which has

also been recommended as an effectual insecticide. We take from our files the following type formula:

Silex	22 parts
Sodium fluoride	40 parts
Sodium chloride	10 parts
Dried sodium carbonate	5 parts
Sodium sulphate	10 parts

Mix.

Recently a writer in the *Journal of the A.M.A.* recommended the use of bromine for the purpose, a method which seems to be worthy of trial. An ounce bottle of bromine is placed in a room, the windows of which have been tightly closed. The cork of the bottle is then removed, the door quickly closed, and the room left for twenty-four hours, when it is opened and aired. The writer states that the fumes of the bromine do not seem to affect anything but the bugs and their eggs, which are quickly put out of commission by the treatment. It is not expected that this method is adapted for commercial exploitation like the ordinary packaged preparations, but it is claimed that it will do the work.

Hoffman's Anodyne

(H. E. B.)—"Hoffman's Anodyne" is now an official synonym for "Spiritus Aetheris Compositus," abbreviated "Sp. Aether. Co.," or "compound spirit of ether" of the National Formulary, 4th revision, and under the provisions of the Federal Food and Drugs Act, such synonym without qualification cannot be legally applied to any other preparation. The formula is identical with that for compound spirit of ether of the U.S.P. VIII, but for which the synonym "Hoffman's Anodyne" was not officially given. The formula is as follows:

Ether	325 mils
Alcohol	650 mils
Ethereal oil	25 mils

Mix them. Average dose: Metric, 4 mils—apothecaries, 1 fluidrachm.

The designation "Hoffman's Anodyne" should not be confused with "Hoffmann's Drops," which is an official synonym for "Spiritus Aetheris," abbreviated "Sp. Aether.," or spirit of ether of the U.S.P. IX. Presumably the spelling of the name "Hoffman," as employed in the National Formulary is due to a typographical error, as the name is spelled "Hoffmann" by most authorities. In a paper contributed to the A.Ph.A. in 1903 by the late Martin I. Wilbert on "Personal Name Synonyms in the U.S.P.," it is stated that "the compound spirit of ether was first prepared by Friedrich Hoffmann in the early years of the 18th century. Hoffmann was born at Halle, February 19, 1660, and is usually considered one of the leaders of German medicine. Hoffmann was the first professor of medicine at Halle, and was the author of 'Systema Medicinæ Rationalis.' His dictum that 'experience and sense are the basis of medicine' is as true today as it was then. Hoffmann died at Halle, November 12, 1742."

Transparent Toilet Cream

(J. N. C.)—We cannot give the formula for the proprietary preparation, but it is possible to make a so-called "transparent" cream on the type of a glycerin jelly, using a fine grade of French gelatin, isinglass, or agar agar, the following formula having been suggested for a preparation of this character:

Thin French gelatin	4 drams
Water	5 ounces
Glycerin of borax	10 ounces
Triple rose water	6 ounces

Soak the gelatin in the water all night in a gallipot, and next morning place the pot in a sauce-pan with water, and heat until dissolved. Add the glycerin and rose water, previously mixed with a teaspoonful of white of egg. Heat until the albumen coagulates, and filter while hot through a twill bag. The jelly may be colored red with cochineal or golden with saffron, the coloring in either case being add to the water used in the manufacturing.

To get a transparent preparation, the very finest gelatin should be employed.

Another formula directs the following:

Isinglass	1 ounce
Water	24 ounces
Glycerin	6 ounces
Boric acid	2 drams

Soak the isinglass in water over night, then gently heat until dissolved. While still hot add the water and glycerin in which the boric acid has been previously dissolved, and allow it to stand until cold. Gelatin may be used in place of isinglass, but it will not make so clear a mixture.

A formula for a so-called "greaseless" cream, which is said to be satisfactory, but which does not produce a "transparent" preparation, is the following:

Stearic acid	3 ounces
Glycerin	3 ounces
Water	6 ounces
Potassium carbonate	½ ounce
Powdered tragacanth	4 drams
Borax	1½ drams
Perfume, a sufficiency.	

Place the glycerin on a waterbath, heat to 150 degrees F., and add the tragacanth, previously rubbed up with a little alcohol. Add the stearic acid, heat till melted, then add the borax and potassium carbonate dissolved in the hot water. Stir until the mixture begins to set, then add the perfume. Other formulas for preparations of a similar character will be found in the Era Formulary.

Musterole: Sage and Sulphur Hair Tonic

(J. A. W.)—We cannot give the formula for "musterole" and the only information we have concerning the preparation is that stated in Judgment No. 4358, issued by the Department of Agriculture, in which is set forth the fact that the manufacturers of the preparation were found guilty of misbranding and were fined \$25. It is also stated that analysis of a sample by the Bureau of Chemistry showed "that it was essentially a combination of oil of mustard, menthol and, evidently, camphor, in a fatty base such as lard."

A proprietary so-called "sulphur and sage hair remedy," analyzed by the Bureau of Chemistry and reported in Judgment No. 4486 showed the following composition:

Sulphur	0.81 per cent
Lead acetate (anhydrous)	0.76 per cent
Solids other than lead, glycerin and sulphur	0.19 per cent
Glycerin; present	
Capsicum; present	
Cantharidin test; negative.	

On this showing, misbranding was alleged and an information filed, the manufacturer pleading guilty, the court imposing a fine of \$25.

A formula for a "sage and sulphur hair tonic," published some years ago in the ERA is as follows:

Sage	1 ounce
Boiling water	1 pint
Steep for an hour, strain and add:	
Glycerin	2 ounces
Borax	¼ ounce
Lac sulphur	¼ ounce
Tincture of cantharides	¼ ounce
Perfume with oil of bergamot.	

Shake well and apply with a soft sponge.

As you must know, sulphur as an element is practically insoluble in water and nearly insoluble in alcohol, but dissolves in hot solutions of the fixed alkalies and alkaline earths, forming sulphides.

To Clean Mortars

(F. W.)—A German authority recommends the use of a stiff paste made with powdered pumice and strong commercial sulphuric acid. The inside of the dirty mortar is covered fairly thickly with this and set aside for a few hours. It is then washed off with water and will leave a clean surface. If the mixture has badly stained the mortar, triturate a little potassium bichromate with sulphuric acid about the sides, rinsing out well with water.

BOOKS REVIEWED

MATERIA MEDICA and THERAPEUTICS INCLUDING PHARMACY and PHARMACOLOGY. By Reynold Webb Wilcox, M.A., M.D., LL.D., D.C.L., president of the American College of Physicians, professor of medicine (retired) at the Post-Graduate Medical School and Hospital, etc. Ninth edition, revised in accordance with the U. S. Pharmacopoeia, IX, with index of symptoms. 12 mo., 860 pages, cloth, \$3.50. Philadelphia, P. Blakiston's Son & Co.

For years Wilcox's *Materia Medica* has been used as a text book in many colleges of pharmacy, and we believe this edition will continue to be so employed, although it is primarily recommended by the author to the medical student and practitioner. The work is divided into two parts, the first being devoted to *materia medica* and pharmacy, in which full attention is given to pharmaceutical processes, to the various kinds of preparations, with their dosage, and to the art of prescribing; after which the description of remedies is taken up in detail. The therapeutic agents are divided into two sections, the inorganic and organic *materia medica*, and the general classification adopted is one based on the grouping of the articles according to the chemical or physiological divisions to which each belongs. According to the author, the course of instruction on *materia medica* should include the performance of the simpler pharmaceutical operations, demonstrations of the drugs and preparations, and practice in prescription writing.

The second part of the book deals with pharmacology and therapeutics, the classification employed being based on the particular physiological system upon which the various agents principally act. There is a very complete presentation of the pharmacopoeial remedies with their pharmacological action and therapeutic uses, this information, so far as we are able to discover, representing the latest views of the highest authorities. We are impressed with the logical and orderly arrangement the author has employed in presenting his facts in this work, but it is to be regretted that he did not incorporate in his volume the *materia medica* of the National Formulary which, so far as pharmacists are concerned, and many physicians as well, is just as "official" and authoritative under the law as is the *materia medica* of the *Pharmacopoeia*.

EXPERIMENTAL STUDIES WITH MUSCICIDES AND OTHER FLY-DESTROYING AGENCIES. By Ralph B. Phelps and Albert F. Stevenson. Hygienic Laboratory Bulletin No. 108. United States Public Health Service.

This bulletin represents a scientific investigation of the use of muscicides or fly poison preparations, and the facts presented will certainly cause many to revise their opinions of the various substances that have been recommended for eliminating the fly nuisance in the household. In this study, the relative coefficient which served as a standard basis of comparison and which was developed by the authors in their work, was one thousandth normal sodium arsenite. Of the large number of substances tried, the work indicated three substances of decided value, namely, formaldehyde, sodium salicylate, and sodium fluoride. The first two of these in the concentrations used and the quantities exposed would be practically harmless to man, while sodium fluoride, even in this dilution, would probably be corrosive when mixed with the hydrochloric acid of the stomach. Potassium dichromate and quassia syrup were found to be of little value, while formaldehyde, when properly prepared, was found to be much more efficient than the standard arsenite solution. The most efficient strength of the formaldehyde solution was found to be from 0.5 to 1 per cent., equivalent to 1.25 to 2.5 per cent of the solution sold as formalin. A muscicide of almost equal efficiency and of distinctly superior qualities in many ways was found in sodium salicylate, a 1 per cent solution of which is recommended.

In the tests on sticky papers it was found that those made with a solution of rosin in castor oil were far superior to those made with rosin and other oils. A preparation composed of 1 part by weight of castor oil and 2 parts of white rosin was most satisfactory and gave as good results as the common sticky preparations on the market.

YEAR BOOK OF PHARMACY, comprising abstracts of papers relating to pharmacy, *materia medica*, and chemistry contributed to British and foreign journals from July 1, 1915, to June 30, 1916, with the transactions of the British Pharmaceutical Conference at its 53rd annual meeting held in London, July 12, 1916. 12 mo., 540 pages, cloth. London, J. & A. Churchill.

This volume, prepared primarily for members of the British Pharmaceutical Conference, contains the proceedings of the annual meeting of that organization, and abstracts of scientific papers published throughout the world relating to such subjects as current work in chemistry, essential oils, *materia medica*, galenical pharmacy, dispensing notes, new remedies, apparatus, formulas, processes, etc. In some respects the volume covers the same field as that of the present Year-Book of the A.Ph.A., the section on Notes and Formulæ particularly furnishing much practical information that will be found useful in daily drug store work behind the counter. As a frontispiece, the volume carries a portrait of Dr. David Hooper, F.I.C., president of the Conference in 1916, whose presidential address on the "Drug Resources of India and the Colonies," which appears in full in the proceedings, was declared to be one of the features of the meeting. The president of the Conference for the current year is Chas. Alexander Hill, B.Sc., F.I.C., London.

BULLETIN OF THE UNIVERSITY OF WISCONSIN. Report of the Director of the Pharmaceutical Experiment Station for the fiscal years July 1, 1914, to June 30, 1916. 52 pages. Madison, Wis.

According to Director Kremers, interest in the activities of the station has not lessened since its establishment three years ago, the principal manifestation of this interest being shown in the visits to the garden and station laboratory, both by residents of the State and representatives of distant states. The medical profession has also begun to realize the benefits to be derived in medical practice from the cultivation of medicinal plants and the scientific production of so-called crude drugs and their preparations.

During the two seasons under consideration, a tabulation shows that 64 plants were cultivated in 1914, and 57 in 1915, the policy being to restrict the number of species cultivated and to try out on a semi-economic scale those medicinal plants which had proven a cultural success. Among the drugs grown and studied were wormwood, *datura*, *digitalis*, and horsemint, the last named being investigated as a possible source of thymol. During the summer of 1915, Prof. E. R. Miller, chemist of the station collected 4039 pounds of *Monarda fistulosa*, and at the time the report was written, was engaged in the study of the volatile oil obtained therefrom and from which he separated carvacrol, a large sample of which had been supplied to the Hygienic Commission of the Rockefeller Foundation for its campaign against hookworm in Ceylon. The bulletin also contains a contribution on "Wisconsin Thymol," by Edward Kremers; on "Wisconsin Wormwood Oils of 1914 and 1915," by E. R. Miller; on the "Apparent and Real Ash Content of *Digitalis*," by Norbert Mueller, and a "Preliminary Report on Co-operative Experiment," by C. M. Woodworth and H. A. Langenhahn. We believe that no pharmacist can read this report without concluding that the Wisconsin Pharmaceutical Experiment Station has demonstrated its value, and to increase its possibilities in rendering service to the state and country at large it should receive as recommended by the Director a special appropriation for the continuation of its meritorious work.

FERN NOTES. By Oliver Atkins Farwell.

This bulletin is a reprint from the 18th annual Report of the Michigan Academy of Science, December, 1916, and puts on record some of the author's results and conclusions arrived at during a course of study embracing botanical researches in the field, herbarium and library. One particularly interesting "Note" in this collection relates to the use of the name *Filix* as employed to designate the genus represented by the male fern.

"Trichlor-Tertiarybutyl Alcohol Anesthesia" by L. W. Rowe, of the research laboratory of Parke, Davis & Co., is the title of a pamphlet we have received. This compound was first used by Abel in 1892, but its preparation was not made practical until 1899, when it was placed on the market under the name of "chlortone."

ASSOCIATIONS

MINNESOTA ASSOCIATION MEETS

Minnesota druggists held a three day convention in St. Paul late in February and favored resolutions abolishing trading stamps and coupon systems, a law establishing educational prerequisite for schools of pharmacy, and a law Minnesota college of pharmacy was authorized.

Dean Wullig, in an interesting speech said that a separation of professional and commercial pharmacy could be looked for in the store of the future. E. C. Brockmeyer of Washington, D. C., urged the druggists to bring pressure on Congress as other bodies of men have succeeded in doing.

There was a lengthy discussion of impure drugs in which it was suggested that druggists make chemical analysis of drugs themselves as that was the only way to get protection.

The Minnesota association elected L. J. Aberwald of St. Paul, former treasurer, president, succeeding John F. Danek of Minneapolis, and other officers as follows: Charles MacGregor, Detroit, first vice-president; Edward A. Grotchau, Duluth, second vice-president; W. C. Haney, Marshall, third vice-president; E. L. Newcomb, University of Minnesota, secretary; R. J. Messing, St. Paul, treasurer; John Danek, Minneapolis, executive committeeman.

New officers of the Northwestern branch of the American Pharmaceutical Association are: Truman Griffen, Minneapolis, president; C. H. Bollinger, St. Paul, vice-president; Prof. Charles H. Rogers, University of Minnesota, secretary-treasurer; F. A. U. Smith, and F. M. Parker of St. Paul, and W. S. Smetana, Hopkins, executive committeeman.

The Commercial Travelers' auxiliary elected as follows: H. Hauter, Minneapolis, president; W. H. Snider, Minneapolis, first vice-president; J. Loes, Minneapolis, second vice-president; D. C. Wokeman, Duluth, third vice-president; W. B. Fields, St. Paul, secretary.

J. P. Jelinek, St. Paul; J. Y. Breckinridge, Pine City; Dr. C. W. Drew and A. J. Kleine, Minneapolis, were made life members after having paid dues to the association for twenty years.

KINGS COUNTY OPPOSES FERTIG BILL

The Kings County Pharmaceutical Society, at its March meeting went on record as being strongly opposed to the bill introduced at Albany by Assemblyman Fertig, called the "formula disclosure bill." The bill would compel druggists to put the formula together with the quantity of all ingredients used in any package of medicine sold by them, on the label of each package. The contention of the druggist is that the law is all right in so far as it covers actual proprietaries, but that it should not be used for all medicines, since private compounds would at once become public.

The report of the committee which had in charge the dinner given to the doctors was that the banquet was the best ever held. Thomas J. France announced that the commencement of the College of Pharmacy would be held in the Brooklyn Academy of Music on May 14th.

MASSACHUSETTS COMPANY FORMED

A company for instruction in the duties of pharmacists in military organization has been formed by over 80 students in the Massachusetts College of Pharmacy. Every Saturday drills are being held, with occasional mid-week meetings.

George L. Burroughs, a Boston druggist, launched the movement in a mass meeting, March 9th. Dean Theodore J. Bradley said that the pharmacist has peculiar duties, for he must not only fight for the lives of his own countrymen, but also for those of the captured enemy.

Sergt. John J. Murphy, of the Army, instructor of the company, declared that each man can best serve his country by serving in the position for which he is best fitted. On the Mexican border recently, he said, he found a pharmacist driving a four-mule team, while the pharmacist in his own regiment was a machinist.

BOARDS AND BRANCHES

KANSAS

At the fourth quarterly meeting of the Kansas Board of Pharmacy, held at Wichita, February 14th and 15th, fifty applicants were present to take the examination, of which number twenty-one were successful. Five pharmacists were registered on diploma, and three by reciprocity, while the names of seven were restored to the register. The next quarterly meeting of the board will be held at Topeka on May 17th and 18th, at 9 o'clock, A.M., and applicants desiring to take the examination should notify Secretary W. E. Sherriff, Ellsworth, Kansas, at least five days before the date of meeting.

NEW JERSEY

Sixteen applicants successfully passed the New Jersey Board of Pharmacy examination held at the State House, Trenton, on January 18th and 19th, and were granted certificates as registered pharmacists. Seven applicants were successful as registered assistant pharmacists. The next examination will be held on April 19th and 20th, and candidates for examination must file their applications with the secretary, Edgar R. Sparks, Burlington, N. J., at least ten days before the date of examination.

LOUISIANA

The Louisiana Board of Pharmacy examined twenty-eight applicants at Tulane University, New Orleans, on February 16th and 17th, of whom seventeen passed as registered pharmacists and one as a qualified assistant. The examining committee was composed of Gus Seeman, pharmacy, Edward H. Walsdorf, materia medica, A. Di-Trapani, practical work, and John H. Taylor, chemistry. The next examination will be held at New Orleans, May 18-19.

CHICAGO BRANCH

At the last meeting of the Chicago Branch of the A.Ph.A., held at Kuntz-Remmlers, L. D. Jones presented a new device for inducing breathing in new born infants afflicted with asphyxia neonatorum or for resuscitating infants or little children with asphyxia from other causes.

The principal subject of discussion was the report submitted by Dr. J. H. Beal for the committee appointed at the previous meeting to consider the matter of Compulsory Health Insurance. Dr. Beal stated that this subject was the most deserving of study of any legislation yet placed before the druggist. It is more important than the Food and Drug Act or the State Pharmacy Acts. Either it sounds the death-knell of what little drug business remains to the pharmacist or it restores to him a real drug business.

Dr. Bernard Fantus endorsed the report, especially the recommendation that the branch continue to study the whole subject in a purely judicial frame of mind, and to reach conclusions that shall be as nearly as possible devoid of partisan bias or prejudice growing out of professional relations to the sick. He considered that it would be a most suicidal policy to antagonize the bill just because it would take the bread and butter from druggists. The position of the physician, pharmacist and nurse should be definitely assigned and defined in the bill before intelligent criticism can be offered. The interested professions should be prepared to offer suitably drawn sections covering their ideas as to the positions the professions should occupy under the laws.

Many others took part in the discussion, and the general opinion seemed to be that the subject required extensive study and that hasty action on the part of state legislatures to enact such a bill into law should be deprecated and strongly opposed.

The report of the committee with recommendations, was endorsed and referred for publication and a vote of thanks was extended to the chairman and his colleagues for the excellent report.

SCHOOLS AND COLLEGES

UNIVERSITY OF OKLAHOMA

President Brooks has been requested by the U. S. naval department to nominate some of the present senior class for appointment as second lieutenant in the marine corps at a salary of \$1,700.

The University of Oklahoma in raising \$1,100 for the Belgian War Relief fund has made a creditable showing compared with the larger schools. The University of Texas contributed \$1,445; Ohio University, \$3,200; Chicago University, \$2,850; and Yale \$5,500.

Oklushe Degataga, the Indian student club, met recently and elected officers and formulated plans for the celebration of Indian Day. A barbecue, an Indian ball game between the Chickasaws and Choctaws, and several big speakers will be the features of the celebration which will be held in May.

Students in the school of pharmacy were dismissed from their pharmacy classes and attended the meeting of the Oklahoma Pharmaceutical Association at Oklahoma City in a body. Calvin Arnold was elected cheer leader and led them in their yells during their stay in Oklahoma City.

Professor Earle S. Porter of the department of chemistry has been granted a year's sabbatical leave beginning September 1, 1917. He will do graduate work in Columbia University.

Plans for a new athletic field and gymnasium to be located just south of Boyd field and the handball courts, work to commence just as soon as sufficient funds are secured within the grounds and equipment appropriations, are being formulated by Athletic Director Ben G. Owen. The new grounds will cover something like 30 acres of university land just south across the road from the handball courts. One of the main features will be a separate enclosure for a large oval track and a well sodded gridiron.

More than 75 pharmacists attending the meeting of the State Ph.A., at Oklahoma City, visited the university and spent two hours visiting the school of pharmacy and the new chemistry building. They were addressed by Dr. Edwin DeBarr on the construction of DeBarr Hall. The visitors then returned to Oklahoma City. Dean C. H. Stocking of the School of Pharmacy believes that the meeting was the most successful in the history of the association. A matter of great importance to this and other institutions offering courses in pharmacy was the adoption of a resolution favoring graduation from a recognized school of pharmacy as pre-requisite to obtaining the state certificate.

Oklahoma's 1917 summer session according to the director will begin a week earlier than it was originally arranged for. Registration begins June 2d and will end Monday, June 4th. June 5th will be occupied by commencement so class work will not begin until Wednesday, June 6th. The session will end July 31st. At this session several courses in pharmacy and chemistry will be offered.

CREIGHTON UNIVERSITY

G. W. Noble, general agent of the New England Mutual Life Insurance Company, recently delivered a very interesting lecture on insurance to the combined classes of the college of pharmacy. This was the third of a series of lectures on special subjects arranged by Dean Newton for the second semester.

N. C. Wood, master accountant and "efficiency expert," will deliver a course of several lectures, early in April on "Salesmanship and Efficiency in Pharmacy."

Founder's Day was observed as a holiday by the students and the faculty were tendered a banquet at Hotel Fontenelle.

A record of one hundred and two prescriptions compounded in four hours was made by the section of students in the prescription room of the Free Dispensary.

Lieutenant W. W. Waddell, of the Omaha Navy Recruiting Station, addressed the students on the subject, "Preparedness."

ILLINOIS UNIVERSITY

The executive committee of the Alumni Association of the University of Illinois School of Pharmacy met recently and decided to hold a "William B. Day Testimonial Dinner" on June 6th, this date being the 25th anniversary of Prof. Day's graduation from the school and since which time, he has faithfully served the pharmaceutical profession in many ways. Representatives of every branch of pharmacy, wholesale, retail, the teaching profession, and especially of the A.Ph.A. and I.Ph.A., will be invited to attend the dinner. The Alumni Association will finance and direct the project, with the president and secretary in charge.

The Alumni Ebert Scholarship fund, according to the report of the treasurer, has a balance on hand of \$642, and the committee decided to collect the outstanding pledges and enough new subscriptions to bring the sum up to \$1,000, the interest on which would be given yearly as a prize to the student graduating with the highest general average.

President Leo L. Mrazek of the association, announced that he would give \$25 each year to the student attaining the highest average in chemistry, thus completing the list of prizes for each department of the school, a prize of \$25 contributed by Andrew Scherer providing a prize for the student receiving the highest standing in pharmacy. A microscope is awarded annually by Herman Fry for excellence in materia medica, and the proposed Ebert fund will provide a prize for the student attaining the highest general average.

IOWA UNIVERSITY

The Iowa Pharmaceutical Association at its recent meeting in Des Moines, recommended by unanimous vote that a prerequisite bill be introduced into the Legislature at once.

P. K. Husten, '15, formerly storekeeper in the department of chemistry, has returned from Texas where he was a member of the hospital corps of Company A, Iowa National Guard.

H. P. Currier, '17, of Sheffield, Ill., and N. E. Fuller, '17, of Chariton, Ia., attended the meeting of the Grand Council of the Phi Delta Chi fraternity held recently at Lincoln, Neb.

The members of the faculty of the College of Pharmacy were much in evidence at the recent meeting of the Iowa State Ph.A. held at Des Moines. Dean Teeters and Profs. Kuever, Cooper and Boerner being present. There was also a goodly representation of former students.

WAR BRINGS FLOOD OF "FAKE" DRUGS

War, with its accompanying scarcity of drugs, has brought a new danger to druggists and other consumers in this country. Spurious drugs are being thrown on the market in large quantities, and associations, business houses, civil authorities and brokers all over the country are beginning investigations to run down what is believed to be a ring or gang, operating as peddlers to sell the stuff.

Hard upon the heels of the bismuth subnitrate swindle in New York, which has ended in court action and the holding of Benjamin Lifschitz, who sold the stuff, for further trial, comes a report from Minnesota that spurious saffron is on the market and from San Francisco that sawdust is being sold for saccharine. Other complaints have been heard from the West, and a wholesale drug house in Chicago complains that quinine is being adulterated to a great extent.

In New York, the authorities who are making investigations feel sure that a ring is handling the goods.

"With market prices so high," explains one of the officials, "it is but natural that peddlers should try to slip over some smaller quantities. They were able to do this and they found they could make sales without any questions from the purchaser. He was only too glad to get the goods."

WOMEN IN PHARMACY

Conducted by EMMA GARY WALLACE

Women Druggists and Baby Week

FROM May 1st to 6th has been announced by the General Federation of Women's Clubs as the dates for the Nation-Wide Baby Week Campaign. This year the observance will be much more universal and on a larger scale than heretofore, for the educative value of the movement has been amply proven to be very great.

In some places the recent epidemic of Infantile Paralysis will make caution necessary. Where there is the least danger or fear of danger, in getting a lot of babies together, the Local Health and State authorities should be consulted and their wishes and directions strictly followed. Even although they may disapprove of bringing the little people together for parades or contests of any kind, it is not necessary to give up Baby Week celebration. There is no possible objection to the mothers and those interested in the care of children coming together and learning all they can on the subject of child welfare.

In addition to this the Children's Bureau of the Federal Government is anxious to teach the mother how to take care of herself, believing firmly that a healthy, well-cared-for mother is necessary if the child is to achieve its best. If you are not already familiar with the bulletin on "Maternal Mortality" by Dr. Grace L. Meigs, of the Children's Bureau, send for it.

If you can't as a woman pharmacist, get things started for a *Baby Week*, don't scorn a **BABY DAY**. This is not ideal, but it is better than nothing, and a single day to which everybody turns out and which is chock full of interest and enthusiasm is better than several days which have comparatively little to offer. Of course there is plenty which is vital to occupy a whole week, but all communities do not adapt themselves to new ideas at once and have to be educated through smaller beginnings. Don't be afraid of raising too much money, for if there is any left over it can be used as a fund to start some needed movement of a permanent nature for the babies.

Only recently our Government has wakened up to the importance of complete Birth Registration. The Government has an important leaflet on this matter and the woman pharmacist will do well to furnish herself with a supply and to distribute these on her own initiative in drug store packages. To go to the Birth Registration Bureau will give you the list of those already registered, but will not help with any omitted. There is no reason why the individual business woman may not justly undertake some work to connect herself specifically with leadership in baby welfare work. Here are some things you can do:

Things Possible for Baby Week

Offer a prize of a big doll or a watch for the best original Baby Week Poster hand made by children in the Grade School; a fountain pen for the best Poster from the Grammar School; and a five dollar gold piece to the most artistic one from the High School. For the sake of uniformity, specify the size of the Posters, making the three sets slightly different. Have every contestant write his or her name on the back of the submitted Poster. Make window displays of these. They will attract a lot of attention, or if you prefer, award two, three, and five dollars worth of drug store goods to be chosen by the winner.

Another contest can be held for the women or mothers of the town. A 500 word essay on "How to Care for the Baby," or answers to a series of questions printed on a blank, would answer admirably. Have several prominent people assist in judging and advertise it. This will be a benefit to the people who take part for it will help them to crystalize their thoughts on the subject and it will be a benefit to you because you can make friends of every contestant by unexpectedly sending some little souvenir as a "Recognition" of excellent effort. Such a souvenir may

not be anything very expensive, but it should be a drug store article. It will depend upon how many contestants you have and how much you can afford to give. A book on the care of the child will send people back to you again and again for supplies; a baby size hot water bag will be appreciated; or even a package of absorbent paper articles for the summer picnicker.

Do you know that the United States Health Service prints a lot of helpful literature in languages which our foreign population can read? Have you any of these people in your locality? Earn their everlasting gratitude by giving them something they would not get hold of otherwise.

It will pay to make a window display which will *actually tell a story*. Never mind if it isn't as artistic or beautiful to the eye as the window of the jeweler or the department store. A striking window could be made by dividing the space into two parts. On the one side have a small, clean, well-cared-for room with a little stationary bed, a big doll in it, and the bed screened from flies. On a table have a covered glass container with nipples in, a sterilizer, and other baby equipment.

On the opposite side fix up as big a contrast as you can—a dirty floor, a big doll or baby creeping on the floor, a bottle lying near with the nipple resting in the dirt, and flies lighting all around. If you can't find any artificial flies, (and probably you can't), fix up a few dozen by taking little wisps of thin, gauzy black maline twisted up like wings, and caught in the middle. Get a bunch of invisible hair pins (a woman can do anything with a hair pin you know) and stick a hair pin or common black pin down in the middle of the fly and anchor it wherever you want it.

Over one side put a placard, saying:

The DON'T CARE Family lives here. Disease and dirt invariably go together. All dirt is not visible to the naked eye. Come in and we'll tell you how to use antiseptics, disinfectants, and simple fumigators.

On the other side have a similar placard, which reads:

The DO CARE Family lives here. Health, prosperity, and happiness are theirs as a matter of course. They believe in prevention. They don't let the germs multiply when they can help it. Come in and we'll tell you some things you may be glad to know.

If there is a young woman available in the store who can dress as a Red Cross Nurse for the week, it will be a drawing card. Advertise her as the "*Ask Me a Question Lady*." Now every woman, and every man too for that matter, who comes in to ask a question will reveal at once exactly where his or her interest is located, and the wise Red Cross Girl will follow up that lead with appropriate suggestions.

Louisville Chapter, No. 11, is continuing its excellent work of previous years, and the fund grows for the Chapter Club House. Both Mrs. J. J. Seiberz and Miss Eleanor Diehl, second Vice-President, have recently been hostesses each to a "500" card party.

Miss Clara Hulskamp opened her home for the Executive meeting of the Chapter February 26th. The same day the regular Chapter gathering was held at the Main Library. Mr. Johnson gave a talk on "The feeble-minded of the state and their care."

Miss Emma Frick, President of the Chapter, has been signally honored by being elected one of the Directors of the Greater Louisville Savings and Building Association. Chapter No. 10 has always taken an enviable position in the club work of its home city, and it is fortunate in having identified with it women of affairs in both a business and a professional way.

AROUND THE CIRCUIT

The members of the Ladies' Auxiliary of the California Pharmaceutical Association, are making elaborate preparations for the entertainment and good fellowship of those who will attend the State Pharmaceutical meeting to be held in Oakland in the month of May. The Oakland branch of the Ladies' Auxiliary is especially active in this connection. A preliminary meeting of arrangement was recently held at Hotel Oakland, at which Mrs. Ashmead, Mrs. Tallman, and Mrs. Colson acted as hostesses. Twenty-five of the members were present and a delightful banquet enjoyed. The decorations were primroses and asparagus ferns. Card games followed. Mrs. Wagner was awarded first prize; Mrs. Foster, second prize, and Mrs. Patton the guest prize. A business session was held and plans laid for the May program.

The members of the San Francisco Ladies' Auxiliary of the California Pharmaceutical Association believe in taking their gentlemen friends into account occasionally. On January 9th they entertained their husbands, brothers, and sweethearts with a theatre party at the Orphean. Following this they escorted their guests to a prominent downtown cafe and treated them to a supper dansant.

The women of the drug trade will not be slow in showing themselves loyal to their country, by joining in preparedness plans for relief and aid. They proved themselves liberal in sending contributions for the work of the Red Cross abroad, and were so situated that their money and influence procured a large number of supplies. This is an occasion for the application of the motto "DO IT NOW."

Philadelphia Chapter, No. 6, celebrated its tenth birthday in February. One of the delightful annual affairs connected with the chapter anniversary is an "At Home" which the President, Mrs. William Estelle Lee, has given ever since the women were first invited to come and get acquainted and to be charter members of the new chapter.

The tenth birthday was a notable affair in every way. The "At Home" was given at Mrs. Lee's residence, February 13th, and was very largely attended. February 14th, an anniversary banquet was given to which ninety-seven sat down. Mrs. Lee was presented with a magnificent bouquet of American Beauty roses with stems of great length.

As Mrs. Lee finished her speech, the orchestra swung into "Annie Laurie," and her hearers looked up quickly and smiled, remembering her ability as a singer and the fame which was hers through singing "Annie Laurie" in the Mammoth Cave of Kentucky, upon the occasion of the visit of the druggist folk there when the N.A.R.D. Convention was held in Louisville. In response to the urging of her hearers, Mrs. Lee sang this song again with all her old-time feeling and sweetness.

Among those who sent letters and telegrams of greeting and congratulations, were Mrs. R. Natt, Mrs. J. Lyden White, Mrs. Herman Lambeck, Mrs. J. F. Waterhouse, Mr. and Mrs. Thomas Potts, and Mrs. Leslie O. Wallace.

Milwaukee Chapter entertained the members of Chicago Chapter at a Musical on Wednesday, February 28th, at the Deutscher Club. A luncheon was served at this well-known and fashionable Club upon the arrival of the guests. The Chicago delegation was thirty in number, and among them was Mrs. J. H. Riemenschneider, President of the W.O.N.A.R.D. Mrs. Herman Lambeck welcomed the guests, and Mrs. Riemenschneider and Mrs. Forbrick, President of the Chicago Chapter, responded.

Mrs. Hans Bruening accompanied by Mrs. Fleetwood Diefenthaler, well-known in Milwaukee musical circles, delighted the audience with her songs, as did Mr. De Bona, harpist, with his selections. Everyone enjoyed little Miss Edith Stroesser in her graceful dances. The Musical closed by the singing of patriotic airs in which all joined. As the members of Milwaukee Chapter, No. 19, had guest privileges, there was a large and representative gathering.

A GIFTED PHARMASISTER

Miss Lillian Blieden is one of the successful young women pharmacists of Philadelphia. While attending High School and on her summer vacations, she filled a spare time position in a drug store and assisted with the clerical work. This gave her an interest in and a taste for the profession of pharmacy, and she determined to follow that line of work.



MISS LILLIAN BLIEDEN.

While a junior student in the pharmacy class of Temple University, she was able to study, hold a part time position in a drug store and fill a small position in a hotel as well. In her senior year she procured a scholarship. This enabled her to leave her position and to take a more active part in the school life. She suggested that her class have a class book and was made class poetess, thus giving that body the honor of being the first pharmacy class of Temple University to have a class book printed.

Miss Lillian says she is sometimes asked: "What made you study pharmacy? Look at your sister Rose, who was the honor student when she graduated in 1912. Does she receive proper recompense for her work and the training it involved?" Miss Lillian feels that while there may be room for doubt, that pharmacy is both an honorable and a humane profession. Both young ladies are the daughters of Rabbi and Mrs. Benjamin Blieden of South Philadelphia.

Miss Lillian is an enthusiastic admirer of President Wilson. At the time of his re-election, she indited a poem commemorative of the occasion which she sent directly to him and received in reply a very gracious acknowledgment.

A DAUGHTER OF ALABAMA

Miss Bertha Nill Hausman is the charming woman pharmacist in the South Side Drug Store, of Tuscaloosa, Ala. The business is owned by Dr. Frank Hausman, the young lady's father, for in this as in many other cases, it has happened that a fondness for pharmacy has been born of close association with it.



MISS B. N. HAUSMAN.

Miss Bertha Nill was born in Jasper, Ala., on Christmas Day, 1896. She graduated from the Tuscaloosa High School June, 1913, attended the University of Alabama 1913-14-15, and while there took special laboratory work. Following this, she attended the Southern College of Pharmacy in Atlanta, Ga., graduating March 18, 1916. She passed the State Board of Georgia, April 5th of the same year, and the Alabama State Board, October 17, 1916.

Miss Nill's ambition is to be a practicing physician, but not being of robust physique, her parents have tried to persuade her to be content with the practice of pharmacy. She is proving eminently successful in this line at the present time. She is much beloved by the people who know her because of her conscientiousness, thoroughness, and kindness of heart. Truly Alabama received a charming Christmas gift in the person of Bertha Nill Hausman.

The Live Druggist and Baby Week

Why the Pharmacist Should Lead the Workers

By EMMA GARY WALLACE

WHAT are you going to do this year to make Baby Week a conspicuous event in *your* locality? If you haven't begun already to think and plan for the 1917 Baby Week Campaign, not another moment of delay should be permitted to steal away your chances of prestige in this connection.

Now, to be perfectly honest—and when we have a family gathering it's a good thing to confess our sins and forsake them—the writer of this article was terribly chagrined last year to see how little attention the legitimate drug trade paid to Baby Week. In most cases and places they left the dry goods stores, and furniture stores, and real estate offices (just think of it!) to talk about baby bonnets, baby carriages, and a nice, healthy home for the baby.

In all too many instances the public did not realize the underlying, fundamental principles of the Baby Week Movement nor the educational part of it, and hundreds—yes thousands of druggists, didn't know a thing about Baby Week until it was all over. Many haven't much idea of it yet. That is just why we are going to talk a lot about it this month. It pays to read one's trade paper. The trade paper which counts doesn't come tagging along in the dust of the procession, it's right up in the band wagon leading the parade!

The first Baby Week was celebrated in Chicago in the month of April, 1914. Good for Chicago! Then Grand Rapids followed with a similar celebration in 1915. It attracted attention, the idea was good, and people began to talk about it. The newspapers took it up with the club women.

Now, many women's clubs and organizations had been fighting for clean milk, and the doing away with infant narcotics, and teaching mothers how to feed and care for their children, and aiding and abetting any big welfare movement which had child betterment for its purpose. What more natural then, than that the General Federation of Women's Clubs should request the Government to promote a nation-wide campaign along educational and practical demonstration lines for the benefit of the public, and that it be of a week's duration?

To this end the Children's Bureau, with Miss Julia C. Lathrop at its head, proceeded to do all in its power—and that is saying a lot—to make a success of the 1916 Baby Week. The plan appealed to thinking people and especially to those who had anything to do with the promotion of the public good health.

This year every locality, whether it be a hamlet of 500 or a city of hundreds of thousands, should make preparations in ample time to have a Baby Week which will make everybody sit up and take notice. Let us remember that we cannot do good work in a flurry and that preparations should be *made or started* as long in advance as possible.

The Scope of the Campaign

It is not enough to get together a lot of baby foods and baby supplies and advertise a sale of them, or perhaps leave them right on the shelves and list your baby supplies in the newspaper. This is not the point at all! Naturally we want to sell goods if we can, but in place of making a little spurt which will last a few days, we can if we will, go about it so that the regular sales of baby goods will be greatly increased, people will buy intelligently, and will seek a regularly equipped and educated man or woman to furnish them with goods of this character. They will not buy them from a mail order house, or off a bargain counter. Nor will they follow the advice of the next door neighbor who declares she ought to know how to bring up children because she has buried ten.

The purpose of the Baby Week Campaigns is first of all to give the parents of a community an opportunity to learn how to take care of their babies, what they need to do it with, and the importance of having the right supplies at the right time.

Secondly, the purpose of the campaign is to impress upon the community the importance of its babies, the outstanding facts relating to the welfare of children, and the need of systematic, regular work constantly and intelligently carried on by the authorities in their behalf.

Do you know that in New Zealand they are far, far in advance of us? There the Government interests itself in the welfare of the expectant mother, not merely from a humanitarian standpoint, but as a matter of sound business judgment. Does it pay? Answer the question yourself. Does it pay to keep the mother in the home, the wife by her husband's side, the mature woman in the community? Here are some facts.

The Government has recently made a study of the child-birth death rate in sixteen countries in order to find out how we compare in up-to-dateness in this respect. Do you know that the United States stands fourteenth on the list, only Switzerland and Spain having higher rates than we have? Sweden, Italy, and Norway show the lowest rates.

Don't you think it is time that we had a Baby Week Campaign, and when we get to it we will wake up to the fact that we will do best for the babies when we save their mothers alive to take care of them?

How New York Did It

In 1916, New York laid out a sensible program with a definite purpose for each of the seven days. Here is the program. It may suggest to you how you could go and do likewise.

Saturday, Baby Sabbath observed in Jewish Synagogues by reading of Mayor's letter in the pulpits, by special sermons, and other exercises.



"Weighing In" for the Doctor

Saturday, Sunday to be observed in churches, illustrated articles in Sunday newspapers.

Monday, Little Mothers' Day to be observed in the Public and Parochial Schools of the city by the reading of a letter from the Mayor and the distribution by the children of one million pieces of educational literature to the mothers.

Tuesday, Milk Station Day to be observed as "visiting day" in the public and private infant milk stations. Delegations from Commercial and Civic Organizations to visit certain stations in official automobiles.

Wednesday, Hospital and Clinic Day to be observed as above in the hospitals and clinics and dispensaries.

Thursday, Nursery and Demonstration Day to be observed in the morning at all institutions sheltering well babies such as Day Nurseries, Temporary Shelters, Convalescent Homes, and Asylums. Grand automobile ride for mothers and babies in the afternoon. Awarding of Grand Prize to winner of Better Babies Contest.

Friday, Outing Day, free ferry rides and steamboat excursions for mothers and babies, special music in parks, recreation piers, and play grounds.

It is necessary first of all to get together a body of representative citizens, and don't forget the women. The question arises: "Who will call the gathering?" May be you can get some organization of broad appeal or your Women's Clubs or your Chamber of Commerce stirred up. If you can't, look about and see the key people likely to be interested. Call them together yourself, tell them what's doing. Appoint a Chairman of the Baby Week Campaign Committee and go to the task! Remember, you will get out of this exactly in proportion to what you put into it!

How To Go About It

The more people you can interest, the better; besides there is a lot of work to do if you are going to make Baby Week count. There should be an Executive Committee with administrative sub-committees on Finance, Volunteer Helpers, Automobiles, etc.; a Committee on Baby Welfare Information; a Committee on Program; a Publicity Committee with sub-committees on Press Work, Special Printing, Advertising, etc.

It is going to take a little money to operate this. But not too much. In New York, what would have cost regularly \$200,000 in all probability, was secured for about \$650 in actual cash, because so much space and work were eagerly contributed free. If there is a Directory of Organizations in your town the Committee in charge should get each organization to contribute a certain amount just as though they were to bring a big Convention or have a civic celebration or a Fourth of July parade.

Once the Committees are appointed, they will find a great deal of material ready to be had for the asking. This is surprising in view of the newness of the movement and shows how the idea promptly caught. The Children's Bureau will send on application, articles on various topics about Baby Week that may be adopted for local use.

There must be a large number of volunteer "Explainers," and here is where your women customers will be glad to help. The "Explainers" take turns at the Baby Welfare exhibits to make clear what they all mean and the significance of the facts and statistics.

Your State Board of Health will be glad to co-operate with literature, material for exhibits, and possibly stereopticon slides. Additional information and helps may be obtained from the Child Welfare Exhibits Department, Russell Sage Foundation, New York.

If possible, there must be a central exhibit hall. A large drug store may feel like maintaining an individual booth throughout the week, or several druggists or the local Retail Drug Association could club together to good

purpose. Have a booth jointly maintained under a conspicuous sign something like the following:

"At The Babies Service
With Pure Foods, Pure Drugs, And Every Modern, Scientific Device."

Of course, in such a booth there should be a display of infant foods and all kinds of apparatus for preparing these foods, such as sterilizers, graduates, bottles, nipples, bottle brushes, alcohol stoves, etc., etc. There should be someone constantly on hand in this booth prepared to explain how to use the articles, how to prepare the foods, why it is important to modify milk, the difference between cane sugar and sugar of milk in an infant's dietary, when beef juice should be given, orange juice, coddled egg, and just how to prepare them, how to peptonise food and a thousand and one other things the average mother is eager to learn. It would be timely to have the demonstrator explain to her the difference between sterile, absorbent cotton and ordinary cheap bargain-counter stuff; the use of boric acid solution in keeping baby's mouth and eyes clean, and for keeping the nipples sterilized.

Of course, there will be no attempt to encourage home medication. This would be a mistake, but on the subject of milk modification alone, half a dozen slips might be prepared explaining that cow's milk contains so much more proteid or curd than mother's milk, that it is necessary to reduce it with water or gruel; that cow's milk contains much less sugar of milk than mother's milk, so when it is reduced, it is still further weakened in its sugar content so more sugar must be added; that sugar of milk is not included for its sweetening quality, but rather because it gives a necessary food constituent; and such facts.

The more of these educational slips you can get your local Committee to print, the better. Make them brief, however. Boil down your facts, and have each slip treat of just one phase of the subject. You can go on distributing these throughout the whole year, for babies are not going to stop being babies when the week's celebration is over. It will even pay you to have some of these slips printed yourself and go on using them in the drug store packages.

It is perfectly legitimate and entirely proper to make one's own store radiate the Baby Week spirit. The window displays should be carefully thought out, should be planned to be attractive, and yet point a lesson. The inside of the store should be given a touch of a suitable decoration. Baby blue would be an appropriate color. Show baby supplies prominently and if the situation warrants, it would be a good plan to have a trained nurse on duty in the store throughout the week to explain and answer questions. A trained nurse who did not have an engagement for the week could well afford to give her time or to make a special price because of the experience she would gain and the great number of probable patrons she would meet.

I would suggest that placards be used about the store freely and that they be prepared especially for this occasion. General statements will not count for much. Get facts from your State Board of Health or the Children's Bureau at Washington, or your local Board of Health. Emphasize the thought that it is vastly more important to conserve child life than to improve our animal husbandry or save our fruit trees. Point out that parents who safeguard the health of their children are economizing in the best possible way, for a puny, ailing infant will grow up into a puny, ailing child if not properly handled.



Three of a Kind

BUYING AND SELLING

DRUG MERCHANDISE

Educating the Store's Sales Force

IN a drug store handling thousands of items, it is difficult for the ordinary salesman to become acquainted with the special selling points of each particular product. Manufacturers are inclined to criticize retailers for not showing more aggression in handling their goods, and to suggest that retail clerks are lacking in capacity because they do not give the same convincing "line of talk" to the customer that the traveling man representing the house producing the goods gives to the buyer.

It is a physical impossibility for anybody to assimilate as complete knowledge of the various lines as a specialty salesman, handling but one product or "family of products" can readily acquire. If he learns to know the location of the stock, prices of goods and a few things of that kind, so that he can wait on customers promptly, he has done as much as is usually expected.

It will be readily admitted that this is not the ideal system. The druggist who puts goods in stock expects to sell them, and it is more to his interest than the manufacturer's to move that particular lot of merchandise. If his salespeople are not "up" on a product, they cannot talk it effectively, they are unable to push it with the results which are expected, and the item, no matter how desirable it may be, turns out to be a sticker. It is apparently nobody's fault when this happens with worthwhile merchandise. The goods are all right, they were bought at a satisfactory figure, the salespeople did their best to move them—but they stuck.

Of course, there is a weak link somewhere in the merchandising chain. It will probably be asserted, to begin with, that the druggist should have advertised the line vigorously, displayed it in his windows, called a meeting of the salesforce and outlined his plans for a campaign, so that all of them would become properly enthused. True, this might be done; but suppose the druggist is confronted with the task of selling 20,000 or more items: is he to be expected to use this method with regard to each one of them?

Common Sense In Selling

The common-sense plan, it will be admitted, is to take a middle course, and neither neglect specialties which require exploitation and more or less pushing on the part of the clerks, nor expect the clerks to master the sales arguments to a degree rivaling the sales representatives of the manufacturers. By fixing a "dose" which is well within the capacity of the individual salesman to take, the druggist insures an interested effort on his part to make use of the information. In other words, a reasonable amount of information about some particular item of the stock will be made use of, when an effort to cram him with an unlimited number of assorted facts about various lines would defeat its own purpose.

Inasmuch as the window displays are relied on for the most part to interest transient trade and to pull people inside the store, it is apparent that every salesperson should know something about the goods which are being shown in the windows. If the clerk indicates a lack of detailed knowledge about the specialty which is being offered, the interest of the prospective purchaser, which is just being kindled, will be thoroughly quenched, and the sale will be lost. But if the salesman can give an interested and interesting statement about the goods, bringing out the leading points and emphasizing the logical selling arguments, the sale can be closed without any difficulty, because the customer has already indicated that he is interested.

The question as to the proper form in which to provide

this information for the benefit of the salespeople is an interesting one. Some druggists supply their force with copies of all newspaper advertising which they are running, the newspaper ads coinciding, of course, with the window displays as well as the showing of goods inside their store. This helps to the extent of familiarizing the clerks with prices on such items as are specially marked for the occasion, but the average drug store "ad" does not contain a great amount of selling talk about any one item. If it did, the descriptions of items shown in the ad would be so elaborate as to tax the patience as well as the memory of the clerk.

Buck & Rayner's Plan

The plan used in the State street store of Buck & Rayner, in Chicago, impresses the writer as being effective, reasonable and based on good merchandising ideas and common sense as well. It involves the use of a card, which is given to each member of the salesforce, and which gives the sales arguments pertaining to the one item which is being boosted at that time by means of the window display. All that any clerk is asked to do, in other words, is to become familiar with a single item of the stock. The card is carried in his pocket, and is read or referred to often enough to enable the salesman to repeat the information which it carries without having to hesitate or "stall." Moreover, since the talking-points are succinctly put, the clerk who uses an effort to grasp the ideas soon is able to speak authoritatively and thus to impress the purchaser with the fact that he is thoroughly familiar with the goods he is trying to sell.

However, to get back to the Buck & Rayner idea, the card plan is one which is simple and effective because it enables the clerk to learn all about at least one important specialty, and as a new card is issued weekly, on an average, the force has an opportunity to absorb its "lesson" without difficulty, with the net result that all of the clerks gradually become more or less expert in handling the stock and explaining it for the benefit of customers.

A sample card which the manager of the store referred to submitted was three and a half inches wide by five and a half inches deep, and was made of stiff cardboard so that it could be handled for some time without breaking or tearing. The name of the article and the principal talking-points were shown in red ink. The cards were individually typewritten. That one handed to the writer carried the following, shown in about the style indicated:

SALES CARD

Jacrose Cold Cream Soap—Ingredients
Cold Cream, 10 per cent
Cocoonut Oil

Albumin

Purified Tallow Soap Base
(Same Tallow as used in making Butterine)

Talking Points:

Cold Cream 10 per cent removes impurities by "cold cream action," prevents chapping and protects the skin.

Cocoonut Oil gives an elegant, free, creamy lather even with very "hard" water.

Albumin neutralizes every bit of alkali, rendering the soap delightfully bland and soothing; prevents a "shiny skin" appearance.

Jacrose Perfume: exquisite odor brought out by contact with water.

Jacrose Cold Cream Soap soothes, whitens and preserves the skin and prevents enlarged pores.

Suggest Jacrose Cold Cream.

A good clerk could master all of these features in a short time, and with comparatively little effort would soon be able to point out to the inquiring customer just

why he ought to have this particular product. And, as suggested, after handling a number of these cards, he would have become familiar, without realizing it, with many of the principal lines handled by the store.

In the larger stores, of course, the plan of departmentizing helps a great deal. With a clerk working in only one department, and not being expected to work all over the store, except in cases of emergency, he has a chance to study the stock under his immediate supervision, and to work up more elaborate sales arguments than it would be possible for him to develop if he were "running at large" through the entire stock. In this case only the buyer and manager would find it necessary to keep the facts about everything in stock at their fingers' ends, and the salesmen would in a large measure develop into specialists, just as the prescription men are specialists.

But if your men seem not to supply the peppery work which is desirable when a customer asks for information about something shown in the window, adopt the plan of supplying sales cards containing the information, and notice the difference.

CLEANING UP IN SPRING

When April Comes Dust Should Go In Store and Home Alike

This is an age of ultimatums. Germany has been sending them broadcast, the United States has been doing pretty well, March winds are doing it now to everybody and everything * * * why shouldn't the druggist get on the band wagon and send an ultimatum to dirt and stock losses?

It may be all right for the druggist to be "too proud to fight." But there comes a time when such a stand is dangerous. He must either fight or run away. When the druggist finds that the dirt and inefficiency in his store have become so strong that they kill his business, that they commit overt acts every day in the year, then he should send an ultimatum and break off relations all together. The time to show dirt and inefficiency their places is when they begin to grow arrogant. The time to "clean house" is when the dirt begins to fly. The time is March.

Spring cleaning has two very important sides. The one is in the store, the other in the trade. You can clean up your own store and at the same time help others clean up their homes. Killing two birds with one stone is a good business proposition. Consider what Spring cleaning means. It means, that your store can be made almost perfectly bright and clean. It means that badly arranged displays and stock rooms can be torn down and made over into efficient places where rapid and frequent stock-turners are possible. It means that no trace of dirt will be left, and that your customers will enthuse over the possibility of trading with you.

That is one side of an interesting question. The other is that you can advertise a Spring cleaning week with ease. That side means that you can display cleaning oils, vaseline, brushes, mops, everything that you sell * * * or ought to * * * as a side line to help the housekeeper. It means that you can run a valuable "chase dirt" campaign. It means that you can advertise freely with success. It means that you can sell medicines calculated to hinder the ravages of dirt. It means that your customers will enthuse over your activities.

Here is a suggestion. Arrange your windows, simply, with a view to cleanliness. Put in some vaseline, cleanser, mops (you ought to carry mops as a side line, you know), brushes and soap. Arrange them all artistically with a sign reading:

**"Clean Up Week
Chase Dirt Out of the House"**

Then make a sale on dirt chasers. Specialize on it. The day is coming when the specialized sale will be recognized as a wonderful retail trade getter. Too many general sales, of course, are dangerous and they wreck the reputation of your store. But a special sale, in which some article of general importance, under certain conditions, is the center or leader, is a good idea. If, for Spring cleaning, you offer a reduction on cleaning articles, you will soon find you have gained a lasting trade. House-

keepers appreciate attention and bargains. A combination of both is therefore desirable.

There is no necessity for pointing out the value of a clean store. The druggist's own education should tell him why it is necessary and his instinct should assure him of its trade value. There are too many drug stores in which one finds dust and even cobwebs on bottles. If dust gathers on a certain line of containers, the easiest known method of removal and prevention is to get rid of that line. You don't make money by keeping your stock room occupied by a line of goods you can't turn over. Your Spring cleaning will tell you what you can sell and what you cannot get rid of.

The druggist who does make a systematic cleaning gains room, and learns some new things about his business. He's a successful druggist. The one who doesn't know what he is selling and hasn't any room at all is not. Spring cleaning time is the time to learn.

DRUG STORES AS RECRUITING OFFICES

Louis K. Liggett, president of the United Drug Company has offered the 7,000 stores controlled by his company to the Secretary of War of the United States to be used by him as recruiting stations in case there is trouble with Germany. The offer has not been officially accepted, but has been filed with all other offers of private plants for public use that have been made since diplomatic relations were broken off.

The United stores are in 5,969 cities. There is hardly a town in the country of over 1,000 inhabitants that does not have either a complete United Drug Company store or an agency which will be used in the recruiting scheme. The proposition is to use not only the store building for a central office but as far as possible to use the men employed by the company as recruiting agents. In the smaller towns these men would take the names and addresses of prospective recruits who would then be ordered to report at the nearest army station. There they would be examined and mustered in.

In the larger cities, the Liggett stores would be used as branches. Men who enlisted or inquired through the stores would be sent to the army enlistment offices at once. It is doubtful, under the American system of enlistment, whether the Army would permit actual enlistment in the stores, unless a recruiting sergeant was ordered there.

The use of the chain drug stores in such a way would be of great assistance in enlisting. Now, enlistment in rural towns is done through post offices and while it is fairly successful it has not produced results that would stamp it as an efficient means of getting men for the army. It is believed that the use of popular stores in any neighborhood would prove of greater value.

In war time, the rural enlistments are much more important than the urban. The men from the country, for the most part, need less physical training than the men from the cities, and the new system of volunteers would attempt to get a division of city and country men in each regiment. Such a scheme as Liggett proposes meets with the hearty endorsement of Major-General Wood and his chief aide, Major Dorey, of the Department of the East.

PERFUMERS TO HOLD CONVENTION

The Manufacturing Perfumers' Association of the United States will hold its annual convention in the Biltmore Hotel, New York, April 10th, 11th and 12th. Dr. Edward Ewing Pratt, Dr. W. W. Stockberger, Howard S. Neiman and other prominent men will speak during the convention.

Dr. W. W. Pearce of Waukegan, Ill., has a pair of very old balance scales. Of course he uses them in his store, but since they are the oldest in the city, he also uses them as an advertisement. People, usually interested in antiques are interested in the scales, come in to see them, and the rest is too easy to consider. One beauty of the scales is that they are as good today as they were when Dr. Pearce's father bought them over 60 years ago.

Sowing Seeds to Reap Dollars

Specialty Side Line that Pays its Profits

ANY SIDE line, staple article or sundry that will yield a harvest of dollars is worth talking about. In these more or less difficult times, anything that will yield even half a dollar profit is worth considering from every angle. You druggists who have dared to sow your trade in first class seed, realize that the profit is springing up or will do so soon.

There is money in seeds; in the common or garden variety, but there is more money in the vegetable seeds. If a package of anything at all costs you 3 cents, you can sell it for ten cents and make money, even though you pile on an overload of operation cost. Seeds are like that. They don't cost you much to buy, and they can be sold at a realistic profit.

Nowadays the drug business is getting away from itself. Some learned writers have covered tons of perfectly good high priced paper in an effort to show that the old-fashioned prescription pharmacist, who didn't know the meaning of the word "side-line" (and who, by the same token, rarely knew the meaning of the word "bank") is the real druggist. That isn't so. All the ponderous essays on business to the contrary notwithstanding, it is the man who sees the opportunity and takes it who is the real druggist. Although pharmacy is a profession, it is not out at the elbows, and it is capable of extension.

All the learned discussion which has gone before is merely by way of pointing out that side lines are as necessary to most druggists as the corner grocery to the housewife or the flirting maid to the average policeman. True, there are very successful pure prescription druggists, but they are specialists and even they carry a certain amount of sundries.

Having definitely concluded that the druggist must carry a side line, it is only necessary to go further and seek it for him. There are at least 12,000 druggists in this country who have found that seeds are successful for them. Not that they carry only seeds, but they find that having the goods in stock has been a boon to their trade.

The Value of Seed Display

It does not take much of an imagination to discover how seeds may best be handled. After all, display and advertising of the right sort is only imagination cultivated, and that is all that is necessary in pushing such a stock.

One of the big seed men of the country, whose gardens on Long Island are two miles long and one mile wide, says that in stores where his seeds are handled he has found a lack of display. Seeds are put up, he admits, in packages that in themselves are not attractive. They have a picture of a wildly exaggerated plant on the outside, and so far from carrying a suggestion of the beauty of the plant that will grow from them, or its value as food, make it outlandish.

The writer of this story believes that if he were a practicing druggist he would put in a stock as a side line. Nay, he's sure of it. He knows he'd like to make money. And then, he feels that having put in the stock, he'd take some packages, make an open tray with little squares, partitioned carefully off, pour seeds into those squares and put the entire tray in the window.

He'd be sure to have printed some artistic cards with which to mark the seeds in their miniature bins. And then he'd have the whole window as near a mass of growing plants as he could. In other words, the display would be made along lines of the future rather than the present. It would endeavor to catch, first, the attention of the passerby, and then make him want a garden so that the flowers seen in that window might be his. The seeds in the window would answer the question of "how to get such a garden," and the writer would begin to make his profit.

You don't pay much for seeds in packages purchased wholesale. Garden flowers, of the more common kind

can be purchased at from 3 to 7 cents a package. They sell at from 10 to 20 cents. The rarer flowers cost more, but they sell for more. Vegetable seeds also are comparatively cheap. Peas, beans, corn and the like can be purchased for 15 or 20 cents and sold at proportionate profit. Purchased in larger and loose quantities the price is, perhaps, a bit lower, but such sales are not being made by the big seed houses.

The same man who worried about seed display, and who handles a large business volunteered the information that a good stock of seeds to be sold over the drug store counters, presumably to small retail buyers, would cost about \$40.00, possibly a bit more, depending upon the selection made. With such a ridiculously small cost, the return is high enough to warrant experiment.

To most druggists, the mail order houses, both dealers in general supplies and in seeds alone, are a bugbear. One cannot blame a druggist for worrying, or feeling that investment is a precarious thing, but the mail order house is not unbeatable.

First of all, there is the undoubted truth that there is security for the purchaser in home buying. A woman takes a package of seeds from her druggist and she knows, first, that he is her druggist and that she is dealing with an honorable man. She also knows that if the plants don't turn out she has someone to take it up with. Dealing through the mail, she can only feel secure as far as her pen will carry her. She can't talk to the man who sold her the goods.

That is the greatest strength of the druggist in any competition with the mail order house. It certainly holds good in a sale of seeds. Against such competition, there is the subject of rates, and the mail order house cannot cut the price on the druggist to any great extent. It must cover expenses, and there is such a small leeway for him that he is forced to set his price in the near vicinity of that which the druggist sets. There are some things, of course, in which the mail order house has a "big edge" but they are not in the matter of seeds.

The druggist serving a rural community and selling seeds is serving himself and his trade. He is doing something for the people, in that he is giving them opportunity to help themselves—and he is clearing a profit. Sow seeds among the trade, the harvest will be forthcoming.

DRUG TRADE SECTION SUPPORTS PRESIDENT

The drug trade section of the New York Board of Trade and Transportation met in New York on March 7th, and passed a resolution supporting President Wilson in any "effort he may make to safeguard the freedom of transportation, both for persons and property which belongs to the United States as a neutral nation" and pledged itself to support him even if it becomes necessary to "place legal rights and honor above love of peace with all nations." The resolution was passed unanimously.

The proposition advanced by Mr. McKesson of McKesson & Robbins for the organization of a Drug and Chemical Exchange was referred to the committee on importing and will be reported upon at the April meeting. No other business of importance was discussed. Burton T. Bush, chairman of the section was not present at the meeting.

BOSTON DRUGGIST WAR HERO

Norton K. Crosby, a druggist of South Boston, has seen service in Armenia, where he fought in the Armenian army. He was invalided home recently with a Major's commission as a prize for his work. He was taken at once to the Massachusetts General Hospital, Boston, where he had an operation on his hip. The hip was shattered in service and the operation was absolutely necessary to save it.

The Druggist, the Movie and the Public

Reciprocity of the Screen to the Soda Fountain and Pill

"**F**AR above Cayuga's waters," where Cornell University and the Ithacan general public meet to discuss the merits of Mary Pickford or Anita Stewart and other celebrities, is a drug store. In addition to being above the beautiful Cayuga, it is next door, or nearly so, to the Opera House, where moving pictures are shown. The drug store, being in a college town, is alive to possibilities, and in the midst of superlative reciprocity, for in every college town reciprocity between tradesmen and students is a reality, that drug store has adopted such a course with the "movie" house.

What are the results? In that particular case, the merits of Cornell as an institution of learning are brought forward over the tables and fountain in that drug store, and when Cayuga's waters give forth a dampness that begets colds and influenza to the sons of Ezra Cornell, pills, medicines and such things come from the drug store. The students go to the movies, you see, with an abandon that worries professors, and they get the habit of indulging in the reciprocal agreement made for their benefit. For the drug store the indulging does not stop there, it continues after the movies are shut, or before they are opened, and Cornell, together with a large portion of Ithaca, purchases supplies at the store.

The process adopted is simple. A purchase in the drug store before the show opens, brings a little ticket with it. That ticket is good for five cents in the motion picture theatre. It means just half the ticket. And half the actual ticket from the theatre brings a 5-cent drink across the fountain in the store.

The druggist loses no money, as it would first appear. True, for a time he serves ten cent drinks for five cents, but he gets an almost city-wide advertisement for a cut rate. The movie man sells seats for ten cents, five cents to those holding tickets from the druggist. And he recently purchased a house in Ithaca.

Of course, those who get tickets for the theatre from the druggist's checks do not get tickets that will be honored at the fountain. It is only those who pay the full ten cents who are so favored. What the entire arrangement amounts to is that the motion picture house is a five cent house, while the druggist sells drinks at 5 and 10 cents instead of 10 or 15 as other druggists do. If he loses any money at the fountain, he easily makes it up in other trade, because the reciprocal agreement does bring business.

Ithaca Is Not a City Apart

Because Ithaca is a college town does not make of it a city unlike any other. Perhaps reciprocity on such a large scale would not work in Chicago, Philadelphia, St. Louis, Boston or New York, nor even in cities of 100,000. But in community cities of from 20,000 to 35,000, and in towns and villages, where competition is keen, reciprocity can find a place for itself.

The moving picture fan has many weaknesses. The man and woman who sits for an hour watching Charlie Chaplin elude thousands of policemen or break derby hats and "actoristic" heads with a bamboo cane, are very anxious for refreshment after the war is over. Nine out of every ten fans of the screen stop somewhere to get something to drink after the show. And eight out of those nine pick out a soda fountain.

Reciprocity sounds dangerous when it is first heard in such a connection. It does not seem practical to give away tickets or part tickets to a show, over a drug store counter, and then to redeem tickets or checks in soda.

Nevertheless, the more it is considered the less dangerous it seems. Suppose we try an experimental case. Here we have a druggist situated near a motion picture house. He does a little after theatre business, but sees many customers going beyond his store.

He visits the motion picture house and finds that the owner is selling tickets at ten cents, although he would make money at five cents. Some of the seats in the

house are fifteen cents. The manager agrees to a reciprocal proposition and will allow five cents on checks from the drug store. Most managers will do that, by the way, as it increases their business, and gives them standing.

Now, Mr. Druggist has agreed to redeem the checks from the theatre for which cash in full was paid, in drinks. They are worth five cents over the counter. The usual nickel drinks are clear losses in actual money, that much must be admitted. But they are covered a bit—in the advertising and trade winning qualities of the plan.

How much does it cost you to make the usual dime drink? About four cents, isn't it? In any event, without a knowledge of ingredients used by all druggists, four cents is the admitted cost by druggists in New York. You sell the drink, then, for five cents, make one penny in actual money and two more in advertising. A profit of three cents a drink—and your store is assuming an importance in the town. It is being talked of.

The fifteen cent drinks cost about eight cents to make, unless they are egg drinks, and you make two cents there. In quantity you make up, almost the average profit.

Reciprocity not Always in Force

In order to make such a scheme pay, both in actual money and advertising, the druggist must set a time limit. If he gives the checks between the hours of 1 and 4 and 7 and 9, and redeems them between 3 and 5 and 8:30 and 10:30, for instance, he will protect himself. At other times, ordinary prices would prevail.

The druggist is a necessity in the community, that is self-evident. The motion picture has rapidly assumed the same sort of place. It is a tradition, just as the drug store is, and because of that fact, the two businesses are related more closely than any other two. The motion picture man's big desire at all times is to fill the house. If he has 800 seats and sells them all at 5 cents, he can bring in \$160 a day, with four performances. But if he has 800 seats and can only fill 300 of them at 10 cents he gets only \$120. His difficulty lies in striking an average for a performance. His early matinee, for instance may fill but 150 seats, but the second afternoon show will bring the number up.

Through reciprocity with the druggist an incentive is given to the movie fan, "coming and going." He is urged to see the show and go to the druggist later, for a drink.

If during an afternoon, without reciprocity, you sell 100 drinks at an average price of 10 cents, you bring in \$10. The process probably cost you \$8—and you really lose money. If, under reciprocity you sell 250 drinks at 5 cents, the money value is \$12.50. The goods may have cost you \$12. You have 50 cents profit, but you have also the advertising value that increases as sales increase. And you will come very nearly showing an average day profit of \$5 on soda, under reciprocity, because for every 250 drinks you sell at 5 cents, you will sell 50 at the regular price. Many people will buy, simply because they see others going into the store.

Reciprocity does not mean, of course, that every seat sold by the movie man for his theatre is a cut price seat, nor that every drink sold by the druggist is a cut price drink. It may be that the proportion will be halved—because human nature goes that way. People follow the bell cow as quickly as do the cows themselves. For those who haven't been to the theatre there is the regular price list always in force.

A side line of Cigarettes and Cigars along with the soda is attractive to the men of the party using the reciprocal privilege. And there is profit in them.

Under reciprocity with the movie, there may be only a relatively small profit in actual money transaction, but it is an "open sesame" to further trade. It means that the man who becomes acquainted with your drug store after the theatre will habitually stop in before it. It means you'll get the regular trade of many people you could never have approached otherwise.

PERIODICALS—THE SIDE-LINE ISSUE

Everybody Likes to Read—Magazines Are Profitable if Given a Chance—Good Display Chief Feature of Sale

A druggist in Boston, Mass., has an inviting table at the rear of his store. There are two or three chairs around that table. On it are magazines and near it is a salesman ready to sell those magazines. The fact that the tables are there doesn't make of the store a reading room, but it does make of it an inviting desirable place to buy periodicals.

Did you ever stop to consider that almost every ordinary periodical stand is really nothing more than a tobacco stand? In cities like Chicago, New York, Philadelphia and St. Louis, did you ever get into an out-town periodical store without finding tobacco on sale? And do women like to go into such places?

These questions answer themselves. It is not the purpose of this story to urge taking periodicals on as a side line. It seems so very self-evident that they can be made to pay, that it is a waste of time. Of course paper is high and of course there is very little "returning" but you have only to sell the amount you buy and you make a profit.

Displaying periodicals is an art. It has become a habit that ought to be cured. The majority of magazines are placed on strings, showing their covers, and the stand is covered with a brilliancy composed of beautiful and unnatural women, effeminate men, big type names and many colors. With the obvious result that no one can possibly determine what magazine he wants to buy if he hasn't gone into the store with a certain purchase in mind.

The Bostonian has the right idea. He has displayed his stock so people can look it over. He has provided his customers with the means to find out exactly what they want. He has given them opportunity to glance over the magazines at ease so that their interest can become aroused. You wouldn't think of showing fourteen or fifteen varieties of candy so that one kind covered another up and the result was a mass of chocolate and nothing else. You separate them. Why doesn't it become a habit with periodicals? Is the appeal to the mind anything different from the appeal to the stomach?

Periodicals, when all is said and done, are a good side line to catch the trade of a reading nation. But they should be displayed. Neat piles, with a magazine placed in such a position that it may be looked over should be made. If room is possible, a table should be put in. Periodicals should be sold by sample, not by chance. There are times when one marvels at the peculiarity of display in a drug store. And, by the same token, there are times when the display is so mentally nauseating that the would-be purchaser forgets all about what he wanted. He merely turns and goes out—perhaps so disgusted that he won't come in to buy anything else.

BROOKLYN DRUGGISTS DINE DOCTORS

Members of the Kings County Pharmaceutical Society dined the doctors of Brooklyn, N. Y., February 27th, in the private banquet room of the Ritz restaurant. One hundred and twenty-five covers were laid and it was a "real banquet" in every sense of the word.

Reciprocity and N.F. and U.S.P. propaganda work were the subjects for the dinner. Last year such an event brought a closer affiliation between the two professions and this year's affair had the same tendency. Speeches which helped in the propaganda work were made by druggists and doctors.

H. B. Smith, president of the Kings County Pharmaceutical Society, was toastmaster. Dean William C. Anderson of the Brooklyn College made one of the principal speeches. Other important addresses on propaganda were made by Dr. George C. Diekman of New York, Dr. J. Leon Lascoff, chairman of the state propaganda committee, Dr. Otto Raubenheimer of Brooklyn, Dr. T. D. Adlerman, Dr. Le Grand Kerr, whose efforts in the recent New York infantile paralysis epidemic brought him public approval and Melville J. France, United States District Attorney for the second New York district, which includes Brooklyn.

DEPARTMENT STORE VIRTUES

Efficiency in Buying and Display Gives the Druggist Hints—How They May Be Used to Advantage

In wartime, the strategy of the enemy is often a good lesson. General Lee realized that just as much as General Grant did, and the Civil war found both sides taking a hint from every movement of enemy troops. It is exactly the same in business. The strategy, or movement of the department store, which in most cases, is a business enemy of the drug store, can often be used as a help for the druggist.

Not the least important thing in the life and work of a department store is efficiency. It is very nearly true, that efficiency becomes the least important for the average drug store. In display of stock, the department store proves its knowledge of one of the first principles of retail selling, offering goods in the most inviting manner possible. Do the druggists?

The purpose of this story is merely to point out that the average druggist will not lose by spending a little time studying the problem and its solution as made by the department store. Thomas A. Round, who is proprietor of the Elite Pharmacy in Manhattan, has worked it out very well. He has succeeded in applying some of the department store ideas to his own smaller trade with the result; that to some extent, at least, he is approaching the solid and workable efficiency of the larger stores.

Did you ever notice how a department store displays a variety of goods, but always with an eye to design, uniformity and good taste? The goods are there, however, but they are offered in such a way as to invite trade. The drug department is no different than any other, it is built on the lines of least resistance and most profit.

Observations of a Druggist

Mr. Round observed that when he visited a few of the larger New York stores. Necessarily, the department stores are limited in their sales, but Mr. Round found that they carried products that he did, and although he had prided himself on the display of his stock, he was forced to admit that there was conciseness about the department exhibit that simply pushed the goods at the customer.

Then, too, he noticed that the display was not spread out. While it was inviting in every detail, he found that it was confined and that it left the clerks and managers plenty of room in which to work. There were no tremendously long reaches for the clerks, no necessity for running here and there to serve customers. Goods were near at hand. Those two ideas he put in practice in the Elite pharmacy and with creditable results. He made his display uniform, did not attempt to show every bit of stock he carried in a certain line, kept his show cases divided in a reasonable way and rearranged his stock shelves. He has found that he saves time, energy, money and stock. And furthermore, he has found that he has unearthed a way for keeping accurate account of his stock.

Your retailer who carries a line of stationery as a side line does not buy in huge quantities. He rarely can get the benefit of lower prices on that account. But he can purchase it at a factory near enough to keep the express or freight rates at a minimum, and he can buy when he needs it. That does not mean buy when the last box of paper is sold over the counter. It means the department store idea of getting in new stock so that the old will just overlap. Turn over a case of paper, in other words, so that when the last box is sold, the new case will be on hand to take its place. It is not always that the department store buys in quantity but it does buy with brains.

By the system of checks, or whatever is used, the retailer in drugs will be positive on stock. To be negative in business is a bad principle, and against the law of supply and demand. At the same time it is as disastrous to buy more than enough. The department store knows its stock—of course it has more men to handle it, and larger facilities—but the druggist need only call upon his common sense if he would do the same. He can study department stores as Mr. Round has done, and from the enemy he will gain points that will be of great value.

LACK OF EXPERT CLERKS IN NEW YORK

Druggists Complain That Registered Men Do Not Want to Clerk In City—Ambitious to be Registered

Druggists in New York City are worrying over a lack of clerks. With the City Board of Health and the State Board of Health making investigation of druggists which some of them call "more than careful," and with the state laws requiring registered men to put up prescriptions, pharmacists are finding that expert clerks are at a premium.

Many reasons are advanced for the condition, but the one that most of the druggists agree upon is that registered clerks are trying to better themselves, and are forever studying or taking examinations to become registered druggists. While it is possible, in many cases, to get clerks to serve for a short time, there is now no such thing as an apprentice, or a clerk who gets his training in a certain store and is willing to continue there.

Drug addicts have become a menace in New York. The Court of Special Sessions, which sentences that particular kind of criminals is, overrun with them. And it is because of that fact that the City and State Boards of Health are watching the drug stores so closely. Visits from inspectors are more than frequent, with the result that pharmacists now can take no chances, even if they wished to.

At the same time, the men competent to be clerks have been attacked by the ambition bug. That, of course, has been true to a great extent before this, but during the last year and a half, it has become increasingly hard to get clerks who are not merely filling in time until they become pharmacists themselves.

Another reason for the condition as given by several retailers is that New York is becoming a city of 8-hour labor. Most all lines of business are adopting some sort of a modification of such a law, and drug clerks are beginning to insist that 8 hours a day, with perhaps one 10-hour day a week is enough for them. And in many instances, unless such a provision is made for them when they begin work, they will not continue on the job. The Assembly has been asked to pass a bill including the druggists in the 8-hour and Sunday closing class, which is another condition that gives the druggists some concern.

There are several things, according to druggists, which are making the business more difficult in the largest city of the country every day. The scarcity of clerks is one of these, the rigidity of the inspections is another and the possibility that triplicate registration of prescriptions calling for narcotic drugs will have to be made is a third.

The situation is so important that the pharmaceutical societies of both Brooklyn and Manhattan have appointed committees to consider the problem, with a view to ending the condition as far as possible.

CLUB ENTERTAINS CHICAGO VETERANS

At the regular monthly meeting of the Chicago Drug Club, held at Hotel Sherman last month, President Mofett presided. The members of the Veteran Druggists' Association were present as guests, President Theophilus Schmid of the Veterans acting as the toastmaster.

The principal address was made by David E. Shanahan, speaker of the Illinois House of Representatives, whose subject was "How Laws are Made." In reference to the importance of laws that affect the business of druggists Mr. Shanahan said:

"Every druggist ought to know his congressmen, representatives and senators in the legislature and his alderman. They have it in their power to make or break your business. Do your part in helping to nominate and elect the best men for such legislative offices."

W. B. Day spoke on the Consolidation Bill now pending in the Illinois legislature, which has been passed by the House and is now before the Senate and expected to become a law. The bill is being supported by the Chicago retail druggists. Members of the C.R.D.A. have succeeded in having retained in the bill the provision that nominations for the examining boards of different professions may be made by associations composed of members of each of the professions for admission to which candidates make application.

NEW YORK CONFERENCE MEETS

Pharmaceutical Delegates Discuss Excise Laws and New Health Board Regulations

The New York Pharmaceutical conference met at the New York College of Pharmacy on March 2d and held an important session. Excise laws, especially for pharmacists were discussed and the delegates went into the new Board of Health regulations very carefully. The sentiment of the delegates was that the new drug inspections by the Board of Health were dangerous to the drug trade.

Peter Diamond, in speaking of the issue said that an inspector had taken a package of digitalis leaves from his shelves, and while the store was filled with customers had announced that "it isn't fit for use." He had given no reasons, said Mr. Diamond, but sealed it and condemned it. Mr. Diamond insisted that the wording of the resolution was at fault and that the arbitrary power given an inspector was something he should not have. Other delegates favored inspection, and a resolution was passed to co-operate with the Board of Health, but the amendment made by Mr. Diamond, protesting against the wording of the Board of Health's resolution was passed with it.

In regard to the excise laws, Caswell A. Mayo said that the greatest difficulty for pharmacists in getting liquor tax licenses lay in the necessity for the signature of two-thirds of the near neighbors of the store. At present there is a bill before the State legislature ending that rule for druggists.

The executive committee of the conference attended hearings on the bill in Albany and prepared and introduced a list of questions regarding taxes for druggists. As a result of these questions, every druggist in the city has been sent a list showing exactly how far a pharmacist may go in selling liquor and under what conditions he may get a license. The proposed removal of the signature conditions for taxes was another success reported by the committee.

The delegates present at the meeting were: C. O. Bigelow, Caswell A. Mayo, Dr. Joseph L. Mayer, Alexander Gardner, Thomas J. France, Dr. William C. Anderson, Charles E. Heimerzheim, S. V. B. Swann, Peter Diamond, Dr. Joseph Weinstein, A. Allison, M. Zagat and Louis Berger.

The following officers were elected for the coming year: President, Dr. W. C. Anderson; secretary-treasurer, Caswell A. Mayo; executive committee, C. O. Bigelow, Peter Diamond, S. V. B. Swann.

MICHIGAN DRUG CO. ENLARGES PLANT

The Michigan Drug Co., otherwise known as Williams, Davis, Brooks and Hinchman Sons, wholesale druggists of Detroit, Mich., has just closed a lease under which it acquires the five-story Strelinger building adjoining its present premises, which will give the company about 50 per cent more room for the extension of its operations. The business of the Michigan Drug Co. dates from 1819 when it was established by C. Penniman. In 1891 the James E. Davis & Co., its place of business destroyed by fire, united with the house of Williams, Davis, Brooks & Co., the merger being followed by a further amalgamation with the old house of T. H. Hinchman & Sons, the new corporation becoming that known under the present name of Williams, Davis, Brooks & Hinchman Sons. James E. Davis, president of the company has been engaged in the drug business about fifty years and has a wide acquaintance in the trade, having served as president of the National Wholesale Druggists' Association in 1892.

NOVOCAIN NOT COVERED BY HARRISON LAW

The United States Circuit Court of Appeals for the second department has confirmed the decision of United States District Court Judge Grubb that novocain and a few other preparations such as anaesthesia, orthoform, holocain, etc., do not come under the Harrison anti-narcotics act. The decision entitles novocain to mail transportation and it may be used without the registration demanded under the Harrison act.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

H. J. METZGER LEAVES McK. & R.

H. J. Metzger, who for thirteen years has been a salesman for McKesson & Robbins resigned his position late in February. He has decided that he has had enough selling goods for other people and has taken over several lines of drugs which he will sell in New York and vicinity. He will act as sales agent for several manufacturers.

Mr. Metzger is not entirely dependent upon his ability as a salesman, however, for he has taken the three years course in Pratt Institute and is a specialist in chemistry. Among other things, Mr. Metzger believes in preparing himself in every possible way, and to that end travelled a great deal both for his firm and for pleasure before he was ready to begin his own business.

He started as an office boy with the big drug company which he has just left, was made entry clerk and then bill clerk. Finally he became assistant to the manager of the fancy goods

department and from that position was sent on the road as a specialty salesman



H. J. METZGER.

CONGRATULATED ON HIS 85th BIRTHDAY

Dr. William Gale, pioneer druggist of Westfield, N. J., arrived at the ripe age of 85 on February 16th, and was congratulated by a host of friends at his drug store in the city named, and of which he is a native. After graduating from the Long Island Medical College he joined the United States navy as a surgeon serving six years. In 1868 he opened a drug store in Westfield and has been in the business ever since. He has always been interested in politics and was a delegate to the convention that chose electors for Abraham Lincoln. He is a member and one of the founders of the Union County Medical Society, a member of the Westfield Board of Trade, vice-president of the Retail Merchants' Association, and an ex-chief of the Westfield Fire Department. He is also prominent in many other local activities and it is doubtful if there are many druggists of his age who can surpass his record for interest in present day movements. He is assisted in conducting his drug store by his son, William Gale, Jr.

W. S. ELKIN, JR., GOES TO BOSTON

W. S. Elkin, Jr., a well-known druggist of Atlanta, Ga., for many years, and president of the N.A.R.D. in 1909, served as host at a banquet held recently at the Capital City Club to the members of the old state board of pharmacy, the function being held on the eve of his departure to accept a position with the United Drug Co., of Boston. The old board, which had served the State for ten years, was composed of Mr. Elkin, R. H. Land, of Augusta; S. E. Bayne, Macon; H. C. Shuptrine, Savannah, and C. D. Jordan, Monticello. Members of the new or present board were also present. During the evening Mr. Elkin was presented with a handsome gold watch by members of the joint boards the presentation speech being made by C. D. Jordan who also acted as toastmaster. Among the speakers were Max Morris, of Macon, and Prof. Robert Davis, of the University of Georgia.

DREIBELBIS ON ORIENTAL TRIP

Louis Dreibelbis, well-known druggist and president of the Newbro Drug Co., Butte, Mont., has received his passport as an American citizen preparatory to taking an extended business trip and vacation that he has planned to spend in the Orient. He left for Seattle on March 2d and will proceed to Vancouver from whence he sailed for Yokohama, Japan. After spending a few weeks in that country, he will go to Vladivostock, Siberia, and thence down through the Chinese provinces, visiting the principal cities, and across to Manila, Philippine Islands. From Manila he contemplates visiting Australia, returning home by way of the Hawaiian Islands and San Francisco. The trip as planned will take about three months.

—HENRY MORRIS, a Philadelphia druggist, and graduate of the P.C.P., class of 1911, is about to open a new drug store at Grand and Michigan avenues, Lansing, Mich. He announces that he will sell no liquors and that his soda fountain will be an all year institution. When he decided to locate somewhere in the Middle West, he selected Lansing because "every kind of business was booming there and it looked like a real live city."

—DR. W. E. BLACK, has sold his interest in the Black Drug Co., Columbia, Tenn., to Earl Gray, a clerk for several years in the drug store of H. B. Adams, of the same city, and will take a much needed rest. He is thinking of taking a post graduate course in some university and will probably resume the practice of medicine in Columbia. Dr. J. H. Black remains at the head of the Black Drug Co.

—HERBERT M. LEROU, druggist of Norwich, Conn., one of five men recommended by the State Pharmaceutical Association, has been appointed to membership on the State Pharmacy Commission by Governor Holcomb. He will succeed James P. Wood of New Haven, who has already served two terms, and who will vacate the office on June 1st.

—RAYMOND G. LINDLEY, manager of the Fresno Pharmacy, Fresno, Cal., for a number of years prominently identified with the California Drug Clerks' Association, and at one time editor of the Drug Clerks' Journal, was recently appointed a member of the California Board of Pharmacy by Governor Johnson.

—HARRY L. GREEN, who, as "Green the Druggist," had stores for a time in Springfield, Worcester, Holyoke and Boston, which he sold nearly two years ago to the United Cigar Stores Co., is fitting up a modern pharmacy on Main street, Worcester, Mass., where he expects to re-enter business about April 15th.

—SINCLAIR KENNEDY, of Milton, Mass., of the Donald Kennedy Co., proprietary medicine manufacturers, Roxbury, Mass., was appointed, March 9th, executor of the estate of Mary A. Ingall of Milton, by Judge Flint in the Norfolk Probate Court at Dedham, and furnished bonds of \$200,000.

—PROF. CHARLES H. ROGERS, head of the Department of Pharmacy, West Virginia University, resigned some weeks ago to accept a position at the University of Minnesota, Department of Pharmacy. He took up his new duties on February 1st.

—WILLIAM P. MAHAR, a graduate of the New York College of Pharmacy, and for several years with the Monarch Drug Co., of Utica, N. Y., has gained possession of the pharmacy conducted in that city for several years by Charles F. O'Neill.

—PROF. JULIUS STIEGLITZ, head of the department of chemistry, University of Chicago, and newly elected president of the American Chemical Society, has been elected to the presidency of the Sigma Xi, a scientific honor society.

—F. C. LEWIS, of Ottumwa, Iowa, was robbed while go-

ing from his home to his store on March 5th. He was then "black-jacked" and when found by a night watchman was in a serious condition.

—EWING GLENN, druggist of Kansas City, Mo., was badly hurt when he tripped in the street near his store and fell. He was taken to the hospital with a possible fracture of the skull.

—FRANCIS' drug store of Langdon, N. D., was completely destroyed by fire early in March. The entire block in which it was situated was burned and the total loss was \$67,000.

—J. W. KILGORE, druggist at Hyde Park and Mattapan, Mass., is considering selling his Hyde Park business and establishing a new store in Brookline, Mass.

—EDWARD A. LOZIER, druggist of Flatbush, Brooklyn, is retiring from the retail business in Manhattan and will enter the drug brokerage field in New York.

—GLENN H. JOHNSON, of Whitehall, Michigan, has retired from active business after 20 years continuous service with the C. G. Pitkin Drug Company.

—E. C. KINSEL, of Detroit, was robbed of \$2,000 in cash late in February. His store is never closed, and there is a theory that it was an "inside job."

—LYLE V. HENDRICKS, former manager of the Hendricks Drug Company in Oregon has gone into the wholesale business in Akron, Ohio.

—DANIEL C. WOODMAN, for 25 years a druggist in Concord, N. H., has purchased a new drug store and will continue in the business.

—S. B. KEY, of Huntsville, Miss., has become a member of the firm of Moore and Culley and will be local manager for them.

—RALPH BROADBENT, druggist of Grand Rapids, Mich., was married to Miss Cornelia May Adams of that city late in February.

—J. W. EBERHART, of Maysville, Georgia, has given up his own business there and will take charge of the C. & J. Company store.

—F. S. WILLARD, has gone into business for himself in Watska, Ill., after 15 years association with the Johnson Drug Company.

—H. H. HAAS, a druggist of Cape Girardeau, Mo., has recently been twice operated upon for a serious infection of the nose.

—E. A. BENJAMIN, has purchased the drug business conducted for 34 years in Stockbridge, Mass., by John McGovern.

—F. E. DAHN, of Mt. Pleasant, Pa., was married on March 5th to Miss Eloise Wilson of Wheeling, West Virginia.

—JOHN SEMPHILL, of South Bend, Washington, has left his position as clerk and will start in business for himself.

—ROBERT A. KOEGLE, former mayor of Sandusky, has left that position and will return to pharmacy at once.

—H. C. OVERSTREET, of Sylvania, Georgia, was married late in February to Miss Lurline McGee of Rome, Ga.

—HERMAN VIEHMANN, manager of the Knoebel Drug Co. has resigned and will return to the retail trade.

—STANLEY M. BURR, of Brooklyn, married Miss Cleo Barnett of Yonkers in her home on March 8th.

—JOHN DAVID GARDNER, of Cincinnati, a pharmacist has joined the Navy for a third term.

—ARCHIBALD WILLEY, of Pana, Ill., a Navy pharmacist, was married to Miss Emma Grote at Pana.

—A. FOHRELL, of St. Louis, Mo., has been elected treasurer of the Buettner Company of that city.

S. H. KNIGHT WITH KNIGHT FOUNTAIN CO.

Stanley H. Knight has returned to the Knight Soda Fountain Company as salesman. He has also acquired a financial interest in the company, but beyond that there has been no other change. Mr. Knight will reorganize the sales force of the company and the concern is preparing to meet a wide expansion.

SALVARSAN TO BE MADE HERE

H. A. Metz Equipping Plant for Production at an Early Date—Trained Chemists from Germany to be in Charge—Protected by Patents

Within a reasonably short time there will be manufactured in the United States several chemicals that are classed among the most important medicinals now in use by the medical profession, including salvarsan, novocain, pyramidon and antipyrine.

Herman A. Metz, president of the Farbwerke-Hoechst Company, a New York corporation, has arranged with the German manufacturers, Farbwerke vormals Meister, Lucius and Bruning, Hoechst-am-Main, to carry on the processes of manufacture in this country.

All preliminary and experimental work has been completed. Construction of the plant is well under way; equipments are being installed as rapidly as possible and actual production is expected to start in the near future. The products are to be manufactured by the Hoechst processes and the work will be in charge of competent chemists who have received their training in the plants of the original manufacturers.

Since the British Order in Council of March, 1915, and the placement of Germany's export embargo about the same time, the importation of these chemicals into this country has been checked. The demand, especially for salvarsan was so great that with the end of the visible supplies prices became almost fabulous. Through the efforts of the State Department, the consent of both belligerents was obtained for the shipment of a limited quantity of salvarsan to the United States agents, Farbwerke-Hoechst Company, for distribution. The final shipment of these products was received late in the fall of 1916. Supplies of pyramidon and antipyrine were brought to this country by the under-sea boat Deutschland.

Dr. Herzog, manager of the pharmaceutical department of the Farbwerke-Hoechst Company, said that a sufficient stock of these chemicals was on hand to supply all domestic requirements until production at the new plant begins.

"Realizing the urgent needs for such chemicals in this country," said Dr. Herzog, "it has been the intention of Mr. Metz for some time to undertake their manufacture, but until we were assured of the necessary supply of the raw materials we refrained from making any announcement of our intention. The slowness in the deliveries of equipments also retarded operations, but practically all difficulties have been overcome. We expect to have a steady supply from our own laboratories before the stocks of German goods on hand have been absorbed."

WILL ACT AGAINST RETAILERS

John S. Sumner, successor to Anthony Comstock as secretary of the New York Society for the Suppression of Vice, has issued a warning that his society "will seek out and prosecute" retail druggists who illegally handle certain birth control preparations. Mr. Sumner says that it has been customary to watch the wholesalers of these preparations and states that the Court of Special Sessions in New York has made the new policy "necessary."

NEW YORK RETAILERS MEET

A well attended meeting of the N.Y.R.D.A. was held late in February in New York. Mr. Herz, chairman of the Journal committee reported that a substantial profit had resulted from the sale of space in the journal and that the money will be used to fight obnoxious legislation in the city and state.

The treasurer reported that there is \$113.58 in the treasury and then the association went on record, as many other bodies in the city have done, opposing the new Board of Health regulation which provides for inspections of drugs on shelves, and the condemnation of drugs at the will of the inspector.

Jacksonville, Florida, druggists held an important trade conference in the Chamber of Commerce of their city early in March. The difficulties of obtaining necessary drug stock were discussed, and the possibility of a trade conference association was also brought up.

DEATHS IN THE DRUG TRADE

PROF. C. LEWIS DIEHL

Prof. C. Lewis Diehl, one of the best known men in American pharmacy, and for almost half a century reporter of the progress of pharmacy of the American Pharmaceutical Association, died at his home in Louisville, Ky., on March 25th. He had been in failing health for some years, and two years ago was compelled to give up his duties as chairman of the Revision Committee of the National Formulary, a position he had held since 1888, and also, to lay down his office of reporter on the progress of pharmacy.



PROF. C. LEWIS DIEHL

Prof. Diehl was born in Rhenish Bavaria, in 1840, his father coming to the United States in 1849 as a political refugee. A year later the mother and children, of whom Lewis was one, arrived. His mother dying soon after, Lewis, with a brother entered school near St. Louis, the other children being distributed among relatives in Europe. In April, 1854, he left school and joined his father in Philadelphia, securing a position with R. and G. A. Wright, perfumers, and with whom he remained until 1857. A year later he began a four years' apprenticeship with Dr. John R. Angney, in the meantime attending the Philadelphia College of Pharmacy, from which he graduated in 1862. He soon entered the employ of John Wyeth & Bro., taking charge of their laboratory until August, 1862, when he enlisted in the 15th Regiment of Pennsylvania Volunteer Cavalry. He was wounded in the battle of Stone River and secured his discharge. After convalescence, he was appointed assistant chemist in the U. S. Army Laboratory at Philadelphia, remaining until 1865. He then went to Chicago, expecting to continue in retail pharmacy, but started in to manufacture chemicals in the laboratory of Bender, Mahla & Co., a position which he held but for a short time, when he went to Louisville to reorganize and manage the Louisville Chemical Works, continuing with the concern until 1868. He then purchased a drug store in Louisville, and later opened a new store in the same city which he operated until November, 1903.

Prof. Diehl's introduction to professional pharmacy began practically with his joining the A.Ph.A. in 1863. In 1866 he was appointed chairman of the Committee on the Progress of Pharmacy, and a few years later was elected to the newly-established office of reporter on the progress of pharmacy. In 1874 he was elected president of the association. His energies were also employed in other directions. In 1870 he helped to organize the Louisville College of Pharmacy, serving as its president until 1881. He also occupied the chair of pharmacy, with the exception of a short period, up to the time of his death. He was a member of the Seventh and Eighth Revision Committee of the Pharmacopoeia, and was chairman of the Revision Committee of the National Formulary from 1888 until about a year ago, when the fourth revision of that work was published. He had served for many years on the State Board of Pharmacy, and was president of the Kentucky Ph.A. in 1900, having been a member of the organization since 1877. In March, 1887, he received the degree of Master in Pharmacy from the Philadelphia College of Pharmacy.

—CLIFTON D. HUNTER, 80, oldest business man of Marlboro, Mass., who had been in the drug business since 1860, died on March 1st. He was a member of the Masonic order.

PROF. GEORGE A. FERGUSON

Prof. George A. Ferguson, head of the Ferguson Laboratories, 121 W. 42nd street, New York City, and formerly professor of analytical chemistry for many years in the New York College of Pharmacy, died at his home in Brooklyn, N. Y., from pneumonia. He was born in Brooklyn fifty years ago and was educated at Columbia University. After his retirement from the faculty of the College of Pharmacy, which occurred about ten years ago, he organized the Laboratories with which his name is identified, and also served as chemist to the New York State Board of Pharmacy. He was at one time president of the Kings County Republican Club, and held membership in the American Chemical Society, the Society of Chemical Industry, the American Pharmaceutical Association, the New York Pharmaceutical Association, and various other scientific organizations. He leaves a widow and a son.

A. C. WILSON

A. C. Wilson, pioneer druggist, and at the time of his death, president of the Iowa State Board of Pharmacy, died recently at Oelwein, Iowa. He was born in the Province of Ontario, Can., in 1857, and early started to learn the drug business. In 1877 he located at Oelwein where he practiced pharmacy for forty years, first being employed as a clerk in a drug store and then in 1892, establishing his own business, which he successfully maintained up to the time of his death. A few years ago he took his two sons into partnership. Mr. Wilson was active in a number of business enterprises in his community, serving for years as vice-president of the First National Bank of Oelwein. He also served for five years as State Senator from his district and at different times held many other responsible positions of trust. He was a member of the Executive Committee of the National Association of Boards of Pharmacy at the time of his death, and active in its councils. He is survived by his widow and two sons.

JOHN G. WISCHERTH

John G. Wischerth, a trustee of the Brooklyn College of Pharmacy for twenty years, and who conducted a drug store at Bedford and Greene avenues, Brooklyn, N. Y., for thirty years, died on February 5th, aged 54. He was born in the Eastern District, and early in life entered the drug business. He had been active in various organizations, and held membership in the Kings County Pharmaceutical Society, the New York State Ph.A., the New York Geographic Society, Knights of Columbus, Royal Arcanum and the Holy Name Society. For a number of years he was treasurer and general manager of the Brooklyn Consolidated Drug Company, a co-operative buying club. He is survived by a widow, two daughters and a brother.

GEORGE D. SEARLE

George D. Searle, of G. D. Searle & Co., Chicago, manufacturers of pharmaceuticals, died recently, aged 71. He was a native of Deerfield, Ind., and at the age of 17, enlisted in the 135th Indiana Regiment. After being mustered out, he studied medicine and pharmacy, and then followed the retail drug business at Fortville and Anderson, Ind., until 1888, when with Frank S. Hereth he began the manufacture of pharmaceuticals at Omaha. After a time the firm removed to Chicago where it soon became one of the largest of Western houses in its line. He retired in 1905, but a year later, through the solicitations of his former employees, he established the concern now known as G. D. Searle & Co. About four years ago, Mr. Searle was taken ill and the active management of the company was taken over by his son, Dr. C. H. Searle, who has since continued to act in that capacity. The funeral was held at Anderson, his old home.

ALLEN SHOEMAKER

Allen Shoemaker, a retired wholesale druggist of Philadelphia, died late in February. He was at one time a member of the firm of Robert Shoemaker & Co. He was born and educated in Philadelphia, being a graduate of the College of Pharmacy of that city. He is survived by his widow, two sons and a daughter.

ALFRED ELWOOD PECK

Alfred Elwood Peck, proprietor of the Cresol Chemical Company, of Brooklyn, died there in his 68th year. He had been a resident of Brooklyn since 1894 when he went there to found his proprietary medicine concern. He is survived by his widow, a sister and six brothers.

RECENT DEATHS

—C. J. LAMMERT, assistant manager of the Cincinnati Economy Drug Co., Cincinnati, Ohio, died recently in that city, aged 56 years. He had been identified with the drug business since 1881, and had owned stores in various sections of the city. He was also connected for some years with the Stein-Gray Drug Company, and later went to Chicago where he became connected with the Peter Van Schaack & Sons Co. as assistant manager of the soda fountain department. He remained there but a short time and returned to Cincinnati, where he became identified with the Economy Drug Co. He was a member of the Ohio Valley Druggists' Association. His widow survives.

—ADOLPH FEIEL, aged 80, veteran Columbus, Ohio, druggist, and for years a member of the faculty of the medical department of Ohio State University, died recently from the infirmities of age. Previous to his connection with the university, which began in 1895, he was professor of histology at Starling Medical College. He was a native of Wurtemberg, Germany. For many years he operated the pharmacy now conducted by his son, George F. Feiel. He is survived by his widow, son, and four daughters.

—JOHN McLERNON, oldest business man and druggist in Galesburg, Ill., died on March 1st, following a stroke of apoplexy. He was born at Newcastle, England, in 1855, and came to this country with his parents when but two years of age. He early entered pharmacy and passed the state examination 35 years ago. He was a member of the Royal Arcanum and Ancient Order of Hibernians. His widow and four daughters survive.

—JOHN DAVIS, aged 61, one of the best known druggists of Lackawanna County, and active for years in political circles, died recently at Taylor, Pa. He had been in business for more than thirty-five years and had served a number of terms as tax collector and as a member of the board of education. He is survived by his widow, two sons and two daughters.

—GEORGE HEALY, one of the oldest druggists of Baltimore, Md., is dead, aged 75. He was the son of a Baptist minister, and entered the drug business 50 years ago with his brother, the late James E. Healy. For the last 24 years he conducted a pharmacy at 1501 Aisquith street. His widow, one son, Nathan S. Healy of Washington, and a daughter survive.

—SAMUEL F. BOYCE, 75, founder of one of the oldest drug stores in Duluth, Minn., died recently in Denver, Colo., where he had been residing with his daughter for a number of years. He was born in Belleville, Ohio. He was a veteran of the Civil war and a member of Duluth's Old Settlers' Association. He was also prominent in Masonic circles.

—FRED B. STUMPF, who represented Sharp & Dohme in New Jersey for about twenty-two years, died suddenly on February 25th in Newark. He was 42 years of age. His widow and a daughter survive. "Fred," as he was called by all of his customers, had a winning personality and made and held his many friends by his sincerity and square dealing.

—MILEY RICKS, 31, a drug clerk in the store of Mrs. William Anz, Louisville, Ky., killed himself by drinking the contents of a bottle containing morphine which stood behind the prescription counter. No reason is given for his rash act. Besides his father, he leaves two brothers, one of whom, O. B. Ricks, is a druggist of Murray, Ky.

—WILLIAM P. WUEST, son of Carl Wuest, an old-time druggist of Brooklyn, and who succeeded to his father's business at Ewen and Siegel streets, Brooklyn, N. Y., died on March 28th, aged 52. He was prominent in democratic politics and was a former county clerk of Kings County.

—JOHN C. BODENMANN, who conducted a pharmacy at 229 Temple street, Los Angeles, Calif., for the last seventeen years, is dead. He was a member of the Eagles, Modern Woodmen of America and Turnverein Germania. His widow and one son survive.

—FRED ROHRER, 33, a well-known pharmacist of the Copper country, and a popular Calumet young man, died recently, at Laurium, Mich. He had been employed for the past fourteen years by the Superior pharmacy. His parents, residents of Detroit, survive.

—WILLIAM C. COLBRATH, a former Minneapolis druggist, died at Duluth, Minn., on March 6th. He was about 70 years of age. His wife, who was one of the first white children born in Minneapolis, died a year ago. He is survived by two daughters.

—CHARLES H. FINK, son of the late R. M. Fink, a pioneer druggist of Springfield, Ill., and who succeeded to his father's business on the death of the latter, is dead, following a short illness from pneumonia. He was about 30 years old.

—GUSTAV SCHWAB, druggist at Tompkinsville, Staten Island, N. Y., is dead, aged 78. He was born in Germany, and had been a druggist for 60 years, formerly having a pharmacy in Manhattan and one in Brooklyn. Three sons survive him.

—J. Y. BRECKENRIDGE, pioneer druggist and for twenty years postmaster of Pine City, Minn., is dead. He was held in high esteem by his fellow citizens, about 450 people attending his funeral which was held in the local armory.

—MURRAY BLY, 59, for many years a druggist at Farm-land, Ind., and vice-president of the First National Bank, is dead. He had been ill for more than a year with cancer of the liver. His widow, a son and a daughter survive.

—JOHN T. MCCARTHY, retired druggist and naval civil war veteran, died of the infirmities of age at his home in Brooklyn, N. Y., on March 11th. He was born in Nova Scotia 69 years ago. His widow survives.

—CONRAD A. BROCKMILLER, of St. Louis, died suddenly in his home there. He had been for 25 years in the drug business in the Mississippi River city. Two sons, two daughters and his widow survive him.

—JOHN HENRY CODY, for 35 years a druggist at Bridgeport, Conn., died recently, aged 57. He is survived by his widow, his mother, a son William, who was associated with him in business, and a daughter.

—J. H. TOBIN, a druggist of Cedar Rapids, Ia., died suddenly at his home there. He was born in Green Bay, but about 10 years ago opened his store in Grand Rapids. His sister and a brother survive him.

—LEWIS HINE HOBBY, JR., 75 years old, a salesman for Schieffelin & Co., of New York, died at his Brooklyn home. He was born in New York. He is survived by his widow, a son and three daughters.

—EUGENE A. MCFADDEN, druggist of Hackensack, N. J., is dead, following a stroke of apoplexy. He was 60 years of age, and established the store he operated at the time of his death 37 years ago. He was closely identified with many matters of public interest. He is survived by his widow and two daughters.

—JESSE R. BETTS, 54, a son of the late Thomas Betts, a dealer in drugs and chemicals, New York City, died in Brooklyn on March 11th.

—CHARLES H. BRIDGES, Milford, Mass., druggist for twenty-five years, died on March 6th of apoplexy. He was in his 56th year. His widow, one son, and a stepdaughter survive.

—JOHN E. CAMPBELL, 56, a druggist in Detroit for more than 25 years died recently, after a brief illness. He was born at St. Thomas, Ont. His widow and two daughters survive.

NEW PREPARATIONS OF 1916*

ACID OXYPHENYLQUINOLINEDICARBONIC.—See Hexophan.

ACID PHENYLCHINCHONINIC.—See Artamin.

AGUTTAN.—Orthoxyquinoline Salicylate, intended for use in gout, articular rheumatism, and painful joint affections. Dose, 0.5-1 Gm. 3-4 times daily.

ALCOPON.—A preparation said to represent the total alkaloids of opium, and used like pantopon.

ALGOLANE.—The salicylic acid ester of propyldioxybutyl alcohol, intended to be used as a remedy for gout and rheumatism.

ALLPHEN.—A remedy made from garlic and intended for use in cholera and dysentery.

AMMONIUM HEPTINCHLORARSENATE.—See Solarson.

ANTI-INFLUENZOL.—Tablets of acetylsalicylic acid.

APHLOIN.—A fluid-extract made from *Aphloia toeformis*, a Madagascar herb, and used in the treatment of gall stones. The dose is 10 drops daily to begin with, and increased to 15 drops 4 times daily.

ARGALDIN.—A compound of silver and albumin with hexamethylenamine. Contains 8.9% Ag. Employed as an antiseptic in 10% aqueous solution.

ARSENOBENZENE-SILVER BROMIDE-ANTIMONYL.—See Lurargol.

ARSENOHYRGOL.—A combination of enesol with arsenic. Employed in syphilis.

ARSINOSOLVIN.—Sodium Aminophenylarsinate. — Employed in 2:15 solution subcutaneously in contagious pleuropneumonia in cattle.

ARTAMIN.—Phenylcinchoninic Acid.—Uses, as of atophan in gout and rheumatism.—Dose, 0.5 Gm.

ATOXICOCAINE.—Para aminobenzoylamino-ethanol Hydrochloride. Said to be identical with novocaine.

BISMUTH SUBACETATE.— $\text{CH}_3\text{COO Bi O}$. White, very fine, odorless, tasteless powder, insoluble in water. Employed externally as dusting powder or ointments in wounds, chafing, etc., and internally like bismuth subnitrate and other bismuth compounds.

BROMOGEN.—A solution each fluid dram of which contains 2 grains of organically combined bromine, and employed wherever bromides are indicated, particularly in epilepsy, hysteria, and neuralgia.

CALCIGLYCIN.—Calcium Chloride-Diglycocoll, $\text{CaCl}_2 \cdot (2\text{NH}_2\text{CH}_2\text{COOH}) + 4\text{H}_2\text{O}$.—Colorless needles soluble in water.—Used instead of calcium chloride internally.

CALCIUM CHLORIDE-DIGLYCOCOLL.—See Calciglycin.

CHLORAMINE.—See Chlorazene.

CHLORAZENE.—Chloramine; Paratoluenesodium Sulphochloramide.—White crystals, soluble in water.—Germicide and antiseptic; nontoxic and noncorrosive. Employed in solutions up to 2-4%. In chronic bladder and urethral conditions 0.5 solution increased to 2%.

CHLORIAGOL.—Guaiaicol Chloriodide.—Employed in asthma and chronic bronchitis.

CIGNOLIN.—An organic iodine compound used in skin diseases instead of chrysarobin.

COLLOIDAL MERCURIC IODIDE.—See Lutosargin.

CYMASIN.—A yeast free from fermentible carbohydrates, and hence particularly adapted for use in the quantitative determination of sugar by the fermentation process.

DIACETYLDIHYDROMORPHINE.—See Paralaudin.

DIAFOR.—Urea Acetylsalicylate.—Employed in fever, neuralgia, and rheumatism.—Dose: 2 tablets of 0.66 Gm. each thrice daily.

DIGALOID.—A solution of digitoxin each mil (Cc.) of which is equivalent to 150 Mgm. digitalis leaf.

DIHYDROMORPHINE HYDROCHLORIDE.—A morphine derivative said to be superior to morphine hydrochloride.

DIOXYAMINOTHIOBENZENE.—See Intramine.

DISPARGEN.—Colloidal Silver.—Black, lustrous leaflets quite easily and clearly soluble in water.

(To be continued)

EDIBLE VEGETABLE FATS AND OILS

The following definitions and standards for edible vegetable fats and oils, adopted by the Joint Committee on Definitions and Standards, and approved by the Association of American Dairy, Food and Drug Officials and by the Association of Official Agricultural Chemists, have been adopted as a guide for the officials of the United States Department of Agriculture and issued by the Secretary of Agriculture as "Food Inspection Decision 169."

Edible fats and edible oils are such glycerids of the fatty acids as are recognized to be wholesome foods. They are dry and sweet in flavor and odor.

Cacao butter, cocoa butter, is the edible fat obtained from sound cacao beans (*Theobroma cacao* L.), either before or after roasting.

Coconut oil, copra oil, is the edible oil obtained from the kernels of the coconut (*Cocos nucifera* L. or *Cocos butyracea* L.).

Cochin oil is coconut oil prepared in Cochin (Malabar).

Ceylon oil is coconut oil prepared in Ceylon.

Corn oil, maize oil, is the edible oil obtained from the germ of indian corn, maize (*Zea mays* L.).

Cottonseed oil is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum*, L.), or from the seed of other species of *Gossypium*.

Olive oil, sweet oil, is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea* L.).

Palm kernel oil is the edible oil obtained from the kernels of the fruit of the palm tree (*Elaeis guineensis* L. or *Elaeis melanococca* Gärt.).

Peanut oil, arachis oil, earthnut oil, is the edible oil obtained from the peanut (*Arachis hypogaea* L.).

Poppy seed oil is the edible oil obtained from the seeds of the poppy (*Papaver somniferum* L.).

Rape seed oil, rape oil, colza oil, is the edible oil obtained from the seed of the rape plant (*Brassica napus* L.), or from the seed of closely related Brassica species, which yields oils similar in composition and character to the oil obtained from the seed of *Brassica napus* L.

Soy bean oil, soy oil, soja oil, is the edible oil obtained from the seed of the soy bean plant (*Glycine soja* L.; *Soja hispida*, Sieb et Zucc.; *Soja mar.* (L.) Piper).

Sesame oil, gingili oil, teal oil, benne oil, is the edible oil obtained from the seed of the sesame plant (*Sesamum indicum*, De Candolle; *Sesamum radiatum*, Schum and Thonn; *Sesamum orientale* L.).

Sunflower oil is the edible oil obtained from the seed of the sunflower (*Helianthus annuus* L.).

Biologicals of the U.S. Pharmacopoeia

(Concluded from Page 120)

anaphylaxis, and the fear of its occurrence can no longer justify the failure to employ protective serum in every case where it can possibly be of service. This of course applies also to the therapeutic use of the serum.

Park, from whom we have quoted, favors the intravenous use of tetanus antitoxin. He states:

"In tetanus I have frequently seen the life-saving action of the intravenous injection. I believe it is almost criminal negligence not to give an intravenous injection."

"Consider a case of tetanus in which, by the symptoms, you know the most important cells of the body are already affected—it is foolish to rely on a subcutaneous injection with its slow absorption. I have urged the surgeons in New York to keep antitoxin on hand, and at the very first sign of tetanus to inject intravenously about 20,000 units. In those cases of continuing rigidity I confess I advise to go on giving injections every 12 hours for several days, but the more I test the blood in these cases the more doubtful I am as to the good of repeating the injections. At intervals of 24 hours they keep up the strength of antitoxin. I am sure that a large intravenous injection given within a few hours of the onset of symptoms will save many patients in acute stages of tetanus who would otherwise die. The usual practice after first seeing the patient is to wait 12 hours in order to be certain of the diagnosis, and then administer antitoxin; thus from 12 to 18 hours are wasted. We know that many animals treated within a few hours by large doses are saved and our experience has proved the wisdom of large initial doses. Let us therefore combine laboratory results with bedside observations."

PATENTS

Granted February 20, 1917

- 1,216,343—Frank Adam Mertz, New York, N. Y. Non-refillable bottle.
 1,216,361—Mortimore S. Reynolds, Yates Center, Kans. Medicine injecting apparatus.
 1,216,371—Botho Schwerin, assignor to Elektro Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft), Frankfurt-on-the-Main, Germany. Process for the manufacture of hydroxids of aluminum.
 1,216,428—Moress S. Finkelstein, New York, N. Y. Antirefilling bottle stopper.
 1,216,452—Thomas W. S. Hutchins, Luke Hargreaves, and Alfred C. Dunningham, Middlewich, England. Process for the production of sodium bisulfite.
 1,216,515—Konstantin Tarassoff, Moscow, Russia. Manufacturing condensation products from phenol, formaldehyde and the like.
 1,216,516—Konstantin Tarassoff, Moscow, Russia. Process for the manufacture of hard compositions of matter from aldehydes and phenols.
 1,216,710—Louis Lucas, Jamestown, N. Y. Pine incense and process of making same.
 1,217,087—Edmund G. George, Springfield, Ill., assignor of one-half to Leslie Hall Simpson, Glenarm, Ill. Bottle holder.
 1,217,093—James M. Howlett, Denver, Colo. Automatic bottle stopper.

Granted February 27, 1917

- 1,217,218—Herbert C. Reed, Stamford, Conn. Method of manufacturing oxalic acid.
 1,217,247—Frank W. Washburn, New York, N. Y. Process of making ammonium nitrate and other products.
 1,217,388—Harry P. Bassett, Catonsville, Md., assignor to The Spar Chemical Co., Baltimore, Md. Process of producing a soluble potassium compound.
 1,217,389—Harry P. Bassett, assignor to The Spar Chemical Co., Baltimore, Md. Process of treating potassium containing silicates and phosphate rock and the product of such process.
 1,217,390—Harry P. Bassett, assignor to The Spar Chemical Co., Baltimore, Md. Process of producing potassium salts.
 1,217,446, 1,217,447—Wilhelm Hiemenz and Ludwig Taub, Elberfeld, Germany, assignors to Synthetic Patents Co., Inc., New York. Substituted barbituric acids.
 1,217,471—Almer M. McAfee, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburg, Pa. Manufacture of aluminum chloride.
 1,217,509—Aly I. Schall, Yonkers, N. Y. Antirefillable bottle.
 1,217,577—Sylvain Dreyfus, Denton, near Manchester, Lancaster, England. Apparatus for effecting the continuous concentration of sulfuric acid.
 1,217,862—Otto Gerngross, Grunewald, near Berlin, and Hermann Kast, Charlottenburg, Germany. Salts of acetylsalicylic acid and process of manufacture of same.

Granted March 6, 1917

- 1,218,209—Erich Rietz, Elberfeld, Germany, assignor to Synthetic Patents Co., Inc., New York, N. Y. New pharmaceutical product.
 1,218,492—Charles Albert Tatum, New York, N. Y. Device for measuring glass.
 1,218,536—Frank R. Eldred, Francis E. Bibbins and Ray N. Reed, assignors to Eli Lilly & Company, Indianapolis, Ind. Coca extract and process of producing same.
 1,218,550—John A. Gwinner, Philadelphia, Pa. Bottle capping device.
 1,218,588—Maurice Barnett and Louis Burgess, New York, N. Y. assignors to Alchlor Chemical Company. Art of producing aluminum chloride.

Granted March 13, 1917

- 1,218,840—John T. Davis, Alameda, Cal., assignor of fifty-one one-hundredths to Louis Levy and Joseph Rothschild, San Francisco, Cal. Apparatus for fractional distillation.
 1,218,984—Frederick Coates, Rochester, N. Y. Paper bottle.
 1,219,047—Joseph R. Schultz, St. Louis, Mo. Bottle cap remover.
 1,219,147—Alphonse A. Picard, New York, N. Y. Tooth brush.
 1,219,166—Julius Schmidlin, Bergen, near Frankfurt-on-the-Main, and Max Fischer, Frankfurt-on-the-Main, Germany. Manufacture of chlorinated products of xylene aldehydobenzoic acids, and dyestuffs therefrom.
 1,219,222—Frederick C. Baxter and Willis H. Kern, Belvidere, Ill. Funnel.
 1,219,246—Frederick E. Carlson, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn. Vacuum bottle.
 1,219,263—Claude B. Davis, Richmond, Va., assignor of one-half to Stephen A. Ellison, Richmond, Va.
 1,219,277—Peder Farup, Gloshaugen, near Trondhjem, Norway, assignor to Det norske Aktieselskab for elektrokemisk Industri, Christiania, Norway. Process of producing sulfuric acid.

MENNEN ADOPTS A ONE PRICE POLICY

There is a tendency among manufacturers of the nationally advertised goods to simplify their price lists in order that druggists may figure their profits correctly. One of the latest price lists is the one issued by the G. Mennen Chemical Company of Newark. The most noteworthy change in the new general price list which went into effect January 1st of this year, is the one price policy. The lowest price has been placed on the minimum shipping quantity for purchases direct from the factory

which remains the same as last year. There are no discounts for larger quantities. Thus all druggists are placed on the same basis and the little fellow will not have to worry over buying at the best price, or holding off from placing his order until some opportune time when the salesman calls in order to get a special deal.

PUEBLO WHOLESALE DRUG CO. CHANGE

Thomas R. Zeiger, for the past ten years, president and manager of The Pueblo Wholesale Drug Co., having disposed of his interest, and in order to devote more time to his personal affairs, has resigned and retired from the Company.

At a meeting of the Board of Directors held January 18, 1917, G. F. Trotter was elected President, Charles Cavender re-elected Vice-President and A. S. Booth re-elected Secretary-Treasurer. William F. Reinig, who has been associated with the management since organization has been appointed Manager to succeed Mr. Zeiger.

GLASS ENAMELED STEEL APPARATUS

The Pfandler Co., Rochester, N. Y., have recently issued a new catalog of their special glass enameled steel apparatus for the drug and chemical trades. The different styles of kettles, vacuum pans, storage tanks, etc., are all illustrated together with full description and it is sure to be of interest to manufacturers of chemical and pharmaceutical products. They will be pleased to send copy of this catalog upon application. Ask for "Chemical Bulletin C-4."

OLIVER TYPEWRITER FOR \$49

The Oliver Typewriter Co. has discontinued its large and extensive sales force, closed its branch offices in some 50 cities, thereby cutting out all middlemen's profits, and selling their standard \$100 machine direct to consumers for only \$49.

This is an innovation in the typewriter trade which is sure to be greatly appreciated by all buyers. They have a special machine with medical symbols for druggists, further particulars of which they will be glad to send to any druggist on application. Address The Oliver Typewriter Co., 2224 Oliver Typewriter Bldg., Chicago, Ill.

SPECIAL WRITING MACHINE FOR DRUGGISTS

The Hammond Typewriter Company, 588 E. 69th St., New York, are inviting the druggist's attention to their new "Multiplex Hammond" which has two complete type sets on each machine at the same time, and can be changed in the fraction of a minute. Altogether they have nearly 400 different type sets, including every known language which puts this machine in a class by itself for anyone who desires to use more than one language or any special characters. Druggists who are interested in typewriters are requested to send for their special pharmaceutical catalog, which will be sent free on application.

NEW AGENCIES FOR KNIGHT FOUNTAINS

The Knight Soda Fountain Co. of Chicago announce that they have arranged for two new distributing agencies for their fountains during this past month. Blanding & Blanding of Providence, R. I., for a portion of New England and B. Bernheim Co. of Philadelphia, for Pennsylvania and part of New Jersey.

They also report an unusual increase in the number of sales, particularly in the Eastern States where they have only recently placed their fountains on sale. Their motto "Sanitation" the company says, has brought the Knight *all white fountain* into the front rank for soda fountain construction within a shorter period than that experienced by any other fountain on the market. They attribute this to the complete sanitary principles on which their fountain has been constructed, combined with the number of exclusive attachments.

The Massachusetts legislature has a bill to establish the centigrade thermometer as "a state standard clinical thermometer." It is regarded as an opening wedge toward a movement to replace the English system of weights and measures with the metric system, which many druggists favor. The thermometer bill has met approval of the Committee on Mercantile Affairs and the Committee on Ways and Means.

THE DRUG MARKETS

PRICE CHANGES CONTINUE UPWARD

Unsettled Conditions, Advances in Ocean Freight Rates and Scarcity Responsible—Glycerin, Paris Green, Newfoundland Cod Liver Oil and Mercurials all Higher—Adeps Lanae and Vegetable Fatty Oils Lower.

NEW YORK, March 23—The shifting conditions in the arena of international affairs and the multiplying uncertainties surrounding the possible importation and exportation of all commodities including drugs and chemicals, have not been without some effect upon the market, and as a result, prices for many articles show distinct advances. Connecting links between the revolution in Russia, which has transformed the Government of that country from an autocracy to a republic; the increased submarine activity on the part of Germany, and the probable action of our Government; the freight situation, and the general increased cost of raw materials, are somewhat difficult to coordinate, but taken altogether, passing events have impressed themselves upon nearly every activity, in a manner that has never been duplicated in the memory of the present generation.

As a general proposition, there is a stringency in the matter of drug and chemical supplies, due to scarcity and higher prices for crude materials, while advances in ocean freight rates are responsible for firmer quotations on imported articles like oils, etc. Higher prices prevail for acetanilide, acetphenetidin and a number of the so-called synthetic drugs, while such staples as opium, Newfoundland cod liver oil and quinine, have been advanced or are being held for higher prices. Glycerin, owing to the demand for dynamite grade by the Allied governments, has been advanced. Mercurials are also higher, while such botanicals as arnica flowers, belladonna, calendula flowers, caraway seed, Roman chamomile, jalap root, poppy seed and valerian root, have scored marked advances. Paris green, owing to high cost of basic materials and the difficulty of makers securing suitable laborers, is higher, while white arsenic shows an advance. Thymol is tending upward, and various potassium salts show higher ranges in prices.

Among the more important declines noted are those for adeps lanae, both anhydrous and hydrous, buckthorn bark, cacao butter, Russian isinglass, juniper berries, naphthalene, oils of birch, chaulmoogra, neatsfoot, peanut and rape seed; phenolphthalein, distilled extract of witch hazel and various zinc salts. Salicylates are also appreciably lower.

OPIMUM—Stocks are strongly held and only small importations are reported. Most of the available supplies are in the hands of manufacturers who are holding them for their own use. Jobbers offer small parcels only, at \$24@25 for natural, \$25@26 for granulated, and \$25@26 for U.S.P. powdered.

MORPHINE—The scarcity of raw material continues and manufacturers are offering in small lots only. A fairly active export demand is reported, chiefly from Japan for Russian account. Sulphate continues to be held at \$10.75@12.95 per ounce in ounces, and \$11@13.20 per ounce in eighths.

CODEINE—In sympathy with the price of the basic material and a good demand for export, this alkaloid continues firm at \$14.65@18.15 for pure, and \$12.80@14.55 for sulphate. Hydrochloride is held at \$13.20@16.40, and phosphate at \$11.10@13.65 per ounce, respectively.

ACETANILIDE—Keener competition between makers and an effort on the part of holders to dispose of stocks, have caused an easing off in prices, and jobbers are quoting 50c@56c per pound.

ACETPHENETIDIN—There has been an active demand, and this with reports of limited supplies, have caused an advance in quotations, jobbers asking \$2@2.10 per ounce for U.S.P.

ANTIPYRINE—Is firm at \$1.50@1.60 an ounce.

ALCOHOL—Following a general advance in prices by distillers, which has been attributed to the enhanced cost of raw material and an increased demand from both domestic and export interests, quotations on all grades have been marked up, jobbers quoting as follows: Cologne spirit, 95 per cent U.S.P., bbls., per gallon, \$2.98@3; less than bbls., \$3.08@3.13; commercial, 95 per cent U.S.P., bbls., \$3@3.02 per gallon; less, \$3.04@3.14. Denatured in barrel lots is held at 80c@90c per gallon.

WOOD ALCOHOL—Is in good demand, domestic color makers being heavy buyers. Jobbers quote \$1.10@1.15 per gallon.

PARIS GREEN—Manufacturers have advanced their prices due to the high cost of basic material (arsenic and copper), and the difficulty in securing laborers. The buying season is now on and there is an active demand, with jobbers quoting 34c@45c per pound, according to size of container.

WHITE ARSENIC—A shortage of available supplies is reported and higher prices are quoted for both commercial and purified, the former being held at 18c@20c, and the latter at 28c@30c per pound.

GLYCERIN—The demand for dynamite grades has had a stimulating effect on prices which have been advanced to 57½c@58c per pound for C.P. in bulk, drums and barrels added, and 58½c@59c for tins; less, 65c@70c per pound. A report stated that one of the Allied governments was in the market for 600 tons of dynamite glycerin. The demand for C.P. has been fairly active.

ADEPS LANAЕ—Lower prices are noted for both anhydrous and hydrous, the former being quoted at 60c@65c, and the latter at 50c@55c.

ISINGLASS—Russian is lower, being in better supply. Jobbers quote \$5.75@\$6 per pound. American is held at 90c@\$1 per pound.

EPSOM SALT—Jobbers quote 4½c@6c per pound for ordinary, 20c@25c for C.P. crystals, and 20c@30c for dried. In a large way, manufacturers are no longer offering prompt shipment goods and prices for spot are moving up. It is stated that embargoes on railways have held up shipments from the West, while another factor has been the cessation of importation of magnesite.

MERCURIALS—The advance in the price of quicksilver to \$1.70@1.75 per pound has been accompanied by higher prices for all mercurials, the revised schedule being as follows: Bichloride (corrosive sublimate), \$1.76@1.86; powdered, \$1.71@1.81; bisulphate, \$1.50@1.60; chloride, mild (calomel), \$1.89@2.10; iodide, green (protoiodide), \$4.30@4.70; red (biniodide), \$4.40@4.70; oxide, red (red precipitate), \$2@2.33; sulphate, \$3.40@3.55; sulphocyanate, \$3@3.25. Mercury with chalk is held at 99c@\$1.07, and citrine ointment at 76c@83c per pound. Mercurial ointment, 50 per cent, is \$1.16@1.25, and 33 per cent, 87c@97c.

COPAIBA—South American has been advanced to 90c@95c per pound, Para remaining unchanged at 63c@70c.

NAPHTHALENE—There is an active seasonable demand, and quotations are firm at 12½c@13c for both ball and flakes. It is said that the submarine campaign and uncertainties surrounding international affairs are constantly influencing market conditions affecting the production of this antiseptic.

PHENOLPHTHALEIN—A material decline in prices has developed, due to a lack of demand and increased competition among holders who are anxious to get rid of surplus stocks. Jobbers quote \$1.60@1.70 per ounce.

JUNIPER BERRIES—The demand has somewhat subsided and prices are easier with quotations reduced to 12c@15c per pound.

CHAMOMILE—Flowers of the Roman variety are higher at \$1.20@1.25 per pound, the uncertainty relative to the arrival of future supplies influencing the market upward. Spanish flowers are quoted at 65c@70c.

ARNICA FLOWERS—Stocks are scarce and no arrivals reported, jobbers quoting \$3@\$.25 per pound for whole, and \$.25@\$.40 for powdered.

BUCKTHORN BARK—Is easier at 35c@45c per pound.

CALENDULA FLOWERS—Stocks are in limited supply, and following reports of stronger primary markets, quotations have been marked up to \$2.50@\$.2.75 per pound.

ANISE SEED—All varieties are higher, ordinary being held at 40c@45c; and star at 35c@40c.

COD LIVER OIL—Newfoundland oil is higher owing to an increase in the demand from domestic and foreign buyers, and reports of heavy buying in the Newfoundland market for English consumption. The inference is that Germany will undoubtedly secure the bulk of the Norwegian output, which, so far this season, recent cable despatches state amounts to 2,784 barrels against 3,364 barrels for the corresponding period last year. Current jobbing quotations for Norwegian are \$1.25@\$.1.28 per barrel, and \$5.50@\$.6 per gallon for less. Newfoundland is strongly held at \$2.90@\$.3 per gallon. It is said on apparently good authority that if English buying continues at its present rate, the entire Newfoundland cod liver oil supply will be wiped out very soon.

DIGITALIS LEAVES—The higher cost in primary market, as a result of short production and exceedingly small spot supplies here, and a larger domestic demand have led to higher prices, jobbers quoting as follows: Bulk, \$1@\$.1.10 per pound; powdered, \$1.05@\$.1.20; pressed, in ounce packages, \$1.20@\$.1.40 per pound.

VALERIAN ROOT—Belgian is scarce and higher at 85c@96c per pound for whole, and 95c@\$.1 for powdered. English is held at 85c@95c for whole and 95c@\$.1 for powdered.

WITCH HAZEL—Quotations are lower for distilled extract which is offered at 65c@71c per gallon by the barrel, and 77c@85c per gallon for less. Witch hazel leaves are also easier at 15c@20c per pound.

POTASSIUM SALTS—Advances are noted for a number of potassium salts, most of the changes being traceable to scarcity and increasing demands. Bicarbonate ranges from \$1.70@\$.2.30 per pound; cyanide, \$2.50@\$.2.75; nitrate, 42c@48c; powdered, 40c@45c; permanganate, \$4.50@\$.4.70; prussiate, red, \$3.25@\$.3.50, yellow, \$1.20@\$.1.35. A gradual reduction in spot supplies of caustic potash is also reported, and quotations on white sticks have been recently advanced to \$1.50@\$.1.60 per pound.

ESSENTIAL OILS—Advances are noted on the following: Caraway, \$5.75@\$.6.25 per pound; mustard, artificial, \$1.85@\$.2.50 per ounce; sandalwood, English, \$13@\$.13.75 per pound; wintergreen, synthetic, \$1@\$.1.05 per pound.

VEGETABLE AND FATTY OILS—Current quotations are as follows: Benne (imported sesame), \$1.80@\$.1.90 per gallon for barrels or less; castor, American, 25c@30c per pound; chaulmoogra, \$2@\$.2.25 per pound; linseed, boiled, \$1.12@\$.1.17 per gallon; raw, \$1.10@\$.1.15 per gallon; neats-foot, \$1.10@\$.1.15 per gallon; olive, Malaga, \$1.90@\$.1.95 per gallon; peanut, \$1.35@\$.1.45 per gallon; rape seed, \$1.40 per gallon; salad, \$1.30@\$.1.35 per gallon; sperm, winter bleached, \$1.35@\$.1.50 per gallon.

THYMOL—Increasing scarcity of this product is reported and prices are tending upward, jobbers quoting \$18.25@\$.21 per pound.

TIN OXIDE—Following an advance made by manufacturers owing to the higher prices for tin, jobbers are asking 70c@80c per pound for pure oxide.

WHITE HELLEBORE—There is a strong seasonable demand and powdered root is quoted at 40c@45c.

The test cases of E. Fougere & Co., Inc., Charles N. Crittenton Company and H. Planten & Son, against the Department of Health of New York City, have been set for hearing on April 3rd. The Appellate Division has given the argument of these suits preference over cases on the calendar. E. Fougere & Co. said in the final papers filed by Charles M. Russell, counsel, that the defendants were trying to bring into the issue matters not in the evidence and not referred to in the controversy.

LARGE RUSSIAN DEMAND FOR BEESWAX

Manufacture of Candles Used in Greek Church Service Depletes American Stock—Price Rises to 44 Cents per Pound—Substitute for Other Waxes

Beeswax, crude yellow, at present quotations of 42 cents to 44 cents a pound is fully 50 per cent higher than in normal times, and the trade opinion is that values will hold to a steady advance. The manifold uses for this product and its employment as a substitute for a number of waxes no longer obtainable, together with an increasing export demand, are keeping stocks in this market at a low ebb, and a doubt is entertained as to whether visible and anticipated supplies will be sufficient to meet all needs.

Beeswax of this summer's crops in the southern hemisphere is due in this market now but is slow in arriving on account of the lack of shipping facilities. Stocks from the coming summer's harvest in this country will not be available for several months. Fair quantities are coming in from tropical and sub-tropical regions but not in the usual amounts as collection has been retarded in several sections by the disturbed political situation.

Demands for beeswax are constantly increasing. To increase production is a more difficult problem and one in which the co-operation of the bee must be taken into consideration, though it is quite likely that the high prices have stimulated a greater collection. Marketed in much the same way as roots, herbs, etc., the quantity collected by any one individual is small, but seekers after wild honey, gatherers of the half cultivated and keepers of apiaries all add their mite to an aggregate that is an important factor in a number of industries. Large quantities are consumed in the making of candles and wax polishes. In the manufacture of cosmetics, ointments, cerates, etc., the quantities used are also considerable. Its use as a substitute for ozokerite, now that the latter is no longer obtainable, and its use in place of other waxes that are becoming scarce with prices prohibitive, opens a big outlet for beeswax, and not the least of these is its employment in the manufacture of insulating compounds.

Of the foreign buyers, Russia, probably, has been the largest purchaser in this market. Large quantities of the wax are consumed in Russia in the manufacture of candles for ritual purposes. Nothing but pure beeswax candles are permitted to be used in the Greek Catholic churches. Shut off from the usual sources to the south, Russia turned to other countries for supplies, and to the heavy purchases made last summer and fall in this country is directly attributable the present shortage in beeswax.

ELECTS DIRECTORS AND OFFICERS

At the tenth annual meeting of the directors and stockholders of the American Druggists' Fire Insurance Co., held in Cincinnati last month, the following directors were elected: Charles H. Avery, L. G. Heinritz, J. H. Beal, Edward W. Stucky, William C. Anderson, C. O. Young, A. O. Zwick, L. C. Hopp, Simon N. Jones, John D. Muir, Walter Rothwell, George B. Kauffman, M. S. Kahn, E. B. Heimstreet, and Frank H. Freericks.

The directors elected the following officers: President, Charles H. Avery; vice-president, L. G. Heinritz; secretary and general counsel, Frank H. Freericks; treasurer, George B. Kauffman. Executive committee: Chas. H. Avery, L. G. Heinritz, Walter Rothwell, A. O. Zwick, J. H. Beal, George B. Kauffman and Frank H. Freericks.

The reports covering 1916 showed that the company had had the best year in its history, and had written ten times as much insurance as it wrote during its first year. The insurance written during 1916 amounted to \$19,006,594 at an original premium of \$197,236.49. The business in force at the close of 1916 amounted to \$19,044,579 at a premium of \$200,287.41, the company saving its policy holders in the cost of their insurance \$65,745.49. The board of directors declared a 10 per cent dividend to stockholders, payable March 1st. The total assets of the company on January 1st were \$480,318.16, and the liabilities other than re-insurance reserve were \$9,248.13, leaving available for the protection of policy holders \$471,070.03. After deducting the re-insurance reserve of \$83,302.77, a surplus as to policyholders is shown of \$387,767.26.

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PHARMACISTS AND THE WAR

Partial plans have already been formulated by the Council of National Defense for the mobilization of the country's resources, and in so far as they relate to the drug trade, the duty imposed by these plans is to be performed by a committee drafted from the drug trade. The individuals selected for the work are men of affairs and representative of "big business" in the assembling of materials used in the manufacture of medicines and in the distribution of finished products. It is true that they have gained this knowledge in times of peace, but just such knowledge will be needed in greater degree when the war is fully upon us. Common experience proves that the armament of the battleship must be perfected before the engagement, and cannon must be manufactured before it can belch forth death-dealing blows at the enemy. In no less degree the organization of armies and of assembling supplies and materials must be provided for if success is to be obtained.

The armamentarium of the medical and hospital corps of this great organization constitutes no small part of this work, and it must be perfected on a scale commensurate with the place that America is to occupy in the war in which the Nation is now engaged. That pharmacists are interested is shown by their activities in almost every section of the country, and the principal question before them is that of the capacity in which they can be of most service in the general scheme of preparation and of defense.

In offering their services to the Government the educational institutions of the country have not lagged in the rear, and it is noticeable that colleges of pharmacy have not been backward in this work. The College of Pharmacy of the University of Minnesota has announced that its faculty and students can manufacture preparations and pharmaceutical chemicals, apply tests of identity and purity to purchases and examine foods, besides collecting official drugs and assisting customs officials in examining imported drugs, etc. Other institutions have organized themselves into units for the hospital corps or other duties that a well-trained pharmacist can be expected to perform. Associations of active pharmacists have also offered their services in the great mobilization of the Nation's resources, all eager with the flame of patriotism burning brightly in their hearts and ready to perform their duty to country.

It is certain that plenty of work will be found

for all. It is estimated that the war will compel the Government to go into the market for large quantities of drugs and chemicals, which will cost many millions of dollars. How to meet these demands will be the problem confronting the Council of Defense. In a way, this is to be accomplished by distributing the Government's orders to the largest possible number of manufacturers so that each can do the part for which he is best fitted and without disturbing the natural channels of trade. Therein lies a hint for the pharmacist. If he is wise, he will endeavor to perform that for which he is best fitted. In deciding this question he will do well to bear in mind the admonition of the officers of the Council of National Defense: "the business men of the Nation will be doing a greater service to their country should they exercise all their powers to keep the wheels of commerce moving."

THE VICTOR CASE AND PRICE MAINTENANCE

When analyzed and studied in its entirety, it is not likely that the recent decision handed down by the United States Supreme Court in the Victor vs. Macy case will be found antagonistic to the general principle of price maintenance, although it strikes a blow at the method employed by the Victor Company, which attempted to avoid the direct price maintenance issue and to fix prices under a plan of limited transfer of title. As stated by the Court, the Victor "license" plan was not "designed to secure to the plaintiff and the public a reasonable use of its machines within the grant of the patent laws," but "the scheme was regarded by the plaintiff itself and by its agents simply as one for maintaining prices by holding a patent infringement suit in *terrorem* over the ignorant and the timid."

It was further stated that the purpose and effect of the "license notice" of the plaintiff, considered as a part of its scheme for marketing its product, was "not to secure to the plaintiff any use of its machines, as is contemplated by the statutes, but that its real and poorly-concealed purpose is to restrict the price of them, after the plaintiff had paid for them and after they had passed into possession of dealers and the public." Such a principle, the Court held, is "obnoxious to the public interest."

Just how closely this decision will affect the general principle of price-maintenance legislation remains to be seen. The Stephens bill, which has already experienced the rocks in the tortuous current of legislation, has been re-introduced in both houses of Congress, with the prospect that its passage may again be delayed by the larger issues which now engage the attention of the country at large. Plans of price-maintenance by means of notice to dealers, as in the Sanatogen case, and by contract, as in other cases, have failed to accomplish what the manufacturers desired, and the solution of the problem, if it is to be solved, must necessarily be the subject of future Federal legislation. Drafting a law that will harmonize the apparent conflicting interests of manufacturers and consumers, and which will at the same time be consistent with the general principles of public policy, is not so easy as some people would seem to think.

REGARDING USE OF PROPRIETARIES

So far as we are aware, the first systematic attempt of a competent body to study the various propositions that have been made for the control of the sale of proprietary medicines and their use by the public was that undertaken last year by the Commission on Proprietary Medicines of the American Pharmaceutical Association. The report of this study was made public in the early part of the winter just passed, and in the character of the information presented there was evidence that some progress had been made. Now the Commission ask the assistance of the drug trade in gathering statistics relating to the alleged injuries caused by the use of proprietary medicine, and particularly to the alleged use of such remedies for beverage purposes.

According to Prof. J. H. Beal, chairman of the Commission, the information so far obtained is of such an indefinite character as to be almost valueless for statistical purposes, and the Commission is adopting the method of seeking information from the trade at large in the hope that it will lead to tangible results. Whether the data obtained in this manner will be sufficient to accomplish the purpose of the Commission must for a time remain an unanswered question. Proprietary men, the most interested of all individuals in keeping down and answering the criticisms made against such medicines, have struggled with the problems presented, but their conclusions have always been received with reservation by the public and skepticism by the medical profession. The investigations of the doctors have resulted in an equally antagonistic attitude, and one which could well be anticipated by their preconceived opinions of hostility to proprietary medicines in general.

That the drug trade is a party in interest cannot be denied, but this much can be said, that whatever evidence druggists may be able to furnish or whatever answers they may return to the questions asked, they are in a better position than either manufacturers or physicians to get at the facts wanted. In many instances they have, or are in a position to obtain, knowledge of the untoward effects or misuse of such medicines as they may have sold. The reports they may return will undoubtedly be characterized by some as being partial to such medicines from the sale of which they are supposed to derive some revenue, but in the face of this we believe they are in a better position than any other individuals to furnish reliable data on this interesting subject.

Definite information of the kinds indicated below is sought and will be greatly appreciated by the Commission:

- (1) Accounts of specific cases of harmful results following the use of proprietary medicines.
- (2) Accounts of specific cases of narcotic drug-habit resulting from the use of proprietary medicines, or of the use of proprietary medicines for the satisfaction of a habit previously existing.
- (3) Accounts of specific cases of the habitual use of proprietary medicines as substitutes for the usual alcoholic beverages.

Information bearing upon the above should state facts and circumstances that are capable of verification, and should be addressed to J. H. Beal, 801 W. Nevada street, Urbana, Ill. This opportunity of helping to settle the status of the proprietary medicine should receive the attention of the members of the drug trade generally.

War's Great Appeal

The Pharmacist in the Army and Navy

BENEATH the stars there is a group of small, low, dark brown tents around a slumbering camp fire. Not far away stands a man in khaki, with a gun on his shoulder. Everything is quiet as if in peace time. Then the camp commander receives an order, sends for his bugler, and the sharp notes of the rally call make the camp bustle with activity.

On April 2 President Wilson stirred the United States, which was sleeping peacefully, by blowing the rally call. The promptness of the soldiers in the tents has not yet been equalled by the citizens of the nation, but steadily and gradually enlistments are reaching up to the mark the President has set. And as the enlistment figures mount the scale the pharmacists of the nation find opening before them opportunities which most of them never believed could be offered.

How many pharmacists knew that the navy offers intensive and extensive courses in pharmaceutical chemistry to enlisted men in the Hospital Corps? How many druggists knew that real efficient pharmacy, in all its details is taught in the navy, that there is really a school for advanced work for hospital apprentices and pharmacists' mates?

All these things are so—the call of President Wilson is bringing a clear knowledge of them to men who never suspected a development in that line before.

Such high development is not true of the army. But there is a valuable course in handling and dispensing of



Pharmacy Training Classes

handling the duties. Pharmacist's mate, chief pharmacist's mate and acting chief pharmacist's mate are the other high grades of the service.

Army Hospital Corps

In the army there are actually two Hospital Corps. One is a separate unit acting under its own officers as a regimental or brigade outfit, while the other is the hospital company of the regiment itself. The latter is an organization of stretcher carriers for the most part, and there is no effort to have trained men in its roster.

In the Hospital Corps, itself, the men are trained men. It is to this unit that druggists, with training, will be assigned. The man who joins one will find himself in interesting circumstances, but face to face with a large amount of important work.

To him comes the actual work of camp sanitation. Not the digging of sanitation trenches, of course, but the planning of them. To the soldier-druggist comes the care of the sick. He may be required to drive an ambulance. He may not see any more than a glimpse of actual fighting. But he must always be on hand, usually working when the other are resting in camp.

The most arduous duty, however, is yet to be told. The Hospital Corps is charged with all the drugs, medicines and medicinal supplies that are sent with any army in the field. So the trained pharmacist becomes, in addition to his other work, a stock keeper. He must keep accurate account of everything, and so becomes a sort of detached



Learning "Pill Rolling"



First Aid in the Field

drugs, in aiding the sick or helping the wounded on the field of battle. The Hospital Corps in both branches of the service are well organized, strong units, made up of men either actually in the profession or men who have been trained along the lines of it.

The highest rank for an actual pharmacist in the navy is pharmacist, which may be gained after experience and the proof that the applicant is temperamentally capable of

adjutant working in conjunction with others of his own kind.

At first glance it appears as if the duties of the pharmacist—even these given are not all, there are others that can be thought out—are particularly difficult. But war time is not joy riding time. The man in the front rank of the infantry has several interesting duties to perform, too, not the least of which is that of standing up along

with his fellows and permitting the enemy to shoot at him.

However, the pharmacist will be shot at. He must not figure that because he is behind the firing line that he is immune. He isn't. He's just as likely as not to be bothering his head about a consignment of quinine that the supply wagons have let founder in the mud down on the service road and to be worrying some because an A. D. C. of division has told him the commanding general has a cold, when along will come a big shell to keep him company. While it is perfectly true that the Hospital Corps usually is in position behind the actual lines, the unit is rarely placed so far behind that a stray shell will not reach it. If such a shell comes the Hospital Corps will have immediate need of another unit of the same class.

When the United States went into this European war it went into a real raging fight, nothing less. If it sends men to the firing line it will only appreciate what it is up against the more. And the pharmacist who is part and parcel of that firing line army will know he is up against war. It's dangerous and mighty uncomfortable. Why, work in Plattsburg camp, which the writer experienced last summer, is no play, and the only enemy there was the continued rush of visitors to camp.

The Navy's Requirements

The situation in the navy is somewhat different. The recruit must pass a difficult mental examination because his work is more directly a matter of pharmacy. The ranks are pharmacist, chief pharmacist mate, permanent; chief pharmacist mate, acting; pharmacist mate, hospital apprentice. There are several classes in each of the ranks.

The Navy Hospital Corps, when it is a landing force, acts in the same nature as does the army corps. Its men are trained "first aiders," who are oftentimes subjected to a heavy fire. They act as supporting unit to the stretcher bearers and are expected to operate a field ambulance and hospital station back of the actual firing line.

Much as in the army the navy is a surgery unit. Its duties are in the hospital most of the time. It dispenses drugs for the ship, however, and its members must know how to prepare medicinal doses of various sorts, as well as how to handle a large quantity of drugs in a hurry. There are times when the pharmacy shop of a battleship of the first line will supply the entire fleet, but that rarely happens in war time because of the uncertainty of rapid communication between units of the same fleet.

On shipboard the duties are probably more interesting because of the greater exactness demanded. An expert pharmacy operator who enlists now for a term of three years will find those three years a source of great profit. Aside from any appeal to patriotism and honor there is the appeal to education and growth in ability.

The Naval Hospital Corps is one of the strongest and best developed branches of the service. It has reached a high point of efficiency and the necessity for going to war now will increase its value.

Druggists who want to enlist will find plenty of opportunity in their neighborhood, no doubt, but every large city has a recruiting office, and now, in war time, most of them have three or four. However, information can be had in the ERA office at any time regarding the navy, army and marines, which is really a branch of the navy insofar as the Hospital Corps is concerned.

NEW YORK COLLEGE DRILLING

The students of the first-year class of New York College of Pharmacy, organized by Benjamin Rosenberg, U. S. A., retired, have organized and are drilling as a reserve corps in the First Field Artillery Armory, New York. The organization can be turned over to the regular army at almost any time.

Among propositions offered the senior class is one from Major John F. Dunseith, commanding the First Battalion, First Field Hospital Corps of the New York National Guard. He offered to provide trained drill sergeants and to give free use of the armory if the college would organize a complete unit of 67 men, with three commissioned officers. More than this number volunteered and drills have already commenced.

BAYONNE, N. J., DRUGGISTS FORM UNIT

In Bayonne, N. J., the members of the Bayonne Pharmacy Association have organized a Red Cross unit. They will be used to co-operate with doctors and members of

the Medical Corps of the Army when the armies take the field. A collection was taken up to meet immediate requirements and a further fund will be taken up to be used as an emergency fund for doctors in war time.

KANSAS CITY IS HELPING

An army pharmacy course has been added to the course of study in the Kansas City College of Pharmacy. The class, open only to seniors, has a special trained instructor. It opened the first of April and its graduates will be fitted to take up Army Hospital Corps work at once.

ILLINOIS STUDENTS DO THEIR BIT

Seven hundred students of the University of Illinois College of Pharmacy responded to a patriotic address by President James recently by pledging themselves to the service of the Nation. The President told the boys that the salvation of the country lies in universal training and they at once agreed to take it up.

MINNESOTA COLLEGE TO HELP

Dean F. J. Wulling, of the College of Pharmacy of the University of Minnesota, has suggested in a letter to President George E. Vincent how the College of Pharmacy can be of service to the Government in the prosecution of the present war. The dean's statement is in line with the offer of President Vincent, who has offered the services of the university to the nation.

Here is what the College of Pharmacy proposes to do:

Manufacture in bulk of official and nonofficial pharmaceutical preparations.

Manufacture of pharmaceutical chemicals, the Government to furnish the supplies.

Application of tests of identity and of purity to purchases of pharmacopoeial as well as nonpharmacopoeial medical supplies that the Government might make in this vicinity.

Chemical examination of foods.

Furnishing of official drugs, such as belladonna and digitalis, to be grown in the College of Pharmacy garden.

Cultivation of some of the official vegetable drugs.

Direction and supervision of the collection of vegetable drugs growing wild in Minnesota.

Co-operation with the pharmacologists of the Bureau of Chemistry or with the St. Paul or Minneapolis Custom House in the examination of drugs imported through the local customs department.

HARRINGTON CASE IN SPECIAL SESSIONS.

The case of Clement D. Harrington, head of the Harrington Drug Company, 249 West Broadway, whose stock of heroin was seized by members of the Narcotic Squad recently will be tried in the Court of Special Sessions. Mr. Harrington is under \$1,000 bail. A motion to dismiss the case was made before Magistrate Ten Eyck on the ground that the charge did not constitute a crime. The court denied the motion on the ground that the police could not discover a violation of the law unless the druggist kept a record of his receipts as well as the amount of his sales, the attorneys for Mr. Harrington having argued that the law did not require him to keep a record of receipts. The lawyers contended that Section 248 of the Public Health Law contains only two requirements, saying:

"The druggist must keep a record showing (1) the name and address of each person to whom heroin is dispensed and the quantity; (2) he must keep a record of any other disposition of heroin. It will be noted that the information does not charge that either of these requirements has been violated. The charge was not that Harrington had less heroin than he ought to have had if all dispensations had been recorded, but that he had more after considering all recorded sales. There is no requirement in the statute that a druggist keep a record of receipts but only of outgo. The only conclusion is that, as the defendant had more than he had at some prior date, counting what he had dispensed, he must have received some heroin. This is not a crime; nor is there anything in the section of the statute under which the accusation is made requiring a druggist to keep an account of purchases of heroin or to keep any account thereof, nor is any 'discrepancy' in the account a misdemeanor."

American-Made Perfumes

How the Materials are Gathered Together For Them

AN ADDRESS DELIVERED BY FRED. F. INGRAM, JR., PH. C., B. S., BEFORE THE PHARMACY STUDENTS OF THE STATE UNIVERSITY OF IOWA, IOWA CITY.

THE property that certain substances possess of giving off pleasant odors has been known and utilized for many centuries. You will recall that at the birth of Christ two of the wise men, who journeyed from the East, brought perfumes; the other brought gold. Perfumes have played a more or less important part in history ever since their introduction. Cleopatra attracted many men by her judicious use of certain aromatic substances.

The plants which furnish raw materials to the perfume industry are grown in nearly all parts of the world. The oils or substances that are used in the manufacture of perfumes and toilet preparations occur in many parts of the plant. The reason for their occurrence in the plant is not generally known, or at least it has not been definitely determined. Some scientists think they are present as antiseptics, to prevent the attack of insects that prey upon the plant. Others hold to the theory that they assist in the fertilization of the flower, as there is more essential oil just before fertilization than at any other time.

The oil occurs usually in the flower, sometimes in the leaf, occasionally in the stem, bark or root, and often the whole plant is distilled to make the oil.

There are five main processes for the extraction of the oil from the plant, the one used depending upon the product required and upon the plant to be treated.

Expressing a Simple Process

The most simple process is expressing. The oil appearing as such in the rind or outer peel of the fruit such as lemon, orange or bergamot, the rind needs only to be punctured and expressed. These oils are used to produce freshness and fragrance in perfumes.

Another process, distillation, affords the largest field for obtaining volatile oils. Shortly before the war a French company installed a vacuum steam-distillation apparatus in Bulgaria where ancient methods had prevailed. The older way produces a yellow otto of rose; the French company produces a green otto of rose free from objectionable products and more desirable for perfumers' use. About seven thousand pounds of rose-petals give but one pound of otto of rose, and the distillation is a long and tedious process. The rose-petals are gathered in the morning before the sun is high, placed in water and heated. When a certain amount has distilled, the water of distillation is set aside, mixed with other rose distillate, again distilled and allowed to stand. The oil rises to the top and is skimmed off.

There are a few substances that we do not draw from the vegetable kingdom. The material called musk is an excretion of the musk-ox that inhabits Tonquin-China. Civet comes from the civet cat, living in Abyssinia. Ambergris is a substance picked up occasionally on the Pacific coast and is a kind of pus excreted from diseased whales. These substances are the principal ones obtained in the animal kingdom. They are used as fixatives to make the perfume last longer.

Crude Material Production

It is in the south of France, however, that most of the crude materials are produced for perfumers. You may wonder why the perfume industry is so largely centered in the south of France. There the proper amount of sunshine and rainfall is assured, and the soil has the proper constituents.

The French call the south of France the spot that God has blessed. The hot winds blowing from the Sahara accumulate moisture in their journey over the Mediterranean and are deposited as rain fall on the mountains. The Grasse region comprises about forty square miles. Its protection from the cold winds of the north by the Alps makes possible a mean temperature of 56.3° Fahrenheit the year round.

In the low mountains nearer the sea are grown oak

trees, producing cork. Higher up in the mountains grow lavender, thyme, and rosemary. These flowers live but a few minutes after they have been plucked, so the stills are carried into the mountains on the backs of mules and these oils distilled on the spot. Olive trees are grown in abundance on the fertile mountain-sides, and in the shade of these trees violets are cultivated.

The factories are busy the year round. When January comes the cassie flower blooms, and from then on the other flowers are gathered, ending with the jasmine in November. December is devoted to purifying the fat and cleaning up the factories. Two thousand tons of orange flowers alone are used every year in this little town to make perfumes.

Extracting Odors

There are two processes, the hot and cold, for extracting the odors from flowers by means of fixed solvents. The one used depends on whether the flower is capable of elaborating more perfume after it is cut or whether it commences to wither as soon as it is plucked. Jasmine and tuberoses elaborate more fragrance and the cold process is employed. The glass bottom of a frame about twelve inches square is covered with a layer of fat, the petals laid in, and another glass frame placed on top with both sides fat covered. The petals are thus enclosed in a box the top and bottom of which are covered with fat. The top layer catches what odor may escape, and the lower layer steals the perfume from the flower as butter steals the odor of fish in a refrigerator. The frames, or chassis as they are called, stand twenty-four hours. The petals are removed and fresh petals placed on what was the upper layer of fat. This is continued until the fat has absorbed sufficient fragrance.

Roses, violets and orange flowers are extracted by the hot process. This consists in melting the purified lard, stirring in a certain weight of flowers and macerating for some time. Fresh quantities of flowers are added till the fat is saturated. The petals are now removed from the fat and expressed in hydraulic presses.

The finished product in either case which is a fat saturated with some flower odor is called a pomade. In order to extract the perfume from the pomade it must be washed. The fat being soluble in alcohol at the ordinary temperature it is necessary to make the washing at freezing temperature. The washers are surrounded by ice and salt mixture, cologne spirit introduced, the fat added, and the apparatus agitated so as to insure perfect exhaustion. After a certain length of time the washers are opened, the spirit drawn off and becomes a "wash." These washes form the bases for perfume.

There are several substances that might be used in the extraction of the oil, like alcohol and benzine, but a certain petroleum ether has been found the most practical. It has a low boiling point, no pronounced odor, and is easily recovered. The flowers are placed in baskets in a battery of copper kettles and the air partially exhausted. The air must not be taken out too rapidly, nor too much of a vacuum be allowed. The vacuum is liable to absorb some of the perfume. When the air is sufficiently exhausted the petroleum ether is pumped in and led through the flowers in a manner similar to Diehl's method of percolation. The treated flowers are subjected to extraction with fresh solvent, and the fresh flowers with old solvent.

The ether is now led away, always in partial vacuum, to stills. Here great care must be exercised in the recovery of the ether. Too high a heat would injure the oil, and too low a temperature would allow ether to remain and adulterate the product. Vacuum must be carefully regulated to prevent loss of odor. The recovery of the ether has become such a science in the south of France that the ether lost is relatively small.

The last process of obtaining aromatic substances is simple maceration, as is done with orris root; musk, civet and ambergris.

We come now to the industry of synthetic odors, which has been the most interesting development in the history of perfumes. The first to be discovered was vanillin, an aromatic constituent of vanilla. Oil of cloves, grown in Zanzibar, contains eugenol. Eugenol can be converted into isoeugenol, and isoeugenol into vanillin. Coumarin, which also occurs in vanilla, is used in perfumery and is synthetic.

Ionone, or irone, the active constituent of orris root, resembles the perfume of violet. It may not be the identical compound which exists in violet, but it gives an odor very similar. It is too expensive, however, to produce from orris root. Citral can be easily obtained from lemongrass oil, which is cheap. When citral is condensed with acetone we get two compounds, alpha and beta ionone. The alpha, best grade, is separated from the beta, which is used chiefly in soap perfumery.

Heliotropin resembles the perfume of heliotrope. It is made from safrol, which is in turn obtained from oil of camphor.

The perfume should not be placed upon the market until it is at least six months or a year old, and the older it is the more thoroughly blended it will be. It is best for the washes and tinctures, also to be well aged before being used in the manufacture of perfumes. The finished aged product made from well blended-by-age tinctures and washes will amply repay the manufacturer for the time and money he has had invested.

Cheap perfumes are made up partially of synthetics. If a cheap white rose and a good white rose be followed with the nose it will soon be discovered why one sells for \$6.00 and the other for \$3.00. The cheap white rose goes away soon after it is put on a piece of paper, while the good rose stays. That should be the test of the purchaser of perfumes. A perfume should develop evenly as it dries and maintain its original character.

It pays to handle good perfumes. There is little or no repeat sale on the cheaper grades. The consumers are beginning to realize that perfumes, like silks and furs, must be reasonably expensive in order to be worth while.

The druggist sells stamps and has blotters at his money-order windows to be used. A few drops of a good perfume on the blotters will stimulate the sale on perfumes. Some one will like the perfume and ask what it is. A drop on the blotter in the writing paper will perfume the box and make another customer. A perfume is to the flower what a phonograph record is to the voice. When the lilacs are blooming some good lilac perfume sprayed in the store will advertise the perfume counter. On Mothers' Day a bottle of good perfume will last mother longer than flowers, and it should certainly please her just as much.

In using perfume some people add a little as they go and then find it is too much. It should be applied to the linen when it is laid away. That gives the perfume a chance to permeate through and impart a refined scent to the garment.

Toilet waters have been attracting considerable attention lately. Many people use these and do not use perfumes. They understand toilet waters to be a substitute for perfumes. This causes a loss of perfume sales. A toilet water is not a substitute; it is a supporter of perfumes. It has a different mission. The toilet water is invaluable in the care of the complexion. The face can not be thoroughly cleaned with soap and water. There is always dirt in the pores after a hot bath. A little dab of toilet water on the handkerchief rubbed on the face will remove more dirt. If a woman, before she puts on a face cream, would clean her face with toilet water, the face cream would do more good. Toilet water is also good after shaving. A mosquito bite in the summer makes one think of ammonia first. A little dab of toilet water will cure that bite just as quickly as ammonia, and without burning.

A Missouri newspaper records the fact that a public spirited Sarcosie druggist of that State has supplied every pupil in the grade schools with tooth paste, but the problem of inducing the boys to apply it to their teeth he leaves to the ingenuity of the already overworked teachers. Some problem!

SOME AMERICAN CHEMICAL NOTES

Uses of Rubber Sponge and Spinach

A new method of preparing rubber sponge direct from the latex or sap of the rubber tree has been patented, and it bids fair to make the product much cheaper. Rubber sponge has several peculiar properties. It is exceedingly light, its specific gravity compared with water being 0.05, which makes it about the lightest solid body known. Although it is full of holes, the hole are independent; they are not connected with one another, so that it is water-tight and very nearly gastight. It is ideal for life-preservers because it will not waterlog; it is light, conforms easily to the body and it will not collapse. A life-raft made of rubber sponge is as nearly fool-proof as it can be. Most automobile tire fillers have gone into the discard because they do not respond or because they heat up or decompose; but rubber sponge is to be molded to fit the inside of the tire casing.

Rubber sponge is also useful in making sound-proof rooms and for placing under light vibrating and hammering machines. It is further proposed for clothing for aeronauts and for Arctic work.

Hard rubber sponge is the well known hard rubber, but in a spongy state. It weighs a quarter as much as cork and one-tenth as much as light wood. It is suggested for battery jars, insulation and may be worked in any way customary with hard rubber.

Chemical Business With France

Dr. F. J. Le Maistre of the American Industrial Commission to France has written of the chemical industries of that country in the last number of the industrial journal of the American Chemical Society. As in other countries, French chemical industry lagged behind that of Germany previous to the war. Manufacturers now realize that after the war they must specialize, co-operate and abandon inefficient plants and those unfavorably located. Formerly they bought a large part of their chemicals from Germany and they desire in the future to purchase many of them from the United States. But they candidly admit that in many respects the German manufacturers were better informed as to what they wanted than they were themselves. American manufacturers lack the underground help which the Germans enjoyed. Another difficulty which the Frenchmen cannot understand is why so progressive a country as this is so slow in the adoption of the metric system of weights and measures. They cannot understand pounds and ounces and gallons and feet and inches.

Paper From Spinach

A French horticulturist, Monsieur de Noyer, proposes the stems of spinach for making paper. These contain 46 per cent of cellulose against 4 per cent in the stems of wheat straw. M. de Noyer claims that in his experiments in making paper from spinach stems he has followed the methods of the Grenoble paper-making school and has produced a product equal to the best Japanese in its remarkable consistency. He intimates in an article quoted in the *Journal of Industrial and Engineering Chemistry* that with the proper culture of spinach for this purpose, remarkable economies in paper-making can be effected.

RULING ON SYNTHETICS REVOKED

In a recent treasury decision issued by the Commissioner of Internal Revenue and approved by the Secretary of the Treasury, the ruling contained in T. D. 2194, holding synthetic substitutes subject to the provisions of the Harrison Narcotic law has been revoked. The text of the decision, which is addressed to collectors of internal revenue and others concerned, is as follows:

The ruling contained in T. D. 2194, holding synthetic substitutes subject to the provisions of the Act of December 17, 1914, and requiring manufacturers of, dealers in, and physicians prescribing any such substitutes, as therein defined, to register and otherwise conform to the Harrison narcotic law and the regulations issued thereunder, is hereby revoked, to take effect this date (April 10.)

This ruling follows the decision of the United States Court of Appeals for the Second District, which held that novocain, orthoform, anaesthesia, holocain, and other synthetic substitutes for cocaine do not come under the provisions of the Harrison Narcotic law, and that physicians, dentists, druggists and wholesalers prescribing, using, or selling such synthetics, may do so without registering or using the official blanks.

CONSERVATION IN THE RETAIL DRUG STORE*

By William E. Danhauer, Owensboro, Ky.

For several years past many articles have been published in various magazines and newspapers upon the subject of the conservation of our natural resources. Most of us have thought and now think conservation is an excellent idea and certainly should be put into practice.

This word conservation has come into common use and we mention it when speaking of many of the activities of our daily life, such as the conservation of our health, the health of our families, the saving of infant life, the resources of our farm lands and of the natural water power.

Conservation may also be practiced in the retail pharmacy. A prescription is received for a small quantity of a seldom used powdered extract and upon withdrawing the cork the contents of the bottle are found to have become a hard, solid mass. By digging industriously we may weigh the required amount (of a doubtful strength), then possibly break a spatula and lose our temper during the operation. The powdered extract may be kept in better condition by sealing the cork with melted paraffin, and the only apparatus necessary for the operation is a tin ointment box, a retort stand and a bunsen burner or spirit lamp. The first thought that enters one's mind would be that it is a waste of time to seal the cork after using the drug, but on the other hand, there is also a loss of time and material in digging out a hardened powdered extract.

Among the many articles that it would be advantageous to seal with paraffin, besides the powdered extracts are the solid extracts belladonna, nux vomica and stramonium. In fact, all of the solid extracts, as also inspissated oxgall, thus keeping the powdered extracts dry, and the solid extracts in the moist state, as required by the United States Pharmacopoeia. Fluidextract of ergot will remain active longer than usual if the cork is kept sealed. To retard evaporation seal the stoppers in the bottles or cans of chloroform, ether and all of the collodions.

The list of chemicals that should be sealed is a long one. Some of them are deliquescent, others are volatile, while some undergo chemical changes when they are not kept well corked, but all of them should be sealed with paraffin when stored on the shelves. Only a few chemicals are herein mentioned, and the reasons for sealing them are obvious; ammonium carbonate, ammonium iodide, chromic acid, trichloroacetic acid, zinc chloride, calcium hypophosphite, sodium nitrite, sodium iodide, strontium iodide, benzoic acid, alphozone and acetozone.

The animal products are all more or less unstable, therefore they should be kept sealed and also in a cool place, included among them are pepsin, pancreatin, corpora lutea, desiccated thyroid glands and thyroid tablets.

In every drug store having a soda fountain the syrups used at the fountain are kept cold, and the same care should be given to the pharmaceutical syrups. If one has not a special refrigerator for the storing of serums and vaccines, they may be placed in the cold chest of the fountain, and in a similar way should be kept syrup of ipecac, syrup of ipecac and opium, syrup of wild cherry, syrup of squill and compound syrup of squill.

Solution of citrate of magnesia, lactis bulgara tablets and tubes, glycerin suppositories and all rectal, vaginal and urethral suppositories should be kept in a cool place. Likewise aromatic spirit of ammonia, spirit of nitrous ether, compound spirit of ether, and it is well to note that the corks should be well sealed to avoid evaporation or chemical changes.

The real intention of this paper is to illustrate how the conservation of resources may be practiced in the retail drug store by using often a little melted paraffin to seal the corks or stoppers.

The Wells Building Drug Company of Milwaukee is exhibiting many of the rare imported drugs that have nearly or entirely disappeared from the American markets in its window at Milwaukee and Wisconsin streets. With the display of drugs is a layout of the utensils and instruments used "behind the screen" in the preparation of prescriptions. The advertising phase of the idea lies in the calling of the public attention to the fact that only registered pharmacists do the work in the prescription department.

*Read before the Kentucky Ph. A.

BILLS INTEREST DRUG TRADE

Price Maintenance, Mail Order Business, Coupon System, Naturalization of Germans and Protection of Trade Marks Among Subjects Covered

(Special Correspondence.)

WASHINGTON, D. C., April 10.—The opening of the special session of Congress brought with it the introduction of a flood of bills into both the House of Representatives and the Senate, many of which are of interest to or have a direct bearing on the drug trade. One of these contemplates the taxing of all persons, firms, and corporations engaged in the mail order business. The bill was introduced by Congressman M. Clyde Kelly, of Pennsylvania. It provides that all persons, firms, or corporations in the United States which are now conducting or may hereafter conduct an interstate mail order business, shall pay a tax of two per cent upon the total cash value of all goods, wares and merchandise sold within any state.

To stop the giving of coupons, prize tickets, or other devices, with the sale of various kinds of goods, to be redeemed for other goods or for cash, Congressman Richard W. Austin, of Tennessee, has introduced a bill providing that each such coupon, prize ticket, or other device shall be taxed two cents, and a similar tax is to be levied, on and after September 1, next, on the redemption thereof. Mr. Austin would have any person, firm, or corporation failing to affix such stamp or stamps as required, subjected to a fine of \$50. Congressman Luther W. Mott, of New York, would put a stop to the giving of coupons and coupon devices accompanying such articles as are usually sold in a cigar store, by placing a tax of four per cent of the retail selling price of the article purchased, on each sale, the tax to be paid by the retail dealer.

The question of what is to be done with the hundreds of thousands of aliens in the United States who have never taken any steps towards becoming naturalized American citizens, is one that is at this time of the greatest interest to the commercial world. If all of these people, many of whom have lived in the United States for a long period of years and who have considered themselves Americans, even though they be not legally such, are to be confined in detention camps, thousands of large business establishments will lose some of their best trained men, especially in the drug and chemical industries.

A bill has been introduced into the House of Representatives by Congressman Esch which provides that any alien, 21 years of age, who has resided continuously in the United States for over five years next preceding his arrival at that age, may make application to be admitted a citizen without waiting the two years after declaring his intention to become a United States citizen.

Senator Charles E. Townsend, of Michigan, has introduced a bill into the Senate granting citizenship to all Germans who have lived in the United States for more than five years.

A measure for the protection of owners of trademarks, labels, and similar property is contemplated in the bill just introduced into the House of Representatives by Congressman Luther W. Mott, of New York. This bill provides that it shall be unlawful "for any person to knowingly make, draw, paint, design, engrave, color, print, lithograph, photograph, copy, execute, or create in manner whatsoever, or to cause or procure to be so made, . . . or to purchase or have in possession to exhibit or to utter, issue, distribute, circulate, deliver, sell, or use in any manner any business card, trademark, label, firm name, design, picture, wrapper, paper, advertisement or any device whatsoever, or the plates, dies, stones, forms, negatives, or designs therefor, in colorable likeness, similar to, shape, design, or wording of any known existing card, trademark, firm name, label, design, picture wrapper, paper, advertisement, or device whatsoever, except only under authority of a written and signed order duly and legally executed by the individual, firm, copartnership, corporation, association, or body legally owning or possessing the same, or who has publicly used the same for a period of time not less than twelve months."

An appropriation of \$100,000 is contemplated in the bill introduced into the House of Representatives by Congressman Patrick D. Norton, of North Dakota, for experiments and investigations of lignite coals to determine the commercial and economic practicability of their utilization in the production of benzol and other fuels for internal combustion engines and in supplying basic materials required by the dyestuff, explosive and related commercial industries. The bill has been referred to the Committee of Appropriations for consideration and report.

Congressman Raker has introduced a bill into the House of Representatives under the provisions of which \$25,000 is to become available for use in enforcing the laws regulating the sale of viruses, serums, toxins, and analogous products, and to regulate interstate commerce in such articles. This bill has been referred to the House Committee on Appropriations for action.

The friends of price maintenance are preparing for a campaign which will bring about the enactment of the Stephens bill at an early date. Congressman Dan V. Stephens, sponsor of the measure, reintroduced it at the opening of the special session of Congress and has stated that he will do what he can to secure attention for the measure at the extra session, if any such legislation is to be taken up.

PRESCRIPTION PRICING*

By F. A. Bongartz, Jersey City, N. J.

QUERY No. 9 calls for a paper on system of prescription pricing. One could almost call this a catch question of the kind so dreaded by candidates for examinations. The only system I know of is the one in use in some of the European countries, particularly Germany. There the state authorities work out the system for you, and woe to the pharmacist who does not stick to the same. The price list receives corrections quarterly in accordance with the fluctuations of the market prices. I can not tell how this works out at the present time, but I am afraid it does not work out very well, any more than it would hold good here for the same reason, that you would have to revise prices not quarterly, but every day. The situation which exists at present is such, that in order to get your prices correct, you have to hold your prescription long enough to consult several price lists and do a lot of figuring.

It is a known fact that many men in business have a system that is inadequate at the present time: Three ounce prescription, 35 or 40 cents; four ounce prescription, 50 cents; twelve capsules, 35 to 50 cents, and so on *ad infinitum*. Others, again, hold to the motto: "Let us charge all we can get and then some more." The latter are the ones who get away with the coin—that is to say, in case they have a first class reputation and are known as high priced stores or have a little joint and a conscience as big as a mail bag.

Now, how about the honest man? He will figure his prescriptions, item for item at cost price, adding his percentage of profit honestly, figuring his professional services and accordingly making his price. He may have some of the chemicals called for at old prices, and perhaps is willing to run the chances of a break in the market. He may consider the circumstances of the individual, but he never will entertain a single thought of what the next opposition store would do. This, in a good many cases, is one thing that enters into the calculation of prescription pricing with men who have not the necessary backbone to stand pat on their professional ethics.

At one time the N. A. R. D. undertook to bring about conditions to equalize prescription pricing, with the result that their good intentions were grossly abused in as much that the price mark pharmacist on prescriptions helped the other fellow by going below this secret mark. Gentlemen, so long as the honest ethical men in our profession have to compete with abuse and trickery we will have no chance to bring about a system of prescription pricing.

Let me illustrate to you just one instance, which came to my knowledge lately and which is enough to make everybody blush. Perhaps some one can relate a still more corrupt violation of professional ethics. We all know about

cases of preparing half of a quantity called for; we also hear of cases where customers bringing in prescriptions for one hundred and twenty pills are induced to have only thirty made at the time in order to have them fresh every week and by this ruse pay fifty cents for thirty or two dollars for one hundred and twenty, where the honest man would charge one dollar and twenty-five cents or one dollar and fifty cents for the whole quantity. These actions are all dishonest dealings, but the one I am going to relate to you is criminal and is practiced. A prescription comes to you calling for:

Aspirin	2 drams
Phenacetine	2 drams
Caffein citrate	1/2 dram

to be made into twenty-four powders. You price this at one dollar and twenty-five cents, which is a moderate charge. The customer turns on you very indignantly, telling you he can have it made for seventy-five cents, which is an impossibility. Would you like to know how this trick has been done? Well, the prescription quantities have been raised while the other fellow made his price at seventy-five cents by adding just a little stroke to the original, making a two out of a one. When he gets the prescription back again he simply rubs out his little "correction" and laughs up his sleeve for having fooled you and the public. These are conditions today, gentlemen, and if you can tell me how to bring about a system in prescription pricing I would be greatly obliged.

CHINA IS GOOD PROPRIETARIES MARKET

Missionaries Have Blazed the Way by Establishing American Hospitals—Over 400,000,000 Population and Effective Remedies in Great Demand

China will soon be the greatest market in the world for proprietary medicines, according to a bulletin issued today by the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, to call the attention of American manufacturers to the advantages of getting a good foothold in the market at once.

"Hygiene is practically unknown among the Chinese," the report states, "and the sickness and suffering to which the masses are subject on account of the lack of efficient native remedies or treatment is probably greater than in any other country. This is especially true of all varieties of skin diseases, against which no native salves or blood tonics seem effective."

Ten years ago the proprietary-medicine trade in China was hardly worth mentioning, although foreigners had been laboring for 20 years or more to develop it, but immense strides have been made since then and ample profits have been realized. The trade, however, is still in its infancy.

Through judicious and persistent advertising the natives are gradually being educated to the necessity of paying some intelligent attention to their ailments and are responding remarkably well. For this reason it is not difficult to introduce a good article at a reasonable price, if supported by the right kind of advertising.

The Bureau's report is devoted chiefly to sales methods and advertising and the material presented on these subjects is new and important. Copies of the bulletin, which is entitled "Proprietary Medicine and Ointment Trade in China," Special Consular Reports No. 76, may be purchased for 5 cents from the Superintendent of Foreign and Domestic Commerce. It contains 12 pages.

The drugs, patent medicines, chemicals and surgical instruments and supplies used in the Chinese and East Indian mission houses all come from New York and Chicago. They are never shipped, but are taken over by the doctors who come back to the United States on furlough. The most recent lot going to China was a full equipment of dentist and surgical instruments and supplies, taken over by Dr. N. S. Hopkins to Peking.

—DR. J. H. LONG, dean of the school of pharmacy, and professor of chemistry, Northwestern University, has been elected president of the Chicago Institute of Medicine for the year 1917.

*New Jersey Ph. A. Proceedings.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Formula for Dakin's Solution

(Pharmacist)—We have seen several closely similar formulas for this solution, but the best information, perhaps, is that given in the recently published "New and Nonofficial Remedies," under the title "Neutral Solution of Chlorinated Soda," other synonyms being "Solution Chlorinated Soda, Dakin," and "Solution Chlorinated Soda, Carrel-Dakin." The preparation is defined as "a chlorinated soda solution, containing 0.43 to 0.48 per cent of available chlorine, free from caustic alkali. It must be protected from the light."

It is prepared as follows: Place 154 Gm. of chlorinated lime, assaying 30 per cent available chlorine (by the method of the U. S. P.) and 5 liters of water in a jar, stir thoroughly and let stand for 6 to 12 hours. Add to this with constant stirring a solution of 91 Gm. monohydrated sodium carbonate and 64 Gm. sodium bicarbonate in 5 liters of cold water. After one-half hour siphon off the clear liquid and filter it through double filter paper to obtain a clear solution. Transfer the liquid to glass containers and keep dark. (If the chlorinated lime contains a larger or smaller amount of available chlorine than 30 per cent each of the ingredients to be used in making ten liters should be proportionately decreased or increased.) If to 20 Cc. neutral solution of chlorinated soda about 0.020 Gm. phenolphthalein in powder is added, no red color develops on agitation.

Neutral solution of chlorinated soda has the germicidal and other properties of solution of chlorinated soda, U. S. P., but because of its freedom from alkali, is not irritating to the tissues. It does not coagulate or precipitate the proteins of the lymph exudate in wounds, nor does it inhibit leukocytosis or phagocytosis or the digestive action of tryptic enzymes. It has been used after the first cleansing and subsequent more or less continuous irrigation of wounds, especially infected war wounds. Whether its action in this case is to be attributed to the real antiseptic or germicidal effect is still doubtful.

Cloudy Solution of Formaldehyde

(R. D. Co.)—The cloudy appearance of solution of formaldehyde that has been frozen is due to the separation of paraformaldehyde, which, according to various authorities, is but slowly soluble in cold water. It may be that by slightly warming the solution and adding a very small quantity of methyl alcohol the solution will tend to clear up; in any event the solution should not be too strongly heated, as when it is boiled, a portion of the gas is polymerized and becomes insoluble, separating as a soft, white flocculent mass. According to the British Pharmaceutical Codex, in solutions of greater concentration than 38 per cent, the formaldehyde tends to become converted into the solid polymer, paraformaldehyde, to prevent the deposition of which, solution of formaldehyde usually contains some methyl alcohol. Our own Pharmacopoeia also states that the solution contains varying amounts of methyl alcohol to prevent polymerization, and that the solution should be preserved in a moderately warm place, protected from the light. If the application of a very slight degree of heat and the addition of a little methyl alcohol does not clear up your solution, we do not know what will. For most purposes a cloudy solution would probably have some value, and if only a small quantity of solution has become thus affected, it is doubtful if any attempt at clarification would pay; it would be better to use a fresh supply of known strength. See the Pharmacopoeia for method of assay.

Tu Chung Bark

(W. S.)—The sample of bark sent by you has been identified by P. L. Ricker, assistant botanist of the U. S. Department of Agriculture, Washington, D. C., who states that it "is the bark of the plant *Eucommia Ulmoides*, commonly called Tu-chung, Tu-chung-shu and Semien. It is extremely well known in China, having been on the market for hundreds of years, chiefly as a medicinal plant used in diseases of the kidneys and as dressing for wounds. It is extensively cultivated in the provinces of Hupeh, Szechwan, and Shansi, and is perhaps rarely found in a wild state in the northern part of these provinces. The amount of bark exported from China in 1904 was approximately 100 tons, and its value has increased from 4 to 5 times within the last 15 or 20 years." Mr. Ricker also states that he "has no record of current prices, but in 1901 French dealers quoted it at from 25 to 30 fr. per picul, which is equivalent to \$4 to \$5 for 133 1-3 pounds, the Chinese weight known as the picul. Some English dealers have since quoted it as high as \$1 to \$2 per pound, although it may have been in small quantities."

This bark has been variously reported on during the last twenty years. In the *Pharmaceutical Journal* (May 23, 1903) Dr. E. M. Holmes states that "tu-chung bark," valued as a tonic by the Chinese, is remarkable for containing an abundance of a kind of india rubber, although curiously enough it is not used by the Chinese as a source of that product. At that date (1903) it was growing in the Royal Gardens at Kew, was being cultivated in France, and could apparently be cultivated with success in a temperate climate. When the bark is broken across, numerous silky fibres can be drawn out for an inch or more, but they do not show much elasticity. In any case, he said, the bark should be worth growing for the Chinese market, where it brings a high price. The National Standard Dispensary, recently issued, brings out the fact that tu-chung, also known as "muh-mien" (*Euonymus Japonica*), is used in Oriental countries in the treatment of spermatorrhoea.

Unsweetened Ginger Ale

(B. E. C.)—We know of no formula for a ginger ale under this title, nor are we aware that any attempt has been made to prepare a ginger ale without the use of sugar. Ginger ale, as defined by the Board of Agriculture, is a "non-alcoholic beverage prepared from sugar, water and a soluble extract of ginger flavored with various aromatic substances or essential oils, frequently combined with capsicum, or the pungent principle of capsicum, and charged with carbonic acid gas." Under this definition it is a question whether a beverage not complying with the foregoing standard could be sold as "ginger ale," unless the particular deviation from the standard was stated on the label.

Of course in attempting to make such a product you could experiment a little by first preparing a ginger ale extract, using one of the various formulas that are to be found in almost any general formulary. By omitting the sugar, in our opinion, the resulting product would lack the proper density or "body," while some other substance would undoubtedly have to be employed to mask the pungent taste of the ginger and capsicum, if the last named be employed. As you give us no information of how you expect to dispense this product, or anything about its character other than that which is implied in the name, we cannot give more specific information.

Medicinal Plants of Guatemala

(R. M. D.)—The possibilities of success in the importation of medicinal plants from Guatemala is a question which cannot be answered directly, as commercial relations with that country in this particular line have probably never been thoroughly developed. However, we are informed that the natural resources of that country contain much material that could be profitably utilized here if the products were better known. At the present time coffee is the principal product of export, while other plant products more or less closely allied to the materia medica are cacao, chicle, indigo, vanilla, sarsaparilla, logwood, etc. While not a plant product, cochineal has been produced in Guatemala in considerable quantity, the insect from which it is derived being indigenous to Mexico and Central America generally, but which is now cultivated in some of the West Indies, the Canaries, Algiers, and possibly other countries. In many respects the flora of Guatemala is similar to the floras of other Central American States and abounds in many plants of medicinal value. Thus, there is a variety of ipecac which has been occasionally noted in medicinal and pharmaceutical literature, but so far as we can ascertain, it has never been exported to this market to any great extent. In that part of the country known as the coastal region, a variety of the tree producing quinine has been reported, while recent consular reports indicate the production of medicinal gums from shrubs known as conocaste, jocote, balsamo, liquidambar and estoraque. There is also a variety of valerian, while sarsaparilla is common, as it is indigenous to all of the Central American countries. All of the plants named are subtropical in character, and none of them are grown on an economic scale in the United States.

We suggest that you communicate with Dr. Ramon Bengoechea, Consul General for Guatemala, 11 Broadway, New York, and the Bureau of American Republics, Washington, D. C., for more specific answers to your questions. It is also possible that you can get some helpful suggestions from Dr. H. H. Rusby, dean of the New York College of Pharmacy, and former U. S. pharmacognosist at the port of New York, as he has traveled extensively in botanical exploration in South America and Mexico, and is familiar with the drug producing plants of Southern North America.

Nuxated Iron

(J. P. R.)—We cannot give the formula for this proprietary preparation. However, the *Journal of the American Medical Association* printed a report on this specialty in its issue of October 21, last year, from which we take the following information: Taking exception to the manufacturers' statement printed on the trade package that "the valuable blood, nerve force and tissue building properties of this preparation are due to organic iron in the form of ferrum peptonate in combination with nux vomica, phosphoglycerate de chaux and other valuable ingredients," the *Journal* undertook to find out just how much iron and nux vomica there were in "nuxated iron," and published the following report of its examination:

"Packages of the nostrum purchased on the open market were subjected to analysis both in the chemical laboratory of the American Medical Association and elsewhere. Qualitative tests indicated the presence of iron, calcium, magnesium, carbonate, glycerophosphate and small amounts of potassium and chloride, and the presence of cascara. Quantitative examinations were made and so far as the essential ingredients—nux vomica and iron—of the mixture are concerned, gave the following results:

Total nux vomica alkaloids, per tablet. .1-500 grain
Iron (Fe), per tablet1-25 grain

"According to these analyses there is only 1-25 grain of iron in each tablet, while the amount of nux vomica, as expressed in terms of its potent alkaloids, is practically negligible. If a person wants to take iron on his own responsibility—and this cannot be recommended—it is possible to get this drug in a staple form in the well-known Bland's pills. In a dollar bottle of 'nuxated iron' the purchaser gets, according to our analysis, less than 2½ grains of iron; in Bland's pills, which can be purchased in any drug store for from 50 to 75 cents, there are 48 grains of iron. The claim that 'nuxated iron' possesses great advantages over other forms of iron is the sheerest advertising buncombe."

How Much Should He Charge for It?

(E. P.)—"Just a few minutes ago I filled the following prescription:

Tincture of opium 4 ounces
Lead acetate 4 ounces
Water 10 ounces
Glycerin, q. s. to make. 32 ounces

Mix, apply locally.

"I charged \$4 for the prescription, and the party seemed to think the price was highway robbery. Will you advise in your next issue if you think the price is exorbitant?"

Accompanying the prescription is a memorandum showing how "E. P." arrived at the charge, as follows: Tincture of opium (actual cost), \$1.16; lead acetate (actual cost), 0.10; water, 0.00; glycerin (actual cost), 0.70; service at \$2 per hour, 0.08; profit, 100%, \$1.96, making a total of \$4.00.

We have submitted this prescription to several druggists, and the consensus of opinion seems to be that the charge is too great for a mixture of this character and the compounding required. In figuring the expense of producing the mixture at the present market quotations on the materials employed we get the following approximations:

Tincture of opium (\$3 per pint), 4 ounces. . \$1.00
Lead acetate (28c per pound), 4 ounces.07
Water00
Glycerin (68c per lb.) 18 fl. oz. or 22 av. ozs.95
Bottle, cork, label, etc.13
Service at \$2 per hour08
Estimated cost of doing business, 25%.50

\$2.73

Profit, say 25% (in round numbers).67

Making a grand total of. \$3.40

This estimate represents the average charge that druggists in this vicinity would make for compounding the mixture at the present time, although one druggist tells us he would shave the price down to the lowest possible figure on account of the character of the prescription, and particularly would he make a proportionately lower charge than usual if the individual presenting the prescription was one of his regular patrons, expecting to make up for the deduction by averaging the charge against an increased charge on a future prescription to be compounded. ERA subscribers are asked to answer the question, "How much should he charge?"

Caramel and Its Preparation

(T. F. T.)—Caramel and tincture of caramel are both official in the National Formulary, the first named being defined as "a concentrated aqueous solution of the product obtained by heating sugar or glucose until the sweet taste is destroyed and a uniform dark brown mass results, a small amount of alkali or alkali carbonate being added while heating." As described in works of reference, the manufacturing operation is carried out as follows:

Sugar, any convenient quantity; water, a sufficient quantity. Put the sugar (without water) into an iron kettle of several times the capacity required for it, heat to 410° to 430° F. so long as it gives off much vapor, and until it is changed into a black, viscid mass, stirring it occasionally during the operation; then cool, and while cooling add hot water in proportion of one pint for each pound of the sugar used; let stand to dissolve, strain the solution and concentrate it by evaporation to a syrupy consistency, or until it measures a pint for each pound of sugar used. As ordinarily made no precaution is taken to regulate the degree of heat, and for that reason a portion is converted into charcoal, which is insoluble. In small operations this is unimportant, but in manufacturing establishments the heat, to avoid difficulty, is regulated by an oil or sand bath, or by other means. Some manufacturers prepare caramel of different degrees of solubility for different uses. For coloring liquors it is prepared to dissolve in spirits up to 85° proof; but for general use, that which dissolves in water and spirits up to 50° proof is usually furnished. According to the N. F. caramel mixes clear with water in all proportions, 1 part dissolved in 1000 parts of distilled water yielding a clear solution having a distinct sepia tint.

Caramel is extensively employed for coloring liquors, bottled beverages, soda water syrups, etc., a light amber to dark brown. In pharmacy it is employed for coloring syrups, elixirs, solutions, wines and other liquids. When combined with red coloring matter, as in compound tincture of cudbear, it is used to color solutions a reddish brown.

Efficient Glycerin Substitute

(G. T. D.)—The experience of an English pharmacist in attempting to find an efficient substitute for glycerin, as reported in a recent issue of the *Pharmaceutical Journal*, is suggestive. Owing to the limitation placed on the prescribing of glycerin, and a consequent alarming reduction in his stock of sugar, he tried without avail various articles which he thought might be used to produce a mucilaginous, demulcent and pleasantly flavored vehicle which might be added to cough syrups and the like. He finally succeeded when he tried decoction of Irish moss, B. P. C., with the addition of 5 per cent of glucose, a mixture which he states, in the circumstances of the time, can be used to displace both glycerin and simple syrup. The formula he finally adopted, which has body, sweetish taste, and keeps for a reasonable period, is as follows:

Irish moss (washed) ½ ounce
Water 24 fl. ounces

Bring to a boil, and keep boiling for fifteen minutes in a covered vessel, strain this mixture with pressure, make up to 19 fl. ounces by pouring boiling water over the muslin and add

Glucose 1 ounce

Mix and strain through a double ply, finishing without pressure.

It is suggested that mucilage of chondrus of the National Formulary can be similarly employed.

Hungarian Liniment

(G. R.)—Under the title Hungarian Liniment (*Linimentum Hungaricum vel Linimentum Judæorum*), Hager (*"Mannale seu Pharmaceuticum Promptuarium"*) gives the following formula:

Cantharides 5.0 grams
Mustard seed 20.0 grams
Black pepper 20.0 grams
Camphor 20.0 grams

Contuse to a powder and pour on
Wine vinegar 200.0 grams

Macerate for two days, then add
Rectified spirit of wine 400.0 grams

Then express, strain and filter.

Another formula from the Spanish:

Camphor 40 grams
Pimento, powdered 20 grams
Mustard, powdered 40 grams
Garlic, sliced 20 grams
Cantharides, powdered 10 grams

Digest for 24 hours in
Vinegar 86 grams
Rectified alcohol 160 grams

Use with friction after straining.

Variants of this formula are to be found in various receipt books of Continental Europe, some of them directing all of the ingredients to be mixed and allowed to macerate for 7 days, then filtered.

Stramonium, an indigenous member of the nightshade family, is now receiving some attention and is in demand for replacing other narcotic leaves such as belladonna, scopolia, etc. The nightshade family comprises about 1,500 species, and besides those which are important medicinally, the genus comprises such economic plants as the potato, tomato, eggplant, tobacco, etc. The increased demand for domestic stramonium leaves has been productive of a marked advance in price.

Mercantile reports indicate that the drug trade throughout the country is sound financially. This view is supported by the fact that the number of failures among traders in drugs and chemicals during February was 35, as against 43 in the same month last year, and 55 in 1915.

NEW PREPARATIONS FOR 1916

(Continued from April Era, Page 141.)

ENTEROSAN.—A calcium-tannin compound, difficultly soluble in diluted acids, and containing about 15% lime and 85% tannin. The preparation is intended for use in dysentery, and is marketed in powder, and in tablets of 0.5 Gm. each.

EUCUPIN.—Isoamylhydrocupreine.

FERRIVINE.—An organic amino compound of iron, given intravenously in syphilis.—Dose: 1 Gm.

GLUTIODIN.—Iodine-protein compound.—Dark yellow powder; forms a fine suspension with water.—Uses, as of other organic iodine compounds internally.

GLYCOPON.—A preparation containing the total opium alkaloids as glycerophosphates (50% morphine, 20% other alkaloids, and 30% inert matter).—Uses as of pantopon.

GOX.—An electrolytic silver compound containing 16.09% Ag.—Reddish-brown solid easily soluble in water.—Used as an antigonorrhoeic in 0.25-2% solutions.

GUAIACOL CHLORIODIDE.—See Chlorigol.

GUAIODINE.—Described as an electro-chemically prepared iodine suspended in oil together with guaiacol. Employed by injection in gonorrhoea, and also locally to open wounds, broken surfaces, etc.

HEXAIODINE.—Hexamethylenamine Monohydriodide. Occurs as a white odorless, crystalline powder very soluble in water, and melting at 170-171°C. Used like the iodides both internally and subcutaneously.

HEXAMETHYLENAMINE MONOHYDRIODIDE.—See Hexaiodine.

HEXAMETHYLENAMINE-SILVER GLYCOCHOLATE.—Colorless or slightly colored powder, easily soluble in water, hot 90% alcohol, and methyl alcohol.

HEXOPHAN.—Oxyphenylquinoline-dicarbonic Acid, C₁₇H₁₁NO₆. H₂O.—Yellow, odorless, tasteless powder soluble in ammonia and solution sodium hydroxide, but insoluble in water, alcohol, ether, and hydrochloric acid. Employed in gout and rheumatism.

IODOGEN.—A solution each fluid dram of which contains 1 grain organically combined iodine, and employed in gout, aneurism, arteriosclerosis, rheumatism arthritis, asthma, etc.

INTRAMINE.—Dioxyaminothiobenzene.—Yellow, crystalline powder given intravenously in oily suspension in syphilis.—Dose: 1 Gm.

IOCAMFEN.—A product obtained by the interaction of iodine, camphor and phenol. Antiseptic, disinfectant, analgesic, antiphlogistic. Employed locally like iodine in surgical, general medical and dental external indications. Marketed as a liquid containing 10% iodine, and as a 50% ointment containing 5% iodine. The ointment is used in parasitic skin diseases, neuralgia, sciatica, gout, lumbago, etc.

IODAL.—See Septovince.

IODEOL.—Colloidal iodine in 20% stable emulsion.—Uses, as of iodides, internally or subcutaneously, or intramuscularly.

IRIPHAN.—Strontium-Alphaphenylcinchoninate.—A yellowish-white crystalline powder difficultly soluble in cold, but easily in hot water, and also in very dilute solutions of alkali carbonates and bicarbonates. Employed in gout and articular rheumatism in doses of 0.5-1 Gm. 3 to 4 times daily.

ISOAMYLHYDROCUPREINE.—See Eucupin.

KETOIMIDOTETRAZOL.—See Sussol.

LUARGOL.—I02; Arsenobenzene-silver bromide-antimonyl.—Uses, as of salvarsan in syphilis.

LUTOSARGIN.—Colloidal Mercuric Iodide.—Opalescent, pale-yellow liquid, or pale yellow amorphous powder slowly but freely soluble in water.—Employed in syphilis.—Dose: 1 mil. (Cc.) gradually increased to 2 mils (Cc.) 2 to 3 times per week subcutaneously into the gluteus.

(To Be Continued.)

BOOKS REVIEWED

INCOMPATIBILITIES IN PRESCRIPTIONS for students in pharmacy and medicine, and practicing pharmacists and physicians. By Edsel A. Ruddiman, Ph. M., M.D., professor of pharmacy and materia medica, Department of Pharmacy, Vanderbilt University. Fourth edition, thoroughly revised. 8 vo., 317 pages, cloth, \$2, New York. John Wiley & Sons, Inc.

This book has long been a standard on the subject of incompatibilities, both for use behind the prescription counter and in colleges of pharmacy as a text book in compounding. The first part of the book presents in a convenient and condensed form the most common incompatibilities, the substances being arranged in the alphabetical order of their Latin names, except in cases of some of the newer remedies, while Part II contains 450 incompatible prescriptions, followed by criticisms. An innovation in this edition is that in Part I, which shows at the end of each monograph the number of the prescription in Part II, illustrating the incompatibilities mentioned in the monograph. The table of solubilities has been enlarged and revised, and the N. A. R. D. prescription pricing schedule is utilized as the rule for making charges.

NEW AND NONOFFICIAL REMEDIES, 1917, containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to Jan. 1, 1917. 12 mo., 412+XXIV pages, cloth, \$1 postpaid. Chicago: American Medical Association.

This book lists and describes the non-secret proprietary remedies that have been accepted by the Council on Pharmacy and Chemistry of the A. M. A., and also describes the newer non-proprietary remedies which give promise of some real value that have been accepted by the Council. Each description includes the chief facts physicians desire to know concerning composition, dosage, indications, cautions to be observed, etc. The book also contains general articles which compare the value of the proprietary remedies with the established drugs they are intended to supplant. Every physician and pharmacist who wants to keep abreast of the times should have a copy of this annual, for in it they will find such recent information as that relating to the description of acetylsalicylic acid and the revised Carrel-Dakin neutral solution of chlorinated soda, as well as many other useful suggestions.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL OF THE AMERICAN MEDICAL ASSOCIATION FOR 1916. 12 mo., 87 pages, cl., 50c. Chicago: American Medical Association.

This volume includes the reports of the Council which were adopted and authorized for publication during 1916; reports previously published in the *Journal of the A. M. A.*, and also reports which, because of their highly technical character or of their lesser importance, were not published in the Association's journal. In this volume the reader will find the reasons for the rejection of the articles which were examined and found ineligible for "New and Non-official Remedies," and why certain preparations included in previous volumes are not contained in the latest edition of that book. Physicians and pharmacists who wish to be informed in regard to the status of proprietary and unofficial remedies should have the volumes of the Council Reports, in addition to "New and Nonofficial Remedies" described above.

CHANGES IN THE PHARMACOPOEIA AND THE NATIONAL FORMULARY. By Martin I. Wilbert. Bulletin 107, Hygienic Laboratory, United States Public Health Service, 8 vo., 390 pages. Washington, Government Printing Office.

This bulletin represents about the last work done by the late Martin I. Wilbert, and it is a fitting concluding volume of the long series of Digest of Comments on the Pharmacopoeia and National Formulary which were compiled by him and issued by the Hygienic Laboratory since 1905, the year in which the Eighth Revision of the Pharmacopoeia became official. In this bulletin the changes in strength and composition of all preparations of both Pharmacopoeia and National Formulary are indicated as concisely as possible, and special attention is directed to changes in nomenclature of official articles as well as additions to and deletions from the list of articles in-

cluded in the several books. There is also included information concerning all preparations in which official articles are used, while an alphabetical list gives official English titles, widely used synonyms, and trade names, with the corresponding Latin titles of the U. S. P. and N. F.

BULLETIN No. 109, Hygienic Laboratory, U. S. Public Health Service. I, Pituitary Standardization. The relative value of infundibular extracts made from different species of mammals and a comparison of their physiological activity with that of certain commercial preparations. II, Pharmacological Studies with Cocaine and Novocaine. A comparative investigation of these substances in intact animals and on isolated organs. By George B. Roth, 8 vo., 67 pages. Washington, Government Printing Office.

The determination of the activity of infundibular extracts made from the pituitary body obtained from various species of mammals—viz., cattle, sheep, horses, hogs, rabbits, cats and dogs—was made by both the blood pressure and the isolated uterus methods, and it was found that the infundibular extracts made from cats or dogs were more active than similar extracts made from the other species of mammals. An individual variation was shown in extracts made from the same species of mammals. Commercial infundibular extracts examined in the same way showed a variation of 800 per cent by the blood pressure method and of 1000 per cent by the isolated uterus method. A commercial preparation of the infundibular extract which contained chlorbutanol as a preservative was shown to depress the motility of the isolated intestine of the rabbit when used in concentrated solution.

As a result of his studies the author concludes that novocaine is several times less toxic for laboratory animals than cocaine, the relative toxicity being dependent upon the method of administration as well as the animal used in making the determination. Novocaine possesses many of the properties of cocaine as shown by experiments on the isolated heart, on smooth muscle, and by its effects on the circulation and respiration of anaesthetized animals. The depressing effect of novocaine on the blood pressure and respiration of animals makes it necessary to use caution in its administration in clinical cases in which the blood pressure is low or in which the heart is at fault. Great care should be exercised in the injection of novocaine subcutaneously, in order to avoid its entrance into the circulation, thereby increasing its toxicity. Individual susceptibility should always be considered in the administration of either cocaine or novocaine. Both Parts I and II of this bulletin contain extended bibliographical references to the subjects under consideration.

BIBLIOGRAPHICAL CONTRIBUTIONS FROM THE LLOYD LIBRARY. Vol. III, No. 1, Bibliography Relating to Botany, Exclusive of Floras. Authors, N. O. Edith Wycoff, librarian. 31 pages. Cincinnati, The Lloyd Library.

This number of the Lloyd Library *Contributions* continues the publication of the bibliography of botany alphabetically by authors as has been from time to time noted in the ERA, the present issue carrying the list through the letter "O."

PROCEEDINGS OF THE SEVENTEENTH ANNUAL MEETING OF THE AMERICAN CONFERENCE OF PHARMACEUTICAL FACULTIES, 1916.

This volume contains the report of the meeting of the American Conference of Pharmaceutical Faculties held in Philadelphia last year. As shown by the official roster, the association has forty-three colleges and schools represented in its membership, three institutions—Department of Pharmacy, Oregon Agricultural College, College of Pharmacy of Creighton University, and the School of Pharmacy of the University of the Philippines—having joined during the year. Among the important discussions which developed during the meeting were those relating to the educational qualifications of students entering colleges and the relation of colleges to boards of pharmacy. An interesting fact is shown in the statistics presented by the executive committee in a study of the preliminary education of students, viz., that for 1915-16 fifty-six per cent of the students entering the schools of pharmacy had four years of high school work. The plan of having the conference meet at a different time from that of the meeting of the A. Ph. A. seems to have pleased all of the delegates.

BRANCHES

ANNUAL PH. A. CONVENTIONS

May 8-10—Louisiana, at New Orleans; George W. McDuff, New Orleans, secretary.

May 15-17—Kansas, at Topeka; D. von Riesen, Marysville, secretary.

May 15-17—Texas, at San Antonio; W. H. Cousins, Dallas, secretary.

May 23-25—California, at Oakland; C. A. Henderson, Los Angeles, secretary.

June 12-14—Arkansas, at Memphis, Tenn.; Miss Mary A. Fein, Little Rock, secretary.

June 12-14—Mississippi, at Memphis, Tenn.; Miss Flora Scarborough, Laurel, secretary.

June 12-14—Tennessee, at Memphis; T. J. Shannon, Sharon, secretary.

June 12-15—Missouri, at Excelsior Springs; H. M. Whelpley, St. Louis, secretary.

June 12-15—New Jersey, at Lake Hopatcong; Jeannot Hostmann, Hoboken, secretary.

June 13-14—Georgia, at Macon; T. A. Cheatham, Atlanta, secretary.

June 13-14—Washington, at Spokane; A. W. Linton, Seattle, secretary.

June 18-20—Iowa, at Dubuque; Al. Falkenhainer, Algona, secretary.

June 19-21—Alabama, at Tuscaloosa; W. E. Bingham, Tuscaloosa, secretary.

June 19-22—Illinois, at Springfield; Wm. B. Day, Chicago, secretary.

June 19-21—Indiana, at Lake Wawasee; Wm. F. Werner, Indianapolis, secretary.

June 19-21—Michigan, at Grand Rapids; F. J. Wheaton, Jackson, secretary.

June 19-21—Nebraska, at Norfolk; J. G. McBride, University Place, secretary.

June 19-22—New York, at Richfield Springs; E. S. Dawson, Syracuse, secretary.

June 19-21—North Carolina, at Asheville; J. G. Beard, Chapel Hill, secretary.

June 19-21—Pennsylvania, at Pittsburgh; Robert P. Fischelis, Philadelphia, secretary.

June 20-21—Utah, at Salt Lake City; Frank Folland, Salt Lake City, secretary.

June 20-22—Kentucky, at Louisville; J. W. Gayle, Frankfort, secretary.

June 25-29—Wisconsin, at Milwaukee; E. G. Raeuber, Milwaukee, secretary.

June 27-29—Maine, at Kineo; M. L. Porter, Danforth, secretary.

MAINE PH. A. CONVENTION

Arrangements are being made for the annual meeting of the Maine Pharmaceutical Association which is to be held at Kineo, Maine, on June 27, 28 and 29, and an elaborate program is being prepared for this year's event, as the occasion marks the 50th year that the organization has existed in the Pine Tree State. At the June session the annual election of officers will take place and the occasion promises to be one of the most important in the history of the half-century-old organization.

The committee in charge of the arrangements consists of: A. W. Meserve, of Kennebunk, chairman; G. E. Avore, of Skowhegan; G. O. Tuttle, of Portland; D. T. Dougherty, of Bath; B. R. Lane, of Portland; F. H. Tupper, of Bangor; H. C. Riddle, of Rangeley. The transportation committee is composed of F. H. Tupper, of Bangor; F. W. Jewett, of Portland; J. W. Mahoney, of Bath.

ASSOCIATION ELECTION

The Cumberland Co. (Me.) Pharmaceutical Association held its annual banquet and election of officers at the Falmouth Hotel in March, with about 40 members of the organization in attendance. Officers were elected as follows: President, William E. Hurlburt; first vice president, Thomas A. Foley, Jr.; second vice president, Sumner C. Davis; third vice president, Thomas H. Devine; treasurer, James A. Broe; secretary, Edward W. Murphy; executive committee, Louis J. Maguire, Frank H. Power, James A. Broe, John F. Bennett, Benjamin F. Dudley.

BOARDS

TEXAS

At a regular meeting of the Texas Board of Pharmacy held recently in Austin 55 applicants for registration appeared and took the examination, 35 being successful. John A. Weeks, delegate to the National Association of Boards of Pharmacy, presented a report of the 1916 meeting of that organization, which was adopted by the board. The suggestions made in the report are to be followed as near as practicable. The next meeting of the board will be held in San Antonio on May 14 to 16, inclusive.

ILLINOIS

The Illinois State Board of Pharmacy examined 94 applicants for certificates as registered pharmacists, of whom 25 were successful, and 64 applicants for certificates as registered assistants, of whom 27 were successful, at its meeting held in Chicago on March 6-8. One applicant for local registration was also successful. The next meeting for the examination of applicants for registration will be held on April 24 at Springfield.

WISCONSIN

Gustav V. Kradwell, Racine, Wis., was re-elected president of the Wisconsin State Board of Pharmacy at the annual meeting held at Madison, the State capital, on Monday, April 16. Edward Williams, Madison, was re-elected secretary. Other members of the board present at the meeting were Otto J. S. Boberg, Eau Claire, Wis.; Henry G. Ruenzel, Milwaukee, and B. J. Kremer, Fond du Lac, Wis. Sixty-one applicants for certificates took the examinations held at the same time. Thirty-two were successful. The next quarterly meeting and examinations will be held at Madison on Monday, October 15.

NEW YORK

Warren L. Bradt, secretary of the New York Board of Pharmacy, has sent to the ERA a copy of a reply to an inquiry as to whether time spent in the Hospital Corps would be credited as experience as defined under the pharmacy law and the rules of the Board of Pharmacy, which is as follows:

NEW YORK STATE BOARD OF PHARMACY.

Albany, N. Y., April 5, 1917.

Dear Sir: In reply to your inquiry as to whether the time spent by drug clerks and student members of a pharmacy school as members of Hospital Corps, either in the army or navy, in the present crisis, would be given credit for experience had during such enlistment. I beg to say that I am authorized to advise all persons making inquiry in this matter that such time will count as experience toward experience required for admission to the licensing examinations.

This is a very broad interpretation of the law and rules relating to the requirements for experience, but it is justifiable in the present crisis.

Respectfully yours,

(Signed) WARREN L. BRADT, Secretary.

PREPARING FOR DRUG EXPOSITION

The show committee of the Chicago Retail Druggists' Association is taking preliminary steps towards the organization of the coming Drugs, Chemicals, and Allied Trades Exposition, which will be held in the Coliseum this year from November 10 to 16, inclusive.

Chairman Caldwell, of the committee, is busy arranging the list of committees. His selections will be announced in the near future, and the indications are that the strongest line of merchants that ever headed a trade organization will be actively in charge.

Present plans are to give the exhibitors that were in the last show the first opportunity to select spaces before offering the balance of the unsold area to the general trade. Practically every foot of the main floor will be taken by last year's exhibitors, and the number of applications that have been received at the association's headquarters in the Northwestern University Building promise to fill the annex and the balcony.

SCHOOLS AND COLLEGES

UNIVERSITY OF MINNESOTA

The State Board of Pharmacy met at the college during the week beginning April 16. Not many of the students in attendance took the examination. Students usually wait until the completion of the school year and apply for examination in July.

The pharmaceutical departmental library, opened to students recently, is in charge of Charles E. Smythe. Most of the work done by students is of a reference and research nature, although the pharmaceutical periodicals are being read now to a much larger extent than formerly. The several instructors are directing seminar work in their respective subjects during the present fourth quarter of the school year. Additional books and periodicals are continually being added to the library, something more than \$300 having been spent for the purpose during the current year.

Dispensary Instructor O. J. Blosmo, who did some research work at the Columbia University College of Pharmacy, New York City, returned to his post of hospital pharmacist at the beginning of the second semester. He is now one of the two candidates for the degree "Doctor of Pharmacy," the degree given at the completion of a full six-year university course.

Assistant Professor Rogers, who returned to the college instructional staff on February 1, will teach pharmacy in the summer school of the College of Pharmacy of the University of Michigan.

Dr. F. C. Clements, university professor of botany, under whose direction students in pharmacy have been receiving instruction in botany, has resigned to accept a more lucrative and higher position with the Carnegie Foundation.

On the evening of May 8 the university will tender a testimonial dinner to President Vincent, who leaves at the end of the college year to become the president of the Rockefeller Foundation.

Mrs. Wulling, who entertains the members of the College of Pharmacy Spatula Club the first Saturday of every month, entertained the club recently at the Minneapolis Institute of Arts.

The medicinal plant seedlings cultivated in the medicinal plant laboratory from seeds are doing very nicely and will soon be planted in the open. Work has already been begun on the medicinal plant garden.

UNIVERSITY OF IOWA

Members of the graduating classes of all colleges held a senior symposium at Company A Hall. Each college contributed to the entertainment, the College of Pharmacy furnishing the music for dancing.

Students of the college have perfected an "all-class" organization which is to have general supervision of all student activities not controlled by the university authorities. It is to be known as the Student Pharmaceutical Association of the State University of Iowa. H. A. Grimm, president of the Senior Class, was responsible for bringing the classes together for the first meeting. Chas. Carter, of Shoshone, Idaho, was made temporary chairman, and Florence Peterman, of Iowa City, acting secretary. R. A. Stewart, '17, of Spencer, Iowa; E. L. Hazeldine, '17, of Selby, S. D., and T. H. Gillespie, '18, of Algona, Iowa, were made a committee on constitution.

WISCONSIN UNIVERSITY

Two years of accredited high school work, or its equivalent, will be the minimum entrance requirements of the two-year course in pharmacy at the University of Wisconsin beginning next fall, according to action taken at the last meeting of the Board of Regents.

Graduation from an accredited high school or its educational equivalent, will be the minimum entrance requirement beginning with the year 1920-21.

This increase in requirements has been made in accordance with the graded scale of entrance requirements adopted by the American Conference of Pharmaceutical Faculties.

BUFFALO

The faculty of the Buffalo College of Pharmacy, assisted by the Alumni Association, recently tendered Charles H. Gauger a testimonial dinner at the Lennox Hotel, the event commemorating his ten years of service as an instructor in the College of Pharmacy laboratory. A number of ladies, including Mrs. Gauger, were present. Thirteen classes of alumni were represented, and those present soon resolved themselves into a family round table of anecdote and reminiscences. As a souvenir of the occasion the members of the faculty presented Mr. Gauger with a dispensatory. Dean Willis G. Gregory presided.

NEW YORK

At the annual meeting of the New York College of Pharmacy held last month the following officers were elected: President, Nicholas Murray Butler; vice president, Prof. Chas. F. Chandler, Dr. William Jay Schiefelin and Dr. H. C. Lovis; treasurer, Clarence O. Bigelow; secretary, Thomas F. Main; assistant secretary, Charles W. Holzhauer. Trustees, Jacob Weil, F. K. James, Irving McKesson, Theodore Weicker and Edward Plaut. Dr. Joseph French Johnson, dean of the School of Commerce, Finance and Accounting of the University of New York, delivered an address in which he said that the "Bases of Commercial Success" were psychology, sociology, economics and ethics, and that a thorough understanding of these sciences would help the individual to play the great and fascinating game of business to advantage, but without unfairness to others.

PHILADELPHIA ALUMNI NOMINATES

The nominating committee of the Alumni Association of the Philadelphia College of Pharmacy has reported the following list of candidates for the various offices of the association for the year 1917-1918: President, John K. Thum, '96; first vice president, William H. Gano, '84; second vice president, John N. G. Long, '87; recording secretary, Joseph W. England, '83; treasurer, C. Carroll Meyer, '73; corresponding secretary, Robert P. Fischelis, '11. Board of directors for three years: Dr. Mitchell Bernstein, '09; J. Frank Strawinski, '98; Dr. P. Samuel Stout, '99; Elmer H. Hessler, '12; Mortimer M. Smith, '13; Dr. Paul S. Pittenger, '09; Herbert G. Lilly, '09; Brna C. Goodhart, '07.

One of the events of commencement week early in June will be the annual Alumni Reunion Dinner. Members of the Alumni whose graduation year ended in 2 or 7 will hold class reunions in connection with the general reunion.

OKLAHOMA UNIVERSITY

Several pharmacy students have enlisted in the Hospital Corps of the U. S. Navy. Clarke Bonham and Edgar Risley were sent to the Great Lakes Training School on Lake Michigan for instruction and training.

The practical phases of the State Board of Pharmacy examination were held in the laboratories of the School of Pharmacy on April 11, the faculty assisting in the work of examining the candidates for registration.

Dean C. H. Stocking, of the School of Pharmacy, has been appointed chairman of the committee on higher educational standards for the American Conference of Pharmaceutical Faculties. The other members of the committee are Dr. J. T. McGill, of Vanderbilt University, and Dr. Chas. H. LaWall, of the Philadelphia College of Pharmacy.

At the request of the United States War Department Registrar Erret R. Newby is sending a list of all university seniors who receive degrees in June in medicine, pharmacy, chemistry, engineering and other sciences to that department. The request comes as a part of the campaign of the Government to tabulate lists of those who would be immediately ready for service in their lines in the event of war.

WOMEN IN PHARMACY

War and the Woman Pharmacist

Conducted by **EMMA GARY WALLACE**

Now that war has come we may as well set about adjusting ourselves to changed conditions without delay. To begin with, the woman pharmacist will be loyal, patriotic, and conscientious. All that goes without saying. Perhaps as never before her need will be felt and appreciated in the community.

There will be the great army of national defenders who can accomplish little without a second body of industrial workers, professional people, and agriculturists to furnish them with necessary supplies, to fill the industrial places vacated, and to feed the fighting forces. The woman pharmacist will serve her country just as well to stay behind her counter and to help minister to the needs of her community.

The woman pharmacist who is serving as an employee should find no trouble in obtaining employment at the present time, for so many men pharmacists will serve the Government that vacant places will be left which must be filled.

On the Alert

As soon as war was declared a business man in a certain town discharged part of his help, closed up several departments, and, as he expressed it himself, prepared to "reef his sails" until the war was over. He argued that serious times were ahead and he proposed to get ready for them by a policy of conservatism and retrenchment.

His neighbor and competitor argued along opposite lines, saying the people of England were never so prosperous as they are today, and more money is in circulation there than ever before. War prices are always high prices, but it means that there will be much money to spend. So he engaged extra help, prepared to enlarge his business and to take advantage of every timely opportunity. The results are justifying his judgment.

The army of stay-at-homes must be physically fit in order to furnish munitions, motor vehicles, gauze, bandages, food and other supplies for the army and navy, and the people who till the land and manufacture foodstuffs must be in good shape to feed the whole of us. Every person who is sick at home is as great a menace to the national safety as the sailor or soldier who is incapacitated.

Educational Campaign

The present war situation offers the greatest opportunity within our lifetime so far to drive home health facts and the importance of them. Most people consider their health or the lack of it their own affair. It may be so in times of peace. It is *not* so in times of war. The health of the individual is a matter of national concern and it is a patriotic duty for everyone to keep physically fit in order to do his or her part.

In every locality patriotic societies are working doing their "bit," rolling bandages, preparing dressings, getting garments made, learning telegraphy, wireless, stenography, how to drive motor vehicles, etc. Not only is the idea of these women to bring aid and comfort to the soldiers, but to keep the industrial wheels moving at home.

The woman pharmacist is missing her opportunity who does not ally herself with one of these First Aid branches. Not only can she give moral support and some helpful information, but she can establish her position as a local authority on matters pertaining to medical, hospital, and surgical supplies.

All over the country plans are being worked out for base hospitals. Now it is a fact that many hospitals order their supplies direct from the wholesaler and the supply house. They do not get any better price as a rule than they would get if the goods came from the local pharmacist, and it is the duty of the hospital to place the orders locally.

There never was a time when our industries counted

for more than they will in the months to come. Factories of all kinds are already running to capacity, and captains of industry have no desire to have their workers tied up by accidents or unnecessary delays.

See that the law is complied with in every factory in your locality as to First Aid Cabinets and get your share of the business of keeping these stocked. You will not get it if you do not attend to your First Aid Cabinet list regularly. Customers started now will be permanent after the war ends.

Keep posted on everything relating to the war situation which has to do with drugs or drug supplies. This is the only way of doing business safely and profitably. Market reports may not be exciting reading, but they are necessary for the business man or woman, and it is exciting to make money because you are prepared.

It is a good plan to make the path to the drug store as wide and deep as possible, for people grow accustomed to walking therein. Make your drug store the headquarters for patriotic work. One drug store recently gave place on two successive Saturdays to food sales by women who were endeavoring to raise money to buy bandage and garment material.

WHEN YOU SELL STATIONERY

The retailer who sells stationery is very likely to sell it with his own needs, likes, or dislikes in mind, and when he has done this he has materially handicapped the success of his stationery department.

Perhaps no other line of goods expresses more accurately the personnel of the individual than the stationery used.

One druggist lost the trade of an entire family because he sold them poor ink several times. It was not satisfactory upon the high-priced stationery furnished and the people did not stop to analyze just what had been wrong with the service. They only argued that their letters looked characterless when they used his paper and ink and so they transferred their trade elsewhere. Now, the only thing wrong was watery ink which did not give a nicely finished page, and so they did not appreciate the high grade of stationery they were using.

The head of the stationery department should get prices on printing, embossing, and initialing from several firms and be prepared to quote right prices, to guarantee a first-class job, and to be ready to deliver the goods within a reasonable time after the order is taken.

Correspondence cards and family note paper should only be carried in good quality stock, for the women who buy these are discriminating and will not care to have them at all unless they are satisfactory. Initialed stationery and correspondence cards are something of a gamble because one never knows what initial is going to be called for, nor how much will be left over of the little called for initials.

In selecting stationery the customer is entitled to the self-expression of his own individuality, so it is a mistake for the one behind the counter to try to influence the selection too strongly. Show goods; quote prices; be interested; size up the patron as to what he or she will likely need. Do not make the mistake of showing too cheap goods, for customers are likely to take offense if they feel they are under-estimated in any way. Remember that if a patron is over-estimated to buy something which she does not want she is likely to carry a feeling of resentment which will crop up anew every time she takes a sheet of paper or addresses one of those envelopes. Such a sale does not make for repeat orders.

WAR AND DRUG ADDICTION

America is entering into the world conflict with a peculiar advantage on her side. During the months which have passed since Belgium was invaded we have observed a watchful neutrality, aiding the hungry and wounded wherever we were able to do so.

Standing thus on the side the American people, and especially the American physicians, chemists, and pharmacists have had an opportunity to see some of the seeds sown and the harvest reaped of suffering, disease, and habit-formation. We should then as an intelligent people not stumble ahead to court the same evils, but should *do all within our power* to protect the citizenship of today and tomorrow.

Alleviation of pain by scientific approved methods is the due of every soldier who has given his body to be burned by liquid fire, torn by shrapnel, pierced with bullets, or cut and broken in any manner. But—narcotic drug addiction *always* has its beginning from an initial dose, and more often than not that dose is given to relieve pain.

It is coming to be a more and more firmly established fact that the continued use of narcotics of any kind sets up a strong tendency to that particular drug addiction. Therefore if relief from suffering is given by morphia or other narcotic drug during a painful convalescence, we are liable to have come back to us a large number of people who are not to blame for their unfortunate condition in any sense.

Something ought to be done about it, for so far antinarcotic legislation has affected the druggist more than any one else. No one has ever been readier to protect the public, even at personal sacrifice, than the conscientious druggist and his associates, but many times the legislation promoted has been drawn up by those not familiar with the practical retail drug business, and so unnecessary hardships have been worked or the legislation has fallen short of its intended purpose.

Remember, the soldier who is wounded takes what is given him and asks no questions. Perhaps he is in no condition to know what he should or should not take. It isn't his business to know.

Whose business is it?

Surely it is the business of the doctors, druggists, and chemists of the United States to see to it now that every provision be made for the *safe* and merciful treatment of our wounded soldiers, but that European conditions be not repeated here so that again the second condition will be worse than the first.

AROUND THE CIRCUIT

The March meeting of Milwaukee Chapter No. 19, W. O. N. A. R. D., was held on the 28th at the home of Mrs. S. A. Eckstein. As Red Cross work is the topic of the day Chapter No. 19 discussed it at length and where their services could be used to the best advantage.

A First Aid meeting had already been held on March 16 at the home of Mrs. E. G. Raeuber, at which twenty-five First Aid jackets were completed, ready to send to headquarters.

On April 3 the members of the chapter met at the home of Mrs. Eckstein to make gray flannel jackets. A number of the members have joined the Red Cross Society and are ready to serve when called upon if need be. Several of the members have also signed up in the National Defense League for Women's Service.

Sympathy is extended to the family of Mrs. C. A. Jerman, wife of the vice president of the Peter Van Schaack Company, who died of tuberculosis in Florida recently.

A whist party was one of the March events of the Ladies' Auxiliary of the California Pharmaceutical Association. Mrs. V. L. Schafer of Alameda was hostess.

The sympathy of the women of the retail drug trade is extended to the family of the late Dr. Conrad Lewis Diehl, who recently passed away at his Cherokee Road home. He was instrumental in organizing the Louisville College of Pharmacy and for ten years acted as its president. He was an old soldier, a prominent Mason, and one of the beloved gentlemen of the old school of the pharmaceutical world. His wife and three daughters have reason to be proud of the record he has left behind. He will long be affectionately remembered. Many who have had the privilege of knowing him and his family feel his passing as a personal loss.

Another honor has come to Mrs. Charles A. Stover, of Cambridge, Mass., in being chosen vice president of the Cambridge Chapter of the Red Cross Society.

Chicago Chapter No. 2 held its March meeting in the East Room of the Hotel La Salle. A stereopticon lecture and a social hour was enjoyed. The nominating committee was named to choose officers for the coming year.

The Women's Club of the Allied Drug Trade of Chicago held their March meeting at Hotel Sherman. They were entertained by an illustrated lecture on "Wild Animals in Captivity." The same body held a very successful entertainment at the Hotel Sherman March 26, when the members acted the graduation exercises of "Deestrick Skule No. 17." The men of the Chicago Drug Club were very appreciative guests.

The March meeting of Philadelphia Chapter No. 6 was held as usual at the College of Pharmacy. There were interesting speakers present for the occasion who dealt with the Girls' Scout movement.

The Milwaukee Druggists Ladies' Aid Society gave a musical at the Hotel Wisconsin, March 5, at which a number of distinguished artists appeared. Milwaukee has been having a scarlet fever epidemic, but it has not checked the activities of the women folks. March 1 the above mentioned society gave its annual ball, which was enjoyed, in company with the Milwaukee Pharmaceutical Association. This was held at the Auditorium.

The March meeting of the Queen City Chapter No. 5 was held at the home of Mrs. L. C. F. Kraemer. Mrs. Otto Katz reported on the Ohio Federation meeting, which she attended.

Louisville Chapter No. 11 gave an indoor picnic at the home of Mrs. Henry Schweitzer as one of its March activities. Mrs. Schweitzer was assisted by her daughter, Miss Jeanette. An Executive Board meeting was held with Mrs. S. E. May, the chapter treasurer, the last week in March, at which business affecting the chapter was discussed.

Mrs. Queenie Warden, of the People's Pharmacy of San Luis Obispo, is being urged to run as candidate for Mayor of that city.

I. PH. T. A. CONVENTION PLANS

The chairmen of the various committees of the Illinois Pharmaceutical Travellers' Association which will be in charge of the arrangements for the annual convention at Springfield, Ill., in June, have been appointed as follows: Convention Boosters, James W. Morrisson; Entertainment, P. J. Roth; Press and Publicity, I. C. Singer; Reception, Allan W. Stuart; Prizes, L. B. Estabrooks; Athletic Events, F. C. Herrick; Propaganda, Charles Jerman; Information, A. L. Crawford; Hotel, R. H. Smith; Transportation, Carl Abrahamson; Dance and Music, Frank Hoey.

IMPORTANT FOR WOMEN.

Any suggestions for co-operative Red Cross activity or help on the part of the women of the drug world will be received and considered by the Editor of this Department.

Many of the women are members of patriotic societies and already linked up with the work. Others have not allied themselves with any department of helpfulness.

WHAT HAVE YOU TO SUGGEST?

The Bathing Girl is Coming

She'll Need Supplies from the Drug Store

THE season for bathing will be here surprisingly soon. It is warm enough to go into the water most everywhere, except perhaps among the mountains, by May 30. That means that the bathing girl will be on hand full of enthusiasm for her swim, but still looking for a new bathing cap, for powder to use after the dip, for cold cream to help her complexion, for anti-sunburn preparations and for the hundred or more other things that the modern mermaid needs every time she goes anywhere near the water.

"Mother, may I go out to swim?"

Yes, my darling daughter.

*Powder your nose with utmost vim,
Use more perfume than water."*

That poem seems to be the watchword of most of the divine young things who do the swimming, though we'll grant you there are some who go into the water with a vengeance. That kind needs new bathing caps about once every ten days. And powder simply will not last the way it should. So the druggist is appealed to, and there you are!

Most druggists carry bathing caps. Now is the time to get in the new stock. Now is the time to add bathing shoes and even silk stockings—it's alarming how the girls want silk instead of cotton hosiery when they take their little splashes. But they do. And then they'll need various and sundry additions to their costume, the inevitable powder, the beach glasses, the sun shades, the perfume, pins, post cards to send home with a cross in one corner to mark "where we took our swim," and all the rest. There is a good business in it.

Display Is Important

Bathing supplies should be displayed. The average swimmer doesn't realize that the drug store can be a sort of center for all supplies. He or she is prone to do without what he or she would certainly want to have if it was only known that such things could be purchased in a drug store. At Rockaway Beach, near New York, there is a drug store that even sells bathing suits and makes a nice profit. Everything that is worth selling is offered for swimmers by that enterprising pharmacist. True, he really isn't a pharmacist any more, although he does keep a prescription counter, but nevertheless he is rated as one.

If there is a dry goods store in your town it ought to be easily arranged for that store to loan a display dummy. A little card in the window saying that the figure and bathing costume came from Jones' store will be reciprocity and will help the good cause. Then the figure can be placed in the center of the window, with a pair of sun glasses on the eyes, a natty bathing cap on the head, and pretty little shoes. On pedestals around her can be placed the perfume, talc powder, lip sticks, complexion creams and what-nots. Put a nice big card in the very front of the window reading something like this:

Yes, we'll outfit any bathing girl who wants to look better than the rest."

Another good scheme, since a lot depends on the attitude of the bathers, is to distribute souvenirs along the beach. Suppose your store is in a town visited every Saturday and Sunday by an enormous crowd. A boy stationed at the train shed with a number of arrows directing the people to follow the crowd to your store, or little souvenir cards of the beach with your name printed on them—he'd attract. And if he didn't actually bring in the people who left the train, then he'd get 'em for you either when they got to the bath houses and found something missing in their bags, or when they got through with the swim and wanted a good ice cream soda.

Let them come in and get an ice cream soda and find out that you carry the bathing supplies, and next time they come to the beach they'll not be so anxious to "stop off downtown to buy a bathing cap," they'll realize that they can get good ones from a pretty selection right at the beach and they'll go make the train, get a seat and wait until they get to you.

In Provincetown, Mass., which has very little bathing to offer tourists, the salt flavor has been worked out everywhere. The canny Cape Codders in this most wonderfully quaint old town, lie in wait for the "excursionists" who come across Massachusetts Bay from Boston for a day's trip. These people no sooner land in Provincetown than they find themselves opposed by a phalanx of souvenirs, views and post cards. They can't get away from them. Even in the leading drug stores purchasers of goods are rewarded by souvenirs. They all have something to do with the town, however, almost as much as the old town crier, who used to be a real crier but now walks about just to be seen.

There is little bathing there, as we have said, but the drug store carries bathing caps. For there is bathing in Truro, at Highland Light, in Welfleet and in Brewster. And the summer people from those towns take the wonderful automobile drives down along the cape, end up at Provincetown, because they couldn't possibly go any further, and buy their supplies. The drug store, with its line of beach and bathing sundries, is making lots of money.

The keynote to successful business in bathing goods is display. A druggist must let it be known without a question that he carries everything that is needed. He must be ready to fill any emergency. And if he does he'll make money.

Bathing cap specials are as important as other seashore side lines, and the photographs given here show that they can be exhibited as delightfully. A bathing cap does "make or break" a bathing suit, and a good assortment, displayed so that they attract cannot help but being a successful side line.

These caps in the pictures are made to retail at from



Photo by Camera Craft Studio.

A CAP WORTH WATCHING

fifty cents to a dollar. They are made by rubber specialists, and they are designed with a view to attractiveness and worth combined. All of them are of Kleinert rubber, with special bands to keep water from working its way under them. The difficulty in that line experienced by girl swimmers, by the way, is a real one.

The general window display of which these photographs were a part was on bathing caps. And, with nothing more



Photo by Camera Craft Studio.

tangible than the girls' heads to offer it made a mighty attractive window.

It is certainly true that bathing caps and bathing outfits make selling side lines. And they make profitable ones. But the best thing about them is that there is practically no limit to this display.

Can you imagine the possibilities in placing a figure, all toggled out ready for the water, just opposite the main entrance to the store? The customers coming in could



Photo by Camera Craft Studio.

not help being attracted, for these days the wax figures used for such displays are really good looking.

Then there is the possibility of advertising. There are few things which lend themselves to better general advertising than bathing caps in summer. And now is the time to start the campaign. It may seem a bit early in a way, but girls, and men for that matter, who are great "fans" for swimming have a habit of making their plans early and getting their stuff in hand long before the season opens. It's about time to get ready to climb on the band wagon and to get ready to clean up on the summer vacation spenders.

STRAIGHT TALK

Until the European war broke out few druggists realized the dependency of the United States on other countries in the matter of drugs. It was, of course, generally known that Germany supplied many needed articles, but it was not until market reports began to read like patch quilts which have seen long service that everyone here woke up. Recently it has been noted that salvarsan is to be made in this country. The druggist or jobber who can supply drugs and chemicals without calling on the intimate resources of a foreign power is going to make a little bucketful of spending money.

There is a druggist in New York who has been featuring a corn cure in his window. Among other things thrown into the display was a live monkey. Crowds were attracted, most of which could not be certain whether they were watching a menagerie or a retail store window. Being in that state, none of the crowd went into the store. The druggist certainly overdid it. There is a moral in that.

Druggists owe it to themselves to keep their calling a profession. Side lines are necessary adjuncts, and as such should be pushed, but there is no necessity for cheapening the store. When that is done the druggist becomes as respected in his field as the shyster ambulance chasing lawyer is in his.

A good window display these days is half the battle. It is personal advertising of the best sort. Many druggists seem to have gathered the idea that it is merely an exhibition and therefore throw in something of everything they have in the store. A hodge-podge window turns away customers just as quickly as a good window brings them in.

Speaking of windows, the druggist doesn't change often enough. A window display should never be permitted to occupy one window more than one month. It's better to change it weekly, even better to do it every third day. Such a system attracts in itself, and if the display is done well enough gets the customers in the habit of looking for it.

There is as much room for imagination in the drug business as in any other. The man whose imagination can be turned into practical lines long enough to enable him to foresee or imagine the situation he has to deal with is going to make good. Good salesmanship is really nothing but imagination raised to "nth" power.

Is there any reason for trying to be so conservative that the store falls over backward? A little radicalism is a mighty good adjunct to any business, drugs included.

Too few signs are bad. Too many are worse. Get your store "signed" so that it is a good place to spend a few moments. Your customers, for the most part, have taste.

MILWAUKEE DRUGGISTS ADVERTISING

Milwaukee druggists have begun an unusual advertising campaign in that city's papers. Running over the signature of the Milwaukee Druggists' Association the advertisements will tell the public just what part the druggist plays in service and will speak for practically every druggist in the city.

George H. Keston, T. T. Kraft and William Kaiser have been named as the committee to take charge of the campaign. Mr. Keston had this to say about it when he was asked to explain its purposes.

"The whole campaign will be aimed to establish a more intimate contact between the people and the druggists. We want them to know what the druggist is, what he stands for, what he does for them, and what they owe to him. I think we will make the campaign interesting to the public, and tell them some things that will be a surprise to them."

COLGATE CHEMISTS VISIT NORWICH PLANT

The chemistry class of Colgate University, accompanied by several members of the faculty and their wives, inspected the laboratories of the Norwich Pharmaceutical Company at Norwich, N. Y., on March 30.

BUYING AND SELLING

DRUG MERCHANDISE

SNAPPING PROFITS WITH CAMERAS

The Season for Picture-Taking Is at Hand—Cameras Are Always Popular—Developing Department Will Pay Well.

Last summer a party of city persons, who fondly believed they were back-to-nature advocates, went to Oyster Bay, N. Y., which, aside from being the home of a rather prominent ex-President, is famed for being quite a pretty place, and decided to walk across Long Island. It was some fifteen miles of walk to Freeport, where they planned to take dinner, but you must remember they believed themselves fiends on pedestrianism.

The walk started well. In fact, it carried the company three blocks, up past the town hall and the central garage until one of the men suddenly remembered that he had no films for his camera. The walk was in danger of being spoiled. For of what use is it to be a back-to-nature fiend if you can't take pictures to prove it?

There were three drug stores in Oyster Bay. One of them advertised films and had two cartons, neither of which would fit the 3b camera that was at hand. They were both outrageous and never used sizes. The other two drug stores boasted everything but kodaks. And the back-to-nature advocates walked along the beach, went back to New York and decided that metropolitan virtues were better. They went to a chain store, bought films and took pictures in Central Park.

All of which, of course, is exceedingly interesting but of little or no educational value. The Oyster Bay drug stores were not progressive. They are not careful followers of the teachings of their own great man.

The moral, plain to see, of course, is—carry films at least. If you haven't the courage to take on a line of cameras, at least carry films. Picture-taking is essentially an American delight. There's no reason under the sun for failing to take advantage of circumstances.

PULLING POWER OF CAMERAS

Every druggist who carries photo supplies realizes that his goods have a further value to him than mere financial profit. He realizes that pictures always please, and that pictures in the store make a good display that attracts. In that fact alone the druggist has found it of value to carry photograph supplies.

Another feature is the pulling power of amateur contests. Run by a drug store these contests prove highly successful. A small prize for the best picture taken about town in a week means many entries, for kodaking is a delight shared in by a surprisingly large number of people. That means that the store becomes headquarters, which, of course, means trade.

The desire for photo supplies is already made. Cameras have been sold and are being sold by the thousands, and every one realizes that very little is given away with a camera but the book of instructions. Films, lenses, and extras must all be purchased. The man who buys a camera of you buys other things, and becomes a steady customer.

Particularly at this time is it wise to have cameras ready for sale. Summer is knocking at the door, the great outdoors is calling. Everybody is ready and waiting for the first chance to get out. Almost everybody wants to take a camera along with him. The corner drug store which has them can display them tastefully, and there will surely be purchasers.

The first few weeks in May should be given over to pushing the camera line. The window should carry an enlargement of a small photo, with a camera on a tripod, leaves, grass and outdoor pictures to give the summer breath. It should show that cameras are carried as important features of the stock, but at the same time it should make the window artistic in every way.

Then there should be a special table or counter for the cameras and supplies. If possible there should be a spe-

cial clerk waiting on customers. He should know his game and be able to talk it. Last, but not least, is the developing room. That should be one of the features of the display. The druggist can let it be known that he is ready to develop any or all pictures, and then he will have his trade coming and going, which is the way it should be.

CAMERA TRADE IS LARGE

In order to care for the vast amount of amateur photographic work in the town of Farmington, Maine, the management of Marr's Drug Store has remodeled a section of the building which is to be devoted entirely to this work. The equipment is complete in every respect and includes an Eastman enlarging apparatus. The department will be managed by an expert photographer, Carroll Rounds, of Damariscotta. Established photographic shops are being relieved of a large amount of this work because of the interest that is being taken in it by drug store proprietors and managers of department stores in all sections of Maine.

SHOP TALK AND WAR TALK

Care in Conversation on War Subjects Is Desirable These Days—Avoid Hypocrisy and Argument.

In war time one finds men of many minds. There is the man who believes the war should be vigorously pressed to an end, the one who thinks a defensive war is good enough, another who thinks it just as well to let martial matters take care of themselves, and then there is the man who doesn't believe in war at all.

Under such circumstances the druggist is up against something rather peculiar. It is an unfortunate fact that Americans love nothing better than to air their views. Given a counter, a talkative man behind it, and another in front, it is very near a surety that the man in front of the counter will start a war discussion.

There are some druggists who can get away with an argument. But for the majority, two alternatives are offered. Either to oppose or agree. And a retail man can't agree with men who offer three different opinions and still keep their respect. With some he can argue and maintain cordial relations, but there are Americans who feel like a bull in a wide field when a red flag is tossed over the fence if they are opposed in an argument. They get angry, and men angry at the shopkeeper won't trade with him.

It may not seem important, on the face of it, this matter of store conversation during war time. But if you'll look at it a bit closely you'll agree it is. Especially in small towns is there probability of trouble, because there every one knows each other, the druggist included, and shop talking is common.

The problem is to adopt neutral ground. Between the counter's edges should be a firmly established "no man's land" guarded so well that the strongest gas attack will not penetrate. Talk is all right. In many instances it solidifies trade. But war talk is dangerous. The suppressed feeling among Americans runs too high. Hypocrisy, in agreeing with all statements offered, might seem a safe course, but it, too, is dangerous. It will be found out, and the druggist will be shunned.

One course that carries no particular immediate danger might be adopted. That is *disinterest*. Putting in a harmless word now and then will give the man on the other side of the counter the idea that he is a successful arguer, and it will not entail any argument from the druggist. It will merely show that he doesn't care to talk war, at least in his store. It will keep friends, unless it is carried so far as to give the impression that the druggist is too lazy and indifferent to bother with such questions.

Retail Advertising to Bring Results

Campaigns are Necessary for Real Success

THE modern storekeeper, be he a hardware dealer, a grocer, a butcher or a druggist, believes in advertising. Some, of course, believe strongly in various degrees of publicity, but the man who wants to be a success in his business knows well that he wants to advertise in this business.

Advertising, of course, may be good or bad. The campaign that fits the grocer in every way will not fit the druggist, however. The druggist, covering exactly the same public field, must approach it in an entirely different manner; he must know that he is to appeal to his public through an entirely different and an entirely peculiar way.

To advertise in a retail field is not a difficult problem. But unless that problem is met in a studied way it will be unsuccessfully solved. Too much is as bad as too little. Returns, especially for the druggist, come from specialized ads.

There are a great many druggists who insist upon publicity that covers very nearly their entire stock in one spasm. It is a spasm and nothing else. The housewife who reads it goes through it in a spasmodic way. She learns that the druggist carries soap, paper, perfume, hot water bottles, pills, books, periodicals, tobacco, rubber goods, talc powder, candy—and by that time the mass of statistics has wearied her and she promptly forgets everything about the advertisement. And it loses its force.

The ideal advertising campaign should appear in the local paper, in direct-by-mail literature, in store cards, and in specialties if possible. It should be a campaign and should be studied as closely as any other campaign. A druggist may expend but \$500 in his campaign, but he should spend it with as much care and with as wide a view towards getting the best advertising out of that money that he can as any firm which contributes \$50,000 to its publicity.

KNOW WHAT AND HOW TO ADVERTISE

You wouldn't buy a new stock, something entirely based on a season fad, say, without knowing whether you had a call for that stock. You would not load up your shelves with anything unless you knew you would have calls for the stuff. Why should you spend your good money on publicity unless you know that it is going to bring results? Unless you know that there will be a call for the stuff?

Suppose you are a druggist in a city of 75,000; that you have five competitors; that all of them are up to the minute and doing good businesses. Suppose they carry much the same goods that you do—and that is pretty nearly always the fact, isn't it—and that it's a question of general trade for everybody.

Would you list your stuff, take a page in a paper and put an item about everything you sell in that paper? You might. But wouldn't it be better to plan the week's campaign on perfume, say, and feature that—feature it *big*? You must remember that once a customer comes into the store, buys something and is satisfied you've gone a long way towards keeping that customer.

The problem in this suppositional case is not severe, but if you decided to spend \$50 in one week's advertising you ought to plan that expenditure to meet your needs. Forget for the purposes of the publicity itself that you carry any more than two kinds of stock. Specialize on something; it will be a hundred per cent more effective if you know your city well enough to know what it likes

best of all. Suppose you know that most of the women like perfume.

\$50 CAMPAIGN NOT DIFFICULT

With a \$50 expenditure it wouldn't be possible to give samples away unless the jobbers or manufacturers supply them. But if they can be given away, so much the better. The campaign should be studied closely, of course. The druggist must decide what is best for his public. His experience with it should tell how anxious it is for "cut and dried" stuff. Or whether it is one of these "free-thought" communities with a craze for cleverness and new ideas. Or whether it is interested in pretty things, or whether stunts appeal. It isn't easy to find those things out, but it can be done by discernment, watchfulness and study. If you haven't tried it you'll have to experiment, but the successful business man **KNOWS** the field he appeals to.

Well, take it for granted that the people who use your drug store are cultured and refined in every way. Say they are a bit "high-brow," if you will. Circus stunt ads will not appeal to them, will they? Of course not! Will clever stuff do the trick? It will, to a certain extent. But good, solid, forceful stuff, with an atmosphere of cleverness and a good deal of refinement is the sort that's wanted. Do you imagine a series of facts about your store, couched in listless, unimaginative style, will interest such a class?

Under circumstances which have so far been supposed it would seem that the campaign should be begun with subdued, tasteful cards, telling the public what the feature is. A long card, possibly 5x2½ inches, is tasteful and at the same time strong. The message should be printed parallel to the long side. If it is perfume, you decide to feature put the perfume message strong. This is only a suggestion; it is not meant as a good idea to actually follow, but couldn't some such card as the one

*—perfume maintains the odor
even tho' the color of the
flower is gone.*

*—only the good perfumes are
bearers of the "something"
which means culture and breed-
ing.*

**WE HAVE GOOD PERFUMES
AND WE WANT YOU TO
KNOW IT.**

Lilac—Rose—Carnation—
(Price list)

JOHN SMITH.

Main Avenue, A Street.
(Everything that ought to be sold
in a drugstore.)

shown here be used?

Now, off hand, that card does have a little-punch. If it were printed on brown paper in a darker brown ink it would be attractive. It tells your story, too, and it doesn't forget to point out that the drug store is progressive and that it carries a full line of goods.

This supposed advertising is but a hint at what the ERA wants to do with druggists who are in advertising difficulties. The Editors, together with the other forces at their command, are ready to aid druggists who want to be aided. If you will send us your problem, telling us what you are up against, what kind of people you serve, how much you want to spend and when you want to spend it we will gladly study that problem, make out a campaign for you, as far as possible write the advertisements and figure costs of lay outs. We feel that the druggist's advertisements could be made better and more successful. We'll help if you want us to.

ADVERTISING AND COSTS

That advertising properly done, reduces the cost of selling in the retail store, in the jobbing house and in the factory will be the central thought at the convention of the Associated Advertising Clubs of the World in St. Louis, June 3 to 7. The slogan for the meeting will be "Advertising Lowers Cost of Distribution."

SHARPEN A SIDE LINE

The progressive druggist who is wide awake to his opportunities will realize that there is often a successful and paying side line to be found among the so-called unique things. Not that the trade is searching out unique things, but that those things appeal when they are produced.

Most druggists will agree that a novel and interesting side line, and one which bids fair to be a paying one, is opened up in the sharpening of safety razors and the old-fashioned kind as well. There is a firm in Chicago which sharpens razors sent to it by mail, and it offers a good chance for a wide-awake druggist to "get busy" and make a handsome profit.

Perhaps at first blush it seems rather far away from the correct field of activity for a drug store to sharpen razors. But most drug stores sell them, and it cannot be denied that men have to shave. If they can get blades sharpened cheaply at the drug store they'll do it. There is a direct profit in it and an indirect one because it brings people into the store, and that always means better business if the owner is alive to possibilities.

The druggist can get 3 cents apiece for the blades he sharpens and he has to pay but 1½ cents for them. That does not include his postage, but that would hardly amount to ten cents on 100 blades. Even calling it half a cent a blade there is clear profit and no bother, of 1 cent a blade. And all customers will have at least ten blades to sharpen each time. Profit of ten cents for doing nothing more than taking ten razor blades over a counter, wrapping them into a package and sending them away is good profit. If the druggist can manage to sharpen blades for 100 men a day he will make a nice thing out of it and the Keenedge Company of 305 North Michigan avenue, Chicago, says it can be done.

WISCONSIN REXALL MEN MEET

Ninety Rexall druggists from all parts of Wisconsin met in annual convention late in March at the Hotel Pfister, Milwaukee, Wis., to discuss trade conditions and their relation to current events. The following officers were elected: President, M. C. Trayser, New London; first vice president, W. F. Truckenbrod, Monroe; second vice president, C. A. Begum, La Crosse; third vice president, Fred O. Hoppe, Sheboygan; secretary-treasurer, F. A. Rhyme, Portage.

Chairmen of the various standing committees were named as follows: Candy, Charles F. Kirst, Two Rivers; toilet goods, E. A. Schmalz, Appleton; stationery, H. J. Setz, Lake Mills; rubber goods, R. T. Buerstatte, Manitowoc.

A. J. Bransted, Eau Claire, was elected head of the committee on soda fountains; W. F. Truckenbrod, Monroe, cigars; A. P. Ruh, Fond du Lac, unusual sidelines; Theodore Mueller, West Allis, special sales; Ora Hatch, Bloomington, general advertising; R. Milbauer, Clintonville, window and interior displays; L. Christopher, Milwaukee, sales people and salesmanship; C. J. Neihous, Fenimore, drug store financial problems; Emil Francar, Galesville, pharmaceuticals; T. F. Cunningham, Pardeeville, Rexall remedies.

A big banquet in the evening of the opening day and a theater party at the Majestic Theater on the following night.

NEW CHAIN IN WEST

G. V. Kradwell, who established a system of seven stores in Racine, Wis., and one in Kenosha, Wis., has organized a new company, with those stores as a nucleus, to operate a chain of about one hundred stores throughout the central west. The company which will carry the project has been incorporated in Delaware for \$1,500,000.

The idea behind the new chain, primarily, is that of a buying club. When Mr. Kradwell began in the drug business in Racine he learned that there was a strong buying power in a chain of stores, so he acquired new stores in his own city as fast as he was able. The success of those chain stores made him appreciate the possibilities in his territory and he interested Carl F. Stark, a drug buyer of Chicago, and E. G. Glenny, a Chicago attorney, in the project. At present the new firm, which is known as the Kraton Drug Company, is offering for public sale its 7 per cent cumulative stock.

GOVERNMENT TAKES OPIUM

Seized Importations at All Ports to Be Forwarded to the Surgeon-General's Office—Morphine Contents May Be Extracted for Hospital Uses

(Special Correspondence.)

WASHINGTON, D. C., April 10.—All smoking opium held at the various ports of entry to the United States is to be forwarded to the Public Health Service at Washington, in accordance with directions just issued by the Treasury Department. A circular letter to collectors of customs, from Byron R. Newton, Assistant Secretary, in charge of customs, reads as follows:

To Collectors of Customs:

Referring to the Department's instructions of January 11, 1916, that no action should be taken looking to the destruction of smoking opium pending the result of the investigation referred to therein, you are hereby directed to forward to the Public Health Service, at Washington, the smoking opium now held at your port.

Your attention is invited, in this connection, to section 2, of the Opium Act, approved January 17, 1914, which provides that opium or any preparation or derivative thereof, imported contrary to law, shall be forfeited and destroyed. Such opium, preparations, or derivatives seized under the provisions of the said section should also be forwarded to the Public Health Service.

The opium, preparations, and derivatives above referred to should be forwarded by mail if weighing not over four pounds, or by express under Government bill of lading if weighing more than four pounds, addressed to the Surgeon General, Public Health Service, 1414 Pennsylvania Avenue, Northwest, Washington, D. C., the express charges to be paid by that service.

BYRON R. NEWTON, Assistant Secretary.

This action by the Government is probably the first step taken in the way of sequestration of products for war uses. It is presumed that the opium will form the basis of a supply of morphine for the hospital corps. The importation and use of opium for any other than medicinal purposes was prohibited by the act approved February 9, 1909.

THE ARMOUR YEAR BOOK FOR 1917

This brochure under the above title is presented as a digest of the industries of Armour & Co. of Chicago, and also of the methods by which the business is conducted. We believe that no one can read the facts herein presented without becoming impressed with the magnitude and extent of the company's operations, and correspondingly with the position these operations occupy in the economic resources of the country. The gross sales of the company for the fiscal year ending October 28, 1916, were \$525,000,000, while the net earnings, after all charges were paid, were \$20,100,000, equivalent to 20 per cent on the capital stock and 14.7 per cent on the invested capital. The net profit on the business done was 3.8 cents on each dollar's sales.

That Armour & Co. are converters of raw material into a wide range of finished products is evident, the 3000 listed being classed for convenience as either "edible" or "inedible," and all produced and marketed in a manner that makes for lower selling cost. J. Ogden Armour, president of the company, states that any pre-eminence the company may have attained has been won on a straight basis of service, the secret of all successful business. The chapters devoted to the history of the business, Armour ideals, the high cost of living, meats on the bill of fare, U. S. meat inspection, efficiency standards, system of distribution, refrigerator cars and the food supply, the retailer, advertising, breeding live stock, markets and by-products are filled with interesting facts and vividly portray the energies, interrelations and economies of 20th century business operations.

MAINE DRUG INSPECTION

C. A. Richards of Damariscotta, State inspector of drugs for Maine under the pure food and drug act, completed his inspection of the stocks in Bangor drug stores early last month and will continue his activities for the next several weeks to other cities and towns in Penobscot County.

NEW YORK BRANCH A. P. H. A.

That the Drug Trade Conference should use its best endeavors with the proper Government officials to secure direct representation of the drug trade on the Council of National Defense was the gist of a resolution adopted by the New York branch of the American Pharmaceutical Association at its April meeting. This action, proposed by Caswell A. Mayo, followed the reading of several communications by Secretary Schaefer, all of which pointed out that pharmacists were being ignored more and more in movements of National and local scope.

The writer of one of the communications, Prof. Edward Kremers, asserted that pharmacists had been ignored in the personnel of the Committee of One Hundred, organized ten years ago for the establishment of a Department of Health at Washington, and now the journal *Science*, in issuing an appeal for the establishment of an "Institution for the History of Science and Civilization," does not publish the name of a single pharmacist among the list of promoters. According to Prof. Kremers, "commercial pharmacy is ruining the future of pharmacy as a calling. Pharmacists are ignored nationally and locally. They play no part in constructive movements and are now facing control by the medical profession as well as by food and dairy commissions."

A number of interesting communications read by the secretary dealt with the discussion developed at the previous meeting on the expenses and future publication of the association's journal. The secretary of the Montana branch, writing from Missoula, stated that his organization had taken no action on the Philadelphia resolution, but that in his own opinion subscriptions for the year book would assist in cutting down expenses. President Frederick J. Wulling, in his letter to the branch, accorded with the spirit of the New York branch's action. He was pleased that the branch did not favor reduced salaries, as such reductions did not always prove to be economies at all, and approved the spirit of the members in advocating increased membership. Secretary Wm. B. Day believed that the *Journal* would soon be self-supporting. He was of the opinion that 1916 members should be given the 1915 year book, and quoted a section from the by-laws to prove that his stand was well taken. Professor Day doubted whether it would be possible to publish the 1916 year book during the present year. He favored cutting down the *Journal*. S. L. Hilton, Washington, D. C., wrote that the conclusions of the branch relating to the matter fully accorded with those of the committee of the Washington branch.

Prof. Remington Absent

Although Prof. Joseph P. Remington was unable to attend the meeting in person he was much there in spirit. It had been announced that he would present an address and participate in a general discussion on "The Pharmaceuticals of the New Pharmacopoeia," papers on which were to be read by Dr. J. Leon Lascoff and F. A. Bongartz. Prof. Remington, by his physician's order, was obliged to remain in Philadelphia and he asked the branch to keep open a later date when he did not have the "lumbago."

In his paper Dr. Lascoff directed attention to many changes in much-called-for preparations in the new and the old pharmacopoeias, noting particularly mucilage of acacia, mass and oleate of mercury, compound syrup of sarsaparilla, and tincture of iodine. He observed that the amount of water called for in the preparation of dilute hypophosphoric and hydrochloric acids had been increased, and asserted that the pharmacist should not discard his old pharmacopoeia when he bought a new one, as, for instance, the new one contained no standard for dilute nitric acid. He concluded by stating that the pharmacist should see that his pharmaceuticals are not only elegant in appearance but are pure in quality. When he buys his galenicals he becomes personally responsible for them as soon as they are sold.

Prof. E. Fullerton Cook, of Philadelphia, who came to the meeting as a substitute for Prof. Remington, said that he left the latter in bed at work upon the dispensatory, and elaborated a bit upon the making of the Pharmacopoeia. He showed how mistakes due to corrections arose in the text and said that copy "right last week might be far from right when it reached the user as the text of the U. S. P." As a minor error he pointed out that the

"clear sand" specified under tincture of lactucarium had been "clean sand" until the printer changed it at the last minute while correcting an error in the same line.

Prof. Cook said that the questions which had caused the most discussion previous to publication of the Pharmacopoeia now seemed to be those which were least discussed. The acceptance of "mils" was unanimous. Delay, said the speaker, "had been Prof. Remington's policy. The revision has 'got to be right' before it could be sanctioned, no matter how long it took. The very fact that the work was not done in one conference or in one laboratory, but by correspondence, is the reason why some questions were solved so well. In a conference, men lose their keenness after eight hours. I have seen many problems solved by present methods which could not be solved in conference. This is one of the things I fear might arise in Government revision."

Prof. Cook also went into the scheme of circulation of tentative text between committees, sub-committees and conference, and the conferences at which all suggestions and criticisms received exhaustive consideration. He said it was Prof. Remington's personal argument that "when the book is out, if it is good, everybody will forget how long it took."

Prof. Charles H. LaWall spoke briefly. He reported that a bill before the Pennsylvania Legislature would, if enacted, make it compulsory for the pharmacist to keep the latest edition of the U. S. P. in his store, and while "you may lead a horse to water, you can't make him drink" a pharmacist might occasionally look at the U. S. P. if he had it in his store. Prof. LaWall regarded the first test in the text for glucose, prepared by Dr. Rosengarten, as rather ingenious. It was a "double-header." The first part demonstrated complete hydrolysis, and the second, if the color blue was not obtained, that the iodine had been taken up by the sulphur dioxide. It was a quantitative test. Although the changes made in the tincture of nuxvomica were more in the interest of the manufacturers than the pharmacist, they tended to greater uniformity of product.

Caswell A. Mayo, Otto Raubenheimer and Dr. Wm. C. Anderson were appointed by President Dr. Joseph Mayer as a committee to draft resolutions anent the death of C. Lewis Diehl, and Dr. Lascoff, Dr. Jacob Diner, and Dr. George C. Diekman to perform the same service in memory of the late Prof. George B. Ferguson.

MAINE HEARS TALK ON DRUGS

Representative druggists, doctors, dentists and lawyers of Portland, Lewiston, Auburn, Biddeford, Saco and Westbrook were guests of Dr. E. E. Holt, of Portland, at a luncheon given at the Congress Square Hotel recently in honor of Charles B. Towns, of New York City, who was secured as the speaker for the Open Forum at the Congress Square Church the day following.

"After the present war," said Mr. Towns, "the world will be full of men who have formed the drug habit while in the trenches.

"There is a vast army of drug takers in the United States, some of them legitimate and inevitably such because of the ignorance on the part of their physicians, or perhaps by a nurse's carelessness. No one can realize fully the enormity of what has come to be known as the 'drug question,' who has not had the special opportunities to study it."

In the course of the address the speaker stated that the Federal Government had recently uncovered in the City of New York a firm that was operating as wholesale druggists. This was accomplished, he said, by paying the Government the annual fee of ten dollars. They imported quantities of opiates which cannot be disposed of legally in the United States except upon written order blanks supplied by the Government. This firm, however, exports large quantities of drugs into Mexico to an individual or firm, and in turn this Mexican individual or firm can smuggle the goods back into this country without any trouble at all, and this is just what they do, he concluded.

Mr. Towns also spoke of the law passed in China which forbids the growing of opium, and which law he was instrumental in having put in operation. It was in China that the speaker personally treated and cured thousands of Chinese who had become addicted to the use of drugs.

WHO'S WHO AND WHAT'S WHAT IN THE DRUG WORLD

PERSONAL NOTES

DR. BURTON ONCE A DRUGGIST

Dr. Marion LeRoy Burton, newly elected president of the University of Minnesota and at present president of Smith College, was once a druggist. His later activities as an educator have made pharmacists lose sight of the

fact that his early training was in their profession, but he still remembers that 25 years ago he was an ambitious young man learning how to "roll pills."

He is responsible for his own advancement. He is one of the men who, without an actual close connection with pharmacy, is yet a source of pride to the profession. By his own efforts he has progressed, he has gained his education and has taken a high place in the work of educating others. Now, at 43 years of age, rather young to be in such an important post, he has made for himself a place in the first rank.



DR. M. L. BURTON

He is a Western man, born in Iowa, August 30, 1874. His father was a farmer, who died when the boy was only eight years old. That placed a big burden on the youngster's shoulders and when the family moved to Minneapolis he had difficulty in finding time to go through the grade and high schools. Then he became a drug clerk. For four years he helped a pharmacist, passed his examination and became a registered pharmacist in the State.

In 1893 he entered Carleton Academy without financial backing and later won his degree in the college. Then he went into education and divinity work. He became principal of Windom Academy at Montevideo, Minnesota, and in the fall of 1903 entered Yale Divinity School.

In the fall of 1903 Mr. Burton entered the Yale Divinity School and was elected to the presidency of his class. Throughout his course he maintained high rank and was the only man to win the full number Fogg scholarships, the highest honor prize. He took his degree as bachelor of divinity in 1906, with a summa cum laude. Along with his theological work he specialized in philosophy and secured his doctor's degree in 1907.

After graduation from Yale Divinity School Dr. Burton remained with the school as associate professor of systematic theology. After filling this position one year Dr. Burton accepted a call to the pulpit of the Church of the Pilgrims, of Brooklyn, N. Y.

In 1909 he was chosen president of Smith College to take up his work there a year later, the fall of 1910. He has been secretary of the Missionary Society of the Associated Congregational Churches. Carleton gave him a doctor of divinity degree in 1909 and he has received the degree of doctor of laws from Tufts, Western Reserve and Amherst. He is a member of Phi Beta Kappa and Delta Sigma Rho honorary societies.

—FREDERICK H. FRICK, State Food and Drug Commissioner of Missouri, has tendered his resignation to Governor Gardner and will take charge of the National Food and Drug Information Bureau, with headquarters in the La Salle Building, St. Louis. He has served as commissioner for the last four years, and during that time was an active collaborator of the United States Department of Agriculture.

RIETZKE CELEBRATES ANNIVERSARY

Herman W. Rietzke, pioneer druggist of St. Paul and former president of the Minnesota State Pharmaceutical Association, recently celebrated the thirty-fourth anniversary of his start as a

business man. A huge "birthday" cake was the feature of the celebration, which was held at his drug store at Selby and Western avenues. The store was decorated with palms, plants and cut flowers, and there was free ice cream for everybody, candy for the children, cigars for the men, and souvenirs for the women. Since the establishment of the store 153,000 prescriptions have been compounded. Mr. Rietzke has lived in St. Paul fifty-three years, and as a young man played ball in some of the lots where the largest houses now stand. His first store was opened in 1883 on



HERMAN W. RIETZKE

the spot where the Aberdeen Hotel now stands. He is already planning another party to mark the completion of his fortieth anniversary. He has always been active in organized pharmacy, having been a member of the Board of Pharmacy, and besides his work in the State Ph. A. has been prominent in the N. A. R. D. as a member of the legislative committee. He is also a member of the A. Ph. A.

HONORS FOR H. P. HYNSON

Dr. H. P. Hynson, of Hynson, Westcott & Co., of Baltimore, a member of the faculty of the Department of Pharmacy, University of Maryland, has been elected chairman of the retail druggists' section of the International Rotary Clubs, and promoted from chairman of the executive committee of the Civil Service Reform Association of Maryland to president of the organization. He has also been drawn on the Grand Jury. In his various activities, of course, his well known executive ability and organizing skill have been signally felt.

As chairman of the Druggists' Section of the Rotary Clubs he has sent out a circular letter urging all Rotarians to attend the annual meeting of the organization at Atlantic City June 17 to 21, and requesting them to give an entire afternoon to the sectional work. He wants especially suggestions from the members concerning what they will do in leading the discussion or reading papers, and as to what subjects should be discussed.

—JAMES R. SPILLANE, proprietor of two drug stores in Elmira, N. Y., has acquired by lease the Gerrity Drug Store at Lake and Carroll streets, that city, recently vacated by the McKallor Drug Co. The lease runs for a period of five years and includes the privilege of purchase at the end of that time. The store has been in operation since 1857, when the Gerritys opened it. On the death of one of the founders a few years ago the Gerrity Drug Co. was formed, which continued the business until a year or so ago, when it was taken over by the E. C. McKallor Drug Co., of Binghamton. Mr. Spillane is well known as a progressive business man by the citizens of Elmira, many of whom recall the days when he first began to learn the pharmacy. He is a graduate in pharmacy and a member of several fraternal organizations.

—FRANCIS E. HOLLIDAY, secretary of the National Wholesale Druggists' Association, is celebrating the 50th anni-

versary of his connection with the drug trade. He became an apprentice of L. H. Bush of Des Moines, Ia., in 1867. In 1878 he started in business for himself with W. E. Swift of Des Moines at Topeka, Kan. He soon became active in the N. W. D. A. and was for many years special representative of the association.

—H. H. DEFENBACH, the popular druggist of Sheffield, Mo., and wife, and Mr. and Mrs. C. H. Defenbach, brother of the former, have returned from a week's motor trip to Hebron, Nebraska, and Augusta, Kansas. While gone they travelled nearly a thousand miles, finding the roads in excellent condition. They also had a race of five miles after a huge coyote. They finally succeeded in killing him.

—B. W. ADAMS, who has been at 7209 East Fifteenth street, Kansas City, for the last seven years, is preparing to move his drug store to 7201 East Fifteenth. He is installing a new fountain, new furniture, shelves, etc., in fumed oak, mission style, and making other radical and extensive changes. His store, when opened, will be second to none in East Kansas City.

—FREDERICK W. RUGG, for many years connected with the firm of H. H. Hays Sons, of Portland, Me., retail drug and chemical dealers, has severed his associations with that concern and has gone to Philadelphia, where he will represent the firm of Bauer & Black, of Chicago. Mr. Rugg will cover the northern section of the city of Philadelphia for the Chicago concern.

—R. J. MESSING, former president of the Minnesota State Pharmaceutical Association, and H. Martin Johnson, secretary of the St. Paul Retail Druggists' Association, are members of the committee of the St. Paul Association of Public and Business Affairs, known as the subdivision on retail promotion and extension.

—W. C. MARSH, of Marsh Bros. Drug Co., Kansas City, who finds his avocation in running a picture show a few doors from his place of business, Seventh and Central, Kansas City, Kansas, reports that patronage has been so good he has decided to charge ten cents on Wednesday and Sunday nights.

—H. L. ROGERS, druggist of Thirty-first street and Agnes avenue, Kansas City, Mo., has decided that he cannot tempt fate any longer and has made plans to move his business. Gas explosions in the vicinity of the present shop have broken his plate glass windows seven times in the past four years.

—GEORGE T. LEHRER, former Mayor of Sandusky, O., and a well known druggist of that city, has been elected Mayor by the City Commission, following the action of that body in ousting the former Mayor. The change took effect April 1, Mr. Lehrer accepting the office.

—LINWOOD NOYES, for the past three years a registered druggist in the employ of the local drug firm of Heseltine & Tuttle, has responded to the call of Uncle Sam for "recruits" for the navy and has been enrolled as hospital apprentice, first class.

—J. A. HUGHES, druggist and bank director of Bakersfield, Cal., has leased a new building with a rental of between \$250,000 and \$300,000 per year. He will operate a drug store in the building.

—J. T. COVINGTON, owner of the McKinney avenue store in Dallas, Texas, was visited by robbers recently. They took \$40 but overlooked \$3,000 in jewelry which was in the safe.

—FRED MUELLER, druggist of 627 South Ninth street, Quincy, Ill., was the victim of a surprise party early this month. It was his twenty-ninth birthday anniversary.

—ROY M. JOHNSTON, secretary of the Arkansas Bridge Commission, is to resign and will return to the credit department of the Morris-Morton Drug Company.

—O. P. BENNETT, former druggist, now a farmer in Cumming, Georgia, has returned to his first love and will become a salesman in a wholesale drug house.

—M. J. SULLIVAN, for the past three years manager of the Riker-Hegeman stores in Stamford, Conn., has gone to Bridgeport, Conn., as manager there.

—AUGUSTUS F. GLEASMAN, a well known pharmacist of Holyoke, Mass., will be married in the near future to Miss Anna F. Craft, of Northampton.

—CHARLES FALKENHAINER, a druggist of Dubuque, Iowa, has been endorsed as a candidate for the State Pharmacy Board by the local druggists.

—J. R. CULBERTSON, of New Freedom, Wis., has been compelled to give up his business after ten years because of continued ill health.

—ALBERT BOWERS, a veteran drug salesman of Danville, Ill., who is well known throughout the Central States, is ill at his home.

—J. F. S. SCHMIDT, of Oshkosh, Wis., has retired from business after forty years of keeping a drug store in the same building.

—W. S. ARNOLD, druggist of Augusta, Wis., has been re-elected president of the Civic and Commerce Association.

—JAMES N. GAMBLE, the soap manufacturer, is one of a committee seeking a site for a retired ministers' home.

—E. V. COULL, for many years a druggist of Spokane, has sold his store and will enter the insurance business.

—FRANK ROSENER, of Jamestown, N. D., was married late in March to Miss Orpha Junkins, of Mason City.

—WALTER J. MORE, of Walton, N. Y., has been placed in nomination for the office of village president.

—CHARLES A. PELTON recently celebrated his sixty-third year as a pharmacist in Middletown, Conn.

—CHARLES E. CHILSTROM, for forty-six years a druggist in Minneapolis, has retired.

HANSER HEADS ST. LOUIS DRUG CLUB

O. C. Hanser was elected president of the St. Louis Drug Club at the annual meeting held recently at the headquarters of the organization. Others elected were: M. Scherer, first vice president; J. J. Frey, second vice president; Hugo Baepler, secretary, and Max Lippman, treasurer. Board of Directors: Frank J. O'Neill, W. F. Kahre, H. D. Delkeskamp, L. A. Seitz, C. L. Chittenden, and F. J. Scharlach.

N. W. D. A. CONVENTION DATES

Charles E. Matthews, chairman of the committee on arrangements and entertainment, announced this week that the fifty-third annual convention of the National Wholesale Druggists' Association will be held in Chicago, October 1, 2, 3 and 4, 1917, with headquarters at the Congress Hotel and Annex. It is requested that delegates arrange for reservations as early as possible, and in regard to this matter address William Buss, care of the Fuller-Morrisson Company, Chicago. Romaine Pierson, 81 Fulton street, New York City, is chairman of the committee on rates and routes and will arrange for special cars from eastern points to Chicago.

KNOWLEDGE OF ITALIAN

The fact that a new clerk in a Massachusetts drug store could talk Italian fluently led to the development of a desirable amount of new business, and perhaps the best part of it is that the new customers pay cash and feel grateful for what they regard as a distinct favor.

The store is in Newton, Mass. On one side of the city, in a congested area, a mile or more from this pharmacy, is an Italian colony of several thousand. Many of these Italians do not speak English, and to do business at a drug store in their own tongue they formerly had to go to Boston, seven or eight miles away.

Recently an Italian young man came to work in this Newton drug store, and soon he realized that considerable business might be developed in the Italian quarter. He put the plan up to the owner of the store, who thought well enough of it to have the clerk prepare several notices in Italian and run one in each issue of the local paper at the cost of 10 cents a line. The response was almost immediate, and the fact that Italians could do business in the store in their own tongue spread through the colony rapidly.

A doctor with a practice among the Italians said that nothing had pleased them so much in a long time as the fact that they could get satisfactory service near home and save a long trip into Boston. This led to the printing of prescription blanks in Italian for this doctor, and this aided in increasing the trade.

DEATHS IN THE DRUG TRADE

HAROLD J. SCHAFER

Harold J. Schafer, who had been employed by the Adams Drug Co. of Auburn, N. Y., for only a short time, died at the Auburn City Hospital on April 7, death resulting from pneumonia following an attack of grippe. He was 23 years of age, and his home was in Fulton, N. Y., where he graduated from the high school in the class of 1912. He was prominently identified with the athletic activities of the school, and served as treasurer of its athletic association. He also served as marshal of the class of 1911.

He studied pharmacy at the Albany College of Pharmacy, from which he graduated in 1916. He had the happy faculty of making friends and of retaining the esteem of his classmates and business associates. He is survived by his parents, one sister, Miss Ruthe Schafer, of Fulton, N. Y., and one brother, Royal Schafer, of Syracuse. His body was taken to Fulton for burial.



HAROLD J. SCHAFER

BOWER T. WHITEHEAD

Bower T. Whitehead, professor of pharmacy in the South Dakota State College of Agriculture and Mechanic Arts, died at his home in Brookings, S. D., after an illness of several weeks. He was 56 years of age and had served as head of the department of pharmacy for twenty-one years. His ability as a teacher and a pharmacist was reflected in all of his students to such an extent that a few years ago it was said that of all the graduates sent out from his institution, only one board examination failure had been reported. He was a thorough believer in requiring of all students a high grade of preliminary general education before beginning the study of pharmacy.

Prof. Whitehead graduated from the "S. D. State," receiving his Ph. G. in 1895, and then spent a year in Northwestern University, where he took his Ph. C. degree in 1896. Returning to Brookings, he took up teaching in the department of pharmacy, at the same time continuing his studies for the higher degrees, receiving his B. S. in 1897, and his M. S. in 1901. He was a member of the American and South Dakota Pharmaceutical Associations, and a registered pharmacist in his home State. He is survived by his widow, one daughter and a son, Lindsey W. Whitehead, who is professor of highway engineering at Pennsylvania State College.



B. T. WHITEHEAD

—GEORGE STEPHEN ELLIOTT, 53, former manager of the Red Cross Drug Stores and later associated with G. V. Kradwell in conducting the Kradwell chain of stores, Racine, Wis., died recently at his home in that city. Mr. Elliott was born in Michigan and came to Racine about fifteen years ago. He was a member of the Masonic order. A wife and daughter are the immediate mourners.

—MALCOLM J. WILCOX, 40, pharmacist in Schnitzler's drug store, Long Island City, N. Y., died suddenly in the office of a neighboring physician, whither he had gone for medical treatment. He was a Mason and an Elk. His widow survives him.

CALEB S. HANKS

Caleb S. Hanks, engaged for a time in the drug business at Olean, also at Hudson and for more than twenty years at Newark, N. Y., died at his home in the last named city on March 29. He was born at Henrietta, N. Y., in 1853, and educated at the Rochester Free Academy and University of Rochester, graduating with the class of 1873. He was a member of the Theta Delta Chi fraternity. Mr. Hanks was widely known in Masonic circles, and had served as presiding officer in the various bodies of both York and Scottish Rite Masonry. He was also a member of Mecosta Lodge, Knights of Pythias. He joined the New York State Pharmaceutical Association in 1898 and had served as president of the Wayne County (N. Y.) Branch of the N. A. R. D. His body was buried at Maplewood Cemetery, Henrietta, N. Y. He is survived by a widow and a sister, Mrs. William S. Dunn, of Scottsville.



CALEB S. HANKS

HENRY J. WOODWARD

Henry J. Woodward, president of Allaire, Woodward & Co., manufacturing pharmacists, Peoria, Ill., died at Denver, Colo., April 15, whither he had gone to recuperate. Mr. Woodward was born at Jubilee, Ill., in 1864. He graduated from the Peoria High School in 1884 and from Princeton University in 1887. He then entered the retail drug business in Peoria for a time and later became an employee of Allaire, Woodward & Co., where he remained, working up through the various departments to the presidency of the company. He was a director and vice president of the Central National Bank of Peoria, and at the time of his death held the position of junior warden in St. Paul's Episcopal Church. He was also for many years a member of the National Wholesale Druggists' Association. His widow, two sons and two daughters survive.

RECENT DEATHS

—WILLIAM H. TIBBS, a druggist of Grand Rapids, Mich., for 32 years, is dead. He had been ill with pneumonia for about ten days. He was born in London, Ont., in 1850, and at the age of 18 went to Buffalo, where he became a drug clerk, and later the owner of a chain of four drug stores. In 1885 he sold his interests in Buffalo with the expectation of going to California, but changed his mind and settled in Grand Rapids. He was a member of the Masonic order, Royal Arcanum, and a devoted Episcopalian. He is survived by a widow one son and one daughter.

—J. MARO HARRIMAN, one of the oldest druggists of Lynn, Mass., is dead after an illness of two months. He was born in West Lebanon, Maine, 58 years ago. He graduated from the academy in that place, becoming a teacher. He then went to Manchester, N. H., where he learned pharmacy, and in 1881 opened a drug store in Lynn. This was destroyed in a disastrous fire which ravaged Lynn, and he then organized the J. Maro Harriman Drug Co., which grew to be one of the largest establishments of the kind in that city, operating two stores. A daughter survives him.

—CLARENCE H. TRUESDELL, 51, formerly engaged in a drug business in the Old National Bank Building, Waupaca, Wis., died recently at Biloxi, Miss., where he had gone with his family to recover good health. A wife, a daughter

ter, and a son survive him. The deceased was a member of the Presbyterian Church and of the Masonic order. The funeral was held in Biloxi.

—SIMEON H. LLOYD, proprietor of the Lloyd Drug Co., Flint, Mich., is dead after an illness of two years of paralysis. He was born in Ontario in 1860 and went to Flint about two years ago from Columbiaville, Mich., where he was in business for fifteen years. He was a member of the Masonic order. Besides his wife he leaves one son, Ralph Lloyd, of Flint.

—ROBERT BARKER, president of the Barker, Moore & Mein Medicine Co., manufacturers of veterinary medicines, 312 Green street, Philadelphia, Pa., died in that city last month, aged 77. At one time he was engaged in the wholesale drug business, but gradually drifted into specialty manufacturing. A widow and two sons survive.

—LOUIS J. GODDARD, father of Charles H. Goddard, president of the American Druggists' Syndicate, died on April 14 at Elmhurst, L. I. He was born in Pennsylvania and was engaged in the real estate business until his retirement fifteen years ago. Besides his son Charles he leaves a widow, two sons and two daughters.

—EDMUND S. CONGDON, vice president of Harshaw, Fuller & Goodwin Co., manufacturers of chemicals, and a former president of the Drug and Chemical Club, New York, died on April 14 in the Mount Vernon Hospital, following an operation for mastoiditis. He was 54 years of age. His widow, a son and a daughter survive.

—CHARLES T. FEAGAN, druggist of Mattoon, Ill., died on April 6. He had suffered from kidney trouble, complicated with a gangrenous affection of the big toe. To secure relief from the gangrene the toe was removed by an operation from which Mr. Feagan did not recover. He was about 60 years of age.

—CHARLES ALBERT BOYNTON, for nearly 40 years connected with Otis Clapp & Co., Inc., of Boston, and later in business for himself at 100 Boylston street, Boston, died April 15 in Emerson Hospital, Boston. He was born in Compton, N. H., 68 years ago. He left a wife and one daughter.

—MORRIS KRAUSKOPF, 73, father of Nathan Krauskopf, secretary of the Wright Drug Co., operating five stores in Milwaukee, Wis., died recently at his home in that city. He was a brother of the Rev. Joseph Krauskopf, the noted rabbi of Philadelphia, and was a veteran of the Civil War.

—ROBERT J. FERGUSON, proprietor of the Chevrolet Pharmacy, Flint, Mich., is dead, following an illness of five weeks of acute Bright's disease. He was born at Mt. Morris, Mich., in 1876. His widow and two small children survive.

—B. S. REED, retired druggist, 72 years of age, and who for forty years had lived at Hart and Pentwater, Mich., died recently of heart disease. He had been in apparently perfect health. He is survived by a widow and two daughters.

—LOUIS E. LAROSE, who formerly conducted several drug stores in Nashua, N. H., died at St. Joseph's Hospital, that city, recently, aged 72. His body was taken to Verchere, Quebec, for burial.

—GLASSELL FITZHUGH, 41, a member of the firm of Fitzhugh Bros., druggists of Charlottesville, Va., is dead after an illness extending over several months. A widow and two children survive.

—J. F. SCHMIDT, retired pharmacist, and for forty-two years a resident of Paterson, N. J., died in St. Joseph's Hospital, that city, on April 15. He was 74 years of age. Three sons survive him.

—JOSEPH A. SIMARD, Providence, R. I., druggist, died recently, following an illness of several weeks. He was a native of Canada, and about 50 years of age. He left a wife.

—JOHN E. EGAN, employed for forty years by Lanman & Kemp, wholesale druggists of New York, died at his home in Brooklyn on April 7. He was 54 years of age.

—THOMAS O. OTTO, druggist of Key West, Fla., for more than thirty years at Jacksonville, Fla., is dead. He was known in his home town as the poor man's friend.

—NAPOLEON E. MANNEVILLE, 59, druggist of Spencer, Mass., for many years, died of diabetes on April 3. Three daughters, one son, and his aged father survive.

—S. S. SIMMONS, druggist of Norris, Ill., and former

owner of the drug store now conducted by M. V. Sparr, Farmington, Ill., died recently from paralysis.

—CLAUS FREDERICK RHODE, president of the Minnesota State Pharmaceutical Association in 1894-5, died at Owatonna, Minn., on March 29 from diabetes.

—MRS. ELLA M. BENDER, mother of Walter C. Bender, a druggist of St. Joseph, Mo., died at St. Louis on April 1. She was born at Oxford, Ohio, in 1847.

—FREDERICKE KLEMCKE, 60, druggist, Brooklyn, N. Y., is dead from apoplexy. He was a member of several Masonic bodies.

REXALL DRUGGISTS MEET

Three hundred retail druggists, representing the same number of towns in Kansas and Missouri, held a 3-day convention in Kansas City beginning February 19th. It was the first bi-state meeting to be held by the member-firms of the United Drug Company. The convention closed with a banquet at the Hotel Baltimore.

Unanimous indorsement was given the Kansas "Bone Dry" Law by the druggists. Words were not wasted in the resolution commending the Kansas legislature for passage of the law, but the indorsement was the more emphatic because of its brevity. State officials were assured of the co-operation of the Rexall druggists in the enforcement of the bill.

FAVOR ANTI-COUPON BILL

Jacob Frisch, of Chicago, a member of the Illinois Pharmaceutical Association, is also a member of the State Legislature, and House Bill No. 390, which is an anti-coupon and trading stamp measure, has been introduced by him. This bill was given a hearing in committee and arguments in favor of the bill were presented by several members of the I. Ph. A. and of the Chicago Retail Druggists' Association. Among these were President Denton, of the I. Ph. A.; Senator John Boehm, of the same organization and of the C. R. D. A.; Secretary Isam M. Light, of the two associations, and Mr. Frisch. After hearing all the arguments submitted by these men the committee made a unanimous report to the House of Representatives in favor of the passage of it.

IOWA REXALL MEN MEET

More than 100 Rexall druggists of Iowa met early in April in Des Moines for the annual conference. Interesting speeches on the business aspects of the club members were made by Iowans and by Rexall leaders of the country.

The following officers were elected for the coming year: E. E. Bell, Leon, president; J. H. Axt, Fort Madison, David Artz, Red Oak, and Harry Wilson, Oelwein, vice presidents; Miss Daisy Frick, Audubon, secretary-treasurer.

Added members of the executive committee are: J. M. Daniels, Manson; G. H. Boyson, Cedar Rapids; C. D. Mulcahy, Colfax; M. J. Olsen, Des Moines; D. W. Middleworth, Mount Ayr; T. J. Lampe, West Point; B. W. Schunnehan, Waterloo; John Bootsman, Bloomfield; Bert Hughes, Emmetsburg; M. M. Hebner, Sigourney; Frank Carman, Mason City; C. E. Larson, Fort Dodge; Dr. F. Taylor, Fredericksburg; W. Ludman, Burlington, and W. L. Watters, West Liberty.

NEW YORK OFFERS SERUMS TO GOVERNMENT

Dr. Haven Emerson, Commissioner of the New York Department of Health, has offered to the Government its services for the production of biological products. The offer was made to Surgeon-General William Gorgas of the army, Dr. Braisted of the navy and Dr. Rupert Blue of the U. S. Public Health Service.

Dr. Emerson offers several serums and vaccines for the prevention and treatment of communicable diseases at a price which represents the cost of production. The offer includes the following:

Serum for the treatment of cerebro-spinal meningitis and pneumonia at \$10 a liter; diphtheria antitoxin, 5 cents a thousand units; tetanus antitoxin of moderate strength for immunization, 7 cents a thousand units; concentrated for treatment, 10 cents a thousand units; bacterial vaccines, especially typhoid and paratyphoid, containing 1,000,000,000 bacilli per cubic centimetre, \$3 a liter; thromboplastin for preventing hemorrhage, \$3 a liter.

VICTOR COMPANY LOSES SUIT

Federal Supreme Court Decides Against Talking Machine Concern—Denies Right to Use "License Contract" as Firm Did—"Works Widespread Injustice to Public"—Department Store Wins Long Legal Battle.

The United States Supreme Court, in a decision recently handed down, denies the injunction prayer of the Victor Talking Machine Company in its suit against R. H. Macy & Co., of New York, and refuses to permit the phonograph concern to use a "license contract" scale of prices to bind concerns which purchase machines from other sources than the factory.

Justice Clarke, the latest appointee, wrote the opinion of the nation's highest court. The decision brought to an end a litigation that has been going on for some time, and one which has been of vital interest both to the retail and jobbing trade. It practically marked the end of possible control by a manufacturing company of its product after it had once been sold to another distributing concern.

The Macy company purchased several machines from an agency at a reduced price and offered them for retail sale at a price lower than Victor standard. The manufacturing company at once asked an injunction restraining such sale, alleging that the license contract or license notice made any cut in prices a violation of contract. The department store fought the case and won in the District Court, but the decision was reversed in the Circuit Court. On appeal to the Supreme Court the decision was almost unanimous for the store.

The court's opinion said that it was plain that whatever rights the plaintiff had against the defendants must be derived from the license notice attached to the goods, inasmuch as no contract rights existed between the manufacturer and the department store firm. It was further pointed out that the sole act of infringement charged against the defendants is that they exceeded the terms of the license contract by obtaining machines from the plaintiff's agents and by selling them at less than the price fixed by the plaintiff.

The first significant feature that impressed the court was that the notice of the Victor company looked to the future in that "for itself the plaintiff makes sure that the future shall have no risks, for it requires that all it asks or expects at any time to receive for the machine must be paid in full before it parts with possession or it."

Another feature which the court commented upon was that the Victor company has made no provision to control the machine in case the holder moves from one place and carries the machine with him, "as would certainly have been the case if the plaintiff intended to enforce the rights so elaborately asserted."

The court's decision was important to the retail trade in that it permits the purchase of the machines from an agency which may sell at a slightly reduced rate and the re-sale of them at a price under the standard. In many ways it is parallel to the Sanatogen case, which some time ago occupied the center of attention in the same court.

LIGGETT CO. BUYS MINNEAPOLIS STORES

MINNEAPOLIS, Minn., April 20—The Voegeli Bros. Drug Company, which operated three stores in this city, has sold out to the Louis K. Liggett Company of New York, a subsidiary of the United Drug Company. The business was established 30 years ago by Thomas Voegeli. Mr. Voegeli owns a majority of the stock and the sale is for cash. Thomas Voegeli will retire from business. Henry Voegeli and William F. Ralke, part owners, will continue with the new owners.

N. A. R. D. TO MEET IN CLEVELAND

Arrangements are being perfected by Cleveland druggists to entertain the National Association of Retail Druggists, which will hold its annual meeting in that city during the week of September 17 to 22. The sessions will be held in the Hotel Hollenden, and a drug show will be one of the features. Complete details of the program will be announced later.

STEPHENS "AD" BILL UP AGAIN

Introduced in Congress at Special Session—Retains Familiar Provisions—Depends Upon Length of Session—Prospects Good for Passage.

Representative Stephens of Nebraska offered the Stephens "Ad" Bill, which was before the last Congress, as a bill to the special session of the new Congress, which met in Washington on April 6. It was the first bill offered, taking its place even before the war declaration resolutions or President Wilson's speech.

There is little possibility that the bill will have the attention of the present house, because of the war measures which are now before it. It has been referred to the Committee on Interstate and Foreign Commerce. Of that committee the chairman and many of the members are strongly opposed to the bill.

The bill which has reappeared retains all the familiar features of the old bill sanctioning the prescribing of uniform prices and manners of settlement for all articles of commerce put out under trade-mark or special brand. As heretofore, the plan requires the filing with the Federal Trade Commission (registration fee \$10) of schedules of prices which, in the case of each trade-marked product it is proposed shall be observed in sales to wholesalers, retailers and ultimate consumers. As in the former bill there is provision for disposal sales at other than the regular prices, and procedure is prescribed whereby bankrupts, dealers retiring from business, etc., may close out stock by means of price concessions in the event that the original vendor does not exercise his option to buy back the goods at the price originally paid.

MORE ABOUT PHONOGRAPHS

D. W. McKenzie, president of the Playerphone Talking Machine Company of Chicago, sends us the following communication in reference to the article about phonographs printed in the March ERA. His remarks will interest every druggist who handles phonographs or who contemplates adding this line.

Editor THE PHARMACEUTICAL ERA, Chicago, April 16
Dear Sir:

I have read the article in your March issue carefully. In the main, your information is correct. The druggist is the logical distributor of talking machines and records. And I make that assertion from positive knowledge based on personal experience. At least that is so in my own experience, in the druggists handling Playerphones and Playerphone Records.

I have seldom known of a case where the profits from the Playerphone line did not pay the retailer's rent and net him a comfortable margin besides, and, the few cases where it did not, were due to local conditions which were beyond the power of any piece of merchandise to remedy. I know of case after case where druggists have made a net profit of from \$1000 to \$5000 a year on our line alone, not to figure in the extra patronage Playerphones have brought to the store, resulting in increased buying in other lines. And we have found that the record business is, as you say, in your article, a wonderfully steady one. The demand is constant and the profit is large. We are able to supply records better than any manufacturers of new style talking machines because we are the only ones putting out a line of high grade 10 inch and 12 inch records under our own name.

But there are two points in your article upon which I must differ with you in a slight degree. You made the contention that the more expensive machines, which retailed from \$100 to \$500 were out of the question, citing the fact of the slow turn over, small commissions and risks of credit in the time payment plan with that price instrument.

Now, theoretically, you are right. On a selling margin of only 10 or 20 per cent, it would be a hazardous business for the druggist. But the margins we allow are far greater than that and our terms of payment so reasonable that the retailer at no time is under any appreciable investment and can usually get his money before he has to pay us.

We have six sizes of instruments, priced at \$50, \$75, \$100, \$125, \$175 and \$200, all made in the latest styles of finished mahogany and oak. Our tone arm, reproducer and automatic stop are our own inventions and are manufactured only by us, for you see the Playerphone plays all makes of disc records without change of equipment.

D. W. MCKENZIE.

DRUGGISTS TRAINING FOR WAR

Druggists in New York City have joined the preparedness movement. Several retailers are members of Major Dorey's citizen training corps, and those pharmacists that went to Plattsburg for military training either last summer or in 1915, are still drilling at odd hours at either one of the armories or at Governor's Island.

PERFUMERS SEE "AMERICA FIRST"

Convention Told This Country Will Lead in Production—Name Not Changed—Three-Day Meeting a Great Success—Officers Re-Elected by Unanimous Vote.

The Manufacturing Perfumers' Association met in New York in April and had one of the best conventions they have ever held. The most important matter of business which came before them was the project advanced by the executive committee to change the name of the organization so that it would be more euphonious, but the convention decided against any change.

Not the least interesting feature of the convention was the speech made by Adolph M. Spiehler, the president, who predicted that the war and its outcome would make American products in the perfume line superior to all others. He went so far as to state that he believed this country would sooner or later make the greater proportion of the perfumes sold to the world. The "America First" speech led to the adoption by the convention of a general label, to be used by all members of the association, reading "Made in the U. S. A."

A warning was sounded, however, by President Spiehler against prohibition. He said that so far as prohibition went in itself it would not injure the perfumery business, but declared that it might be carried to an extreme so that it would be difficult to get alcohol. Such a situation, he said, would be exceedingly dangerous to the business.

The convention opened with a lunch in the Biltmore Hotel, and during the first day only routine business was taken up. During the latter part of the afternoon the members went into executive conference and it was then that it was decided not to change the name of the association. There was a theater party the first evening which was attended by everyone.

On Friday, the second day of the convention, Howard S. Nieman, a patent attorney; Dr. W. W. Stockberger, of the Bureau of Plant Industry, and others spoke to the members. The banquet was held that night and it was announced that the officers had been re-elected. They are: Adolph M. Spiehler, president; George Hall, first vice president; G. A. Pfeiffer, second vice president; Walter Mueller, secretary, and A. B. Calisher, treasurer. The new members of the executive board chosen were Paul Watkins, Howard Goodrich, James E. Davis and W. A. Bradley.

The association took in three new members at the convention and the treasurer reported over \$9,000 on hand. This organization is one of the richest of its kind in the country.

Just before the convention closed Capt. T. M. Van, of St. Louis, urged the association to do something for the Government during the war time. He told how a barber supply company had given its chemists to the Government and the association received the suggestions with enthusiasm.

VEST-POCKET MAPS WILL SELL

A new and profitable side line for druggists has been offered by Rand, McNally & Co., the map publishers. It is a pocket map of the various States, and on the back there is a clear automobile road map of that State.

These maps are designed to be sold to travelers, auto-tourists, salesmen and visitors, and each year there are two or three printings so that the maps are kept up to date. They are purchased by new residents of a city in the State and are also used by business houses in planning out the various selling campaigns to be undertaken. There are one hundred and one uses for the maps, and they are selling fast, just as they have sold well for the last 37 years, or since the series was first published.

Druggists who stock up with the maps will find them quick movers. There is little danger of filling stock shelves with them because there is a steady and consistent demand that means speedy turnovers. The publishing company has arranged to give 40 per cent discount on orders of less than one gross and 40 and 10 per cent on orders of a gross or more.

OVALTINE DEPOT ESTABLISHED HERE

An American company has been organized and a depot established at 23 North Franklin street, Chicago, Ill., for the exploitation of ovaltine, a food beverage, which has been on the market in Europe for years, originating in the well-known laboratories of Dr. A. Wander, S. A., Berne, Switzerland. The new venture is under the direction of S. H. Gunder and Jeane D. Gunder, in connection with a



Home of Ovaltine in Berne, Switzerland.

quarter million dollar plant now in the course of erection at Villa Park, Ill.

Ovaltine is claimed by the manufacturers to be the original and first invalid, convalescent and children's food with a content of malt, milk and eggs, flavored with cocoa. It is also recommended as a diet food for the well and healthy, and for those under the doctor's care. It is being extensively advertised in the leading medical journals to bring it to the attention of physicians, and it has the endorsement of the *Journal of the American Medical Association*. It can be served as a nourishing tonic beverage at the soda fountain. See the Wander Company's advertisement in this issue of the ERA and ask the Wander Company for literature and a personal trial sample.

DOMESTIC PAPER BALER

The saving of waste paper is a step toward economy in these days of paper shortage, and there is an urgent demand that there shall be no wastage of this material if paper stocks are to be conserved. The Domestic Paper Baler, made by the Gem Manufacturing Company, Bascom, O., makes such conservation easily possible. It is sold at a popular price, has an open top with plenty of space for dumping in the waste paper, is easily operated, the timber used in its construction being kiln dried and seasoned hard wood, the necessary parts being of malleable and wrought iron and coated to prevent rusting. It occupies a floor space of 18x21 inches, is 40 inches high, and will readily bale a bundle of paper 14x18x30 inches, and weighing from 50 to 60 pounds. The baler ready for shipment weighs 100 pounds and the manufacturers guarantee to replace any defective parts free of charge within five years of date of sale. Write to the Gem Manufacturing Company, 10 Haugh street, Bascom, O., for particulars and prices.

THE PERFECTION PRESCRIPTION FILE

The Perfection Prescription File has many desirable features; it is solidly built of heavy cardboard covered with strong imitation oak paper, and its ten drawers will hold 1,000 prescriptions (100 to the drawer) in the most accessible form and in the smallest possible space. It is just the device to meet the provisions of the narcotic and liquor regulations, for it simplifies the operation of filing and you are able to turn instantly to the prescription wanted.

CHIN-CHIN, A NEW PERFUME

One of the latest novelties from the laboratories of Stearns, perfumer, is Chin-Chin, an odor of the oriental type, which is said to breathe a subtle suggestion of the far east, where black-haired, tiny-footed maidens primp before an incense lamp to await the coming of their lovers. The name Chin-Chin has been popularized in comic opera by Montgomery and Stone, and the perfume is sure to sell. It is supplied in half dozen one-ounce unique pagoda bottles to the shipping container at \$6 per dozen, and its sale at 75c yields an excellent profit. Write to the manufacturer, Detroit, Mich., for Chin-Chin selling plan.

Credit and Commercial Cases for April

By GEORGE H. MURDOCH, Newark, N. J.

Stock issued as paid up and non-assessable cannot be assessed in the absence of fraud.—*Durand v. Brown*, 236 F. (U. S.), 609.

The minds of two or more parties must meet to make a valid contract.—*Phillips-Boyd Publishing Company v. McKimmon*, 73 So. (Ala.), 43.

The purchaser at a bankrupt sale acquires only such title as the trustee took and the bankrupt had at the time of filing the petition.—*Brown v. Brown*, 189 S. W. (Ky.), 921.

Insurance taken out by the insured himself for the benefit of one not having an insurable interest in his life is not void as against public policy.—*Lee v. Equitable Life Assurance Company*, 189 S. W. (Mo.), 1195.

A bank is not "insolvent" if its assets are sufficient to meet its obligations within a reasonable time, although it did not have cash sufficient for its daily needs.—*Dunlap v. Seattle National Bank*, 161 P. (Wash.), 364.

All the provisions of a contract must be construed together so as to give harmonious operation to each of them so far as their language will reasonably permit.—*Manchester Sawmills Company v. A. L. Arundel Company*, 73 So. (Ala.), 24.

Where one party to an executory contract repudiates it, or puts it out of his power to perform it, the other party may at his option treat it as terminated at once.—*Kamps & Sacksteder Drug Company v. United Drug Company*, 160 N. W. (Wis.), 271.

While every word of an agreement should be presumed to have been used with some purpose, the meaning of each word must be determined, and its effect considered, in connection with other words of the agreement.—*First National Bank of Litchfield*, 114 N. E. (N. Y.), 349.

An agent authorized to collect his principal's debt cannot accept payment in anything other than money, so that delivery of a check or substitute for money does not constitute a payment until accepted as such and actually paid in due course.—*Potter v. Sager*, 161 N. Y. S., 1088.

Where there is a running open account between parties and no application is made by either, the law will apply the payment according to priority of time, which rule applies where one item is better secured than the other.—*Friedman-Shelby Shoe Company v. Davidson*, 189 S. W. (Texas), 1029.

Where defendant and another held themselves out to the world as partners, though no such relationship existed, publishing advertisements tending to convey that idea, defendant is liable for the purchase price of goods sold on the credit of the ostensible firm.—*Wise v. Morrissey*, 160 N. W. (Minn.), 487.

The trustee in bankruptcy of a private bank can recover from a national bank the amount of collections applied to the bankrupt's debt, which were received after the national bank knew that the private bank had closed its doors, where there was no evidence that the remittances had been mailed before the doors closed.—*Dunlap v. Seattle National Bank*, 161 P. (Wash.), 364.

A representation as to value is usually regarded as an expression of opinion, but, where false and made by one as an inducement to another, who is ignorant thereof, to enter into a contract, and is relied upon to the detriment of the latter, may be made the basis of an action for damages consequent upon fraud and misrepresentation.—*Hood v. Wood*, 161 P. (Okla.), 210.

The liability of a guarantor cannot be extended by implication, or otherwise, beyond the actual terms of his contract, even though a proposed alteration would be for his benefit, and a case must be brought strictly within the terms of the guaranty, reasonably interpreted, to make the guarantor liable.—*Friedman-Shelby Shoe Company v. Davidson*, 189 S. W. (Texas), 1029.

The involuntary bankruptcy of a party disables him from performing his executory business contracts, and, being the result of acts or omissions of the bankrupt himself, is regarded in the law as the equivalent of a volun-

tary act, entitling the other party at once to treat such contracts as terminated.—*Kamps & Sacksteder Drug Company v. United Drug Company*, 160 N. W. (Wis.), 271.

Where a managing partner was requested by other partners to secure funds from any bank or individual, and had express consent to "act unrestricted" in all matters pertaining to the interests of the company, he had sufficient authority to execute a note, so that a ratification of such note by the firm was not necessary.—*Hill v. First State Bank of Oakwood*, 189 S. W. (Texas), 984. N. W. (Iowa), 333.

Under Bankr. Act. July 1, 1898, c. 541, §57n, 30 Stat. 560 (Comp. St. 1913, §9641), requiring claims to be proved within one year after adjudication, creditors who did not prove their claims because no assets were scheduled as available cannot, years subsequent, proceedings having been reopened on the ground of concealment of assets, prove their claims.—*Chapman v. Whitsett*, 236 F. (U. S.), 873.

Where a father had supplied and was ready to supply apparel sufficient for his daughter's welfare, and befitting the family's social and financial position, dressmakers could not recover against him for gowns and hats furnished the daughter, which were not necessities, in the absence of an express or implied contract on his part to pay for them.—*Auringer v. Cochrane*, 114 N. E. (Mass.), 355.

Where the contract of sale authorized the buyer to return the goods after thirty days' thorough trial, and the buyer either approved them or retained them without trial for more than the period allowed without notice of disapproval, the fact that the goods were worthless is no defense to an action for the price, and a plea alleging that fact is demurrable.—*Manchester Sawmills Company v. A. L. Arundel*, 73 So. (Ala.), 24.

A person representing a material fact to be true to his own knowledge, as distinguished from belief or opinion, when he does not know whether it is true or not, is guilty of falsehood, although he believes it to be true, if it is actually untrue, and is liable for fraud if the statement was made with the intention that it should be acted on by another, who does so act upon it to his injury.—*Bystrom v. Villard*, 162 N. Y. S., 100.

In action by a trustee in bankruptcy to recover a preference, the trustee need not prove absolute knowledge by the creditor, but only such circumstances as would lead an intelligent and prudent man to believe that the transfer would give him a preference over other creditors; the creditor comes within the inhibition of the Bankruptcy Act where the substantial facts are of such significance as fairly to warrant the inference that he knew or ought to have known of the bankrupt's financial condition.—*Jacobs v. Saperstein*, 114 N. E. (Mass.), 360.

In suit to recover a balance due on a bill for merchandise, where defendant's testimony showed that an alleged shortage in the goods delivered was not discovered until about a month after the goods were received, because they were not taken out of the box for that time, the court properly excluded the testimony of one of plaintiff's officers that plaintiff sent an invoice to defendant, and that there was printed on it "all claims or any objections to this bill must be made within ten days," as the invoice was not the contract of sale between the parties, but merely a list of the goods, with the prices charged set opposite each item.—*May & Ellis Company v. Farmers' Uni. Mercantile Company*, 189 S. W. (Ark.), 1053.

State statutes which prohibit the sale as "ice cream" of a product containing less than a fixed percentage of butter fat do not take property without due process of law nor deny the equal protection of the laws—the particular percentages fixed not being so exacting as to be in themselves unreasonable—although the ice cream of commerce is not iced or frozen cream, but is a frozen confection, varying in composition, and under some formulas may be made without either cream or milk.—*Hutchinson Ice Cream Company v. State of Iowa*, 37 Sup. Ct. (U. S.), 28.

PATENTS & TRADEMARKS

Granted March 20, 1917

- 1,219,485—Balthasar E. Reuter, assignor to Reuter Process Co., Chicago, Ill. Process for decomposition of fats and oil.
 1,219,486—Balthasar E. Reuter, assignor to Reuter Process Co., Chicago, Ill. Process of bleaching fats, oils, and their derivatives.
 1,219,510—Eugene R. Weber, Rochester, N. Y. Cork extractor.
 1,219,787—Carl G. Stebbins and Albert Gelow, assignors to the Warren Featherbone Co., Three Oaks, Mich. Process of treating keratin bodies.
 1,219,967—Iven Levenstein, assignor to Levenstein Limited, Manchester, England. Sulfonated palmitic compound.
 1,219,976—Henry Louis Marburger, assignor of one-half to Reinle-Salmon Co., Baltimore, Md. Druggist's cabinet.

Granted March 27, 1917

- 1,220,248—Arthur Luttringhaus, and Wilhelm Koch, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Process of producing ketonic compounds.
 1,220,361—Jared H. Plaisted, assignor of one-half to H. Wadsworth Longfellow, Boston, Mass. Non-refillable bottle.
 1,220,411—James B. Garner and Howard D. Clayton, assignors to Metals Research Co., New York, N. Y. Manufacture of hydrochloric acid.
 1,220,592—Carl Berg, Brooklyn, N. Y., assignor by mesne assignments, to The Berg & Beard Manufacturing Co., Inc. Non-refillable bottle.
 1,220,689—Eugene W. Sanderson, South Norwalk, Conn. Measuring container.
 1,220,746—Wilhelm Herrmann and Martin Mugdan, assignors to Consortium fur elektrochemische Industrie G. M. B. H. Nuremberg, Germany. Process for the manufacture of aldd.
 1,220,749—Gilbert Jackson, New York, N. Y., Bottle valve.
 1,220,752—William J. Kee, Jr., Kansas City, Kan., and Utley Wedge, Ardmore, Pa. Manufacture of sulfuric acid.
 1,220,778—Zeno Ostenberg, assignor to International Cellulose Co., Reno, Nev. Chemical apparatus.
 1,220,926—Albert E. Ainslie, Brashear, Mo. Medicine card.
 1,220,947—August Bunger, Hoboken, N. J. Bronzing liquid.

Granted April 3, 1917

- 1,221,077—Gilbert Thomas Morgan, assignor to Levenstein Limited, Manchester, England. Alkyarylamin production.
 1,221,105—Gustav Strandt, Milwaukee, Wis. Bottle capping machine.
 1,221,382—Otto Schmidt, Karl Hochschwender and Theodor Eichler, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing partially hydrogenized monocyclic hydrocarbons.
 1,221,506—John E. Bucher, assignor to Nitrogen Products Co., Providence, R. I. Process of producing the bicarbonate of an alkali or alkaline-earth metal.
 1,221,516—Thomas A. DeVilbiss, assignor to the DeVilbiss Co., Toledo, Ohio. Medicinal vaporizer.
 1,221,572—Harold D. Morton, Mitchell, Nebr. Poison label.
 1,221,667—Benjamin T. Brooks, and Harry Essex, assignors to the Gulf Refining Co., Pittsburg, Pa. Manufacture of alcohols.

Granted April 10, 1917

- 1,222,086—Arthur F. Erickson, Seattle, Wash. Bottle holding device.
 1,222,112—Jacob C. Lipman, New Brunswick, N. J. Process for producing citrate soluble phosphates.
 1,222,144—William M. Ruthrauff, Chicago, Ill. Dentifrice.
 1,222,224—John F. McNeil, Phoenix, Ariz. Perfume vending machine.
 1,222,239—Karl Ochs, assignor to Siemens & Halske, A. G., Berlin, Germany. Electrolysis of alkaline haloids.
 1,222,246—Frederick H. Schumacher, Jersey City, N. J. Adjustable nursing-bottle holder.
 1,222,377—Bradford B. Flint, Saranac Lake, N. Y. Identification device for tooth brushes and the like.
 1,222,486—John August Swanson, Minneapolis, Minn. Bottle holder.

Granted April 17, 1917

- 1,222,611—Francis F. Emory, Philadelphia, Pa. Funnel.
 1,222,619—George W. Gay, Corona, N. Y. Anesthetic inhaler.
 1,222,640—Otto Liebknecht, assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y. Compound containing active oxygen and the process of making the same.
 1,222,765—Edward A. Hudson, Artesia, N. Mexico. Combined label, seal and cork puller.
 1,222,928—Nils Busvold, Rjukan, Norway. Production of oxygen
 1,222,889—Edward M. Pine, Philadelphia, Pa. Non-refillable bottle compounds of nitrogen from ammonia.
 1,223,056—Jesse P. L'Amie, Duluth, Minn. Bottle stopper extractor.
 1,223,241—Mary Beers, East Orange, N. J. Poison indicator for bottles.
 1,223,207—John F. Scypinski, Detroit, Mich. Bottle.

PRESCRIPTION CHEMICALS

The products of the Mallinckrodt Chemical Works represent the highest degree of purity and uniformity, conforming to the recognized standard for quality, and for this reason have for years been given preference by careful and critical dispensing pharmacists. Most convincing to physicians of a desire on the part of pharmacists to serve medical men with the best modern pharmacy has to offer is the sight of a dispensing department, well stocked with original packages of the Mallinckrodt products.

SHOTWELL PUMP FOR HAZARDOUS LIQUIDS

The Shotwell Pump & Tank Co., Indianapolis, Ind., incorporated early in January of this year to manufacture a complete line of pumps, tanks, etc., for the handling of hazardous liquids, announces that it is now fully equipped to do this work in its own plant, having put in new machinery and installed its own tool room and pattern shop. The Shotwell method for handling hazardous liquids, the company states, does away with the old style rack and pinion employed by other manufacturers, with the result that by its use an exactly measured volume of liquid can be delivered, which can neither be increased nor decreased through negligence, design or mechanical wear or tear. It is claimed to be the fastest pump on the market, and allows for the use of a meter that guarantees accuracy, the working mechanism being so enclosed as to keep out all dirt, which tends to cut and wear the working parts. An accessible foot valve, another desirable feature, makes it easy to clean the valves and intake screen, and does away with the troublesome and expensive method followed in old style systems. The manufacturer will send a catalogue of these pumps to any one interested.

INTRODUCTORY OFFER ON MOSQUITONE

A new type of mosquito repelling agent, put up in the form of a stick instead of a liquid, and which promises to have a big run this summer, is Mosquitone, manufactured by McKesson & Robbins, Inc., New York. It is made of solidified alcohol, medicated with powerful mosquito repelling agents, and does away with the necessity of smearing the skin or soiling the hands or clothes with the greasy compounds heretofore used for the purpose. It is a staple which can be sold all summer long, and retails at 15c. The manufacturers are giving one-fourth of a dozen free with each dozen as an introductory spring offer. Mail your order at once. Attractive sales stimulating counter circulars go with each order.

WESLEY CO.'S NEW SPECIALTIES

Two new specialties offered to the drug trade by the Edward Wesley Co., Cincinnati, O., are Orchard White, a new toilet article for the complexion, and Freezone, a remedy for corns, hard or soft, and calluses on the bottom of the feet. Both specialties are up to the minute and claimed by the manufacturer to be meritorious. Orchard White bought from any wholesaler in six dozen lots entitles the druggist to 5 per cent quantity discount, and the company promises to take back all of the goods stocked if the druggist is disappointed in the sale. Freezone is claimed to be far superior to eating salves, solvents and plasters for the removal of all kinds of corns and hardened calluses, the application of a few drops instantly stopping the pain or soreness, then shortly permitting the corn or callus to be lifted off with the fingers without irritating the surrounding skin. An order of a six-dozen quantity of this specialty entitles the purchaser to a 5 per cent discount also. It sells for 35c a bottle, is extensively advertised, and druggists will have no difficulty in making sales.

LABELING OFFICIAL PREPARATIONS

Under the Federal Food and Drugs Act the labels of all medicines containing alcohol must carry a statement of the percentage by volume of absolute alcohol each preparation contains. The appearance of the revised editions of the United States Pharmacopoeia and National Formulary with their new standards makes a revision of the labels of official preparations as to alcoholic content necessary. The McCourt Label Cabinet Company has promptly met the conditions imposed by the new standards and is already furnishing labels conforming thereto. Old labels no longer comply with the requirements, and if you have not already ordered your new labels, now is the time to do so. Write to the manufacturer, Bradford, Pa., for information regarding the McCourt Roll Label Service.

NATIONAL JUVENILE AUTO CO.

The National Juvenile Auto Co. of Toledo, Ohio, whose factory was completely wiped out by fire last January, now report that they will soon be ready to begin making deliveries of their Juvenile Autos, which a number of druggists have purchased.

THE DRUG MARKETS

PRICE ADVANCES AFFECT MANY STAPLES

Some Drugs and Chemicals Reach Highest Levels Since War Began—Government Orders Influence Market Conditions—Opium Scarce and Higher.

NEW YORK, April 24—The entrance of the United States into the war by breaking off of relations with Germany as a consequence of the policy followed by that country with regard to submarine warfare, has occasioned many advances in the prices of drugs and chemicals, some articles reaching higher levels than any that have been experienced during the whole period of hostilities. The factors entering into an analysis of the situation are connected not only with the submarine blockade, but with increases in freight and insurance rates, a pronounced decline in imports, and the demand for supplies needed by the Government for the equipment of the United States forces. The price advances cover many of the principal drugs and staples handled by the retail druggist, while the declines are few in number and relatively unimportant. These declines relate principally to articles manufactured or produced in this country, and are ascribed to either increasing production or slackening demand.

Among the principal advances noted are those relating to acetone, alcohol, tannic acid, balsam of fir, Oregon, and balsam of peru, belladonna leaves, caffeine, cinchona bark, cocaine, copaiba, cubeb berries, dextrine, ether, flax seed, formaldehyde, glycerin, honey, hydroquinone, jalap root, lithium carbonate and citrate, Epsom salt, menthol, mercurials, naphthalene, most of the fatty vegetable oils, opium, various potassium salts, quinine sulphate, Rochelle salt, sandalwood, senega root, various hypophosphites, sugar of milk, sulphur, tamarinds, thymol, thymol iodide, Venice turpentine, and yellow beeswax. Declines are noted for acetylsalicylic acid, citric acid, antipyrine, cocculus indicus, white hellebore root, ipecac, Newfoundland cold liver oil, phenolphthalein, pink root, true, quince seed, rhubarb, rosemary leaves, American saffron, strophanthus seed and theobromine.

OPIMUM—Scant supplies of gum for manufacturing purposes are reported, and it is said that unless increased quantities are forthcoming some difficulty will be experienced in filling Government orders, which are known to be heavy. Some importers refuse to give any quotations whatsoever, although jobbers are supplying the necessary orders of the retailer at \$30@31 per pound for natural, \$33.25@34 for granulated, and \$33.25@34 for U. S. P. powdered.

MORPHINE—There is a continued scarcity of this alkaloid and its salts, and the demand for Government orders gives increased strength to price quotations, sulphate being held at \$11.30@13 per ounce in 1-oz. containers, and \$11.60@13.50 per ounce in 1/8-oz. bottles. Hydrobromide and hydrochloride are quoted at \$13.20 per ounce in 1/8-oz. bottles.

COCAINE—Is higher, \$9.90@10.10 per ounce being asked for 1/8-oz. bottles, and \$7.90@7.95 for hydrochloride in 1-oz. containers.

ACETONE—The extensive use of this article in the manufacture of munitions of war, and the advance in the price of acetate of lime, are factors which are responsible for the higher prices of all grades. Pure C. P., medicinal, is held at 40c@45c per pound, and technical at 38c@40c.

COD LIVER OIL—A review of the price changes during the month shows lower figures for Newfoundland, which is obtainable at \$2.80@2.85 per gallon. Norwegian is relatively higher, barrels being quoted at \$132@135 per barrel, and \$4.60@4.70 by the gallon. Recent cable advices from Bergen place the production thus far this season at 25,827 barrels, against 41,345 barrels for the same period last year. The catch of fish thus far amounts to 19,800,000, against 40,500,000 last year. The outlook at the present is unfavorable for lower prices on this variety of oil.

THYMOL—Extreme scarcity is reported and the demand is great, with quotations at \$20@22 per pound. Thymol iodide is similarly advancing under like influences, and jobbers are quoting \$18@18.75 per pound.

NAPHTHALENE—An active seasonable demand as a moth preservative, and a scarcity in arrival of supplies have caused an advance in prices, and jobbers are quoting 16 1/2c@19c for both balls and flake.

CAMPHOR—Weakness in the primary market is felt here and prices are easier at 90c@95c for refined; 92c@96c for 1/4-lb. squares, and 90c@\$1 per pound for powdered. Japanese is held at 94c@\$1 per pound. Camphor production in Japan for the year ended March 31, 1917, is estimated at 1,627,422 kin (2,148,197 pounds), an increase of 26,607 kin (35,121 pounds), as compared with the actual production in 1915-16; while the estimated production in Formosa amounts to 5,014,743 kin (6,619,461 pounds), an increase of 394,561 kin (520,821 pounds), as compared with the actual yield in the preceding year.

MENTHOL—While fairly liberal stocks are reported in some quarters jobbing prices are higher at \$3.50@\$3.60 per pound for crystal.

BAY RUM—The report that one of the two principal distilleries in Porto Rico was destroyed by fire recently, and that the other distillery had more orders than it could successfully fill, was one of the reasons given for the advance in Porto Rican bay rum, which is now quoted at \$1.90 per gallon by the barrel; and \$2.25@\$2.30 per gallon for less.

MERCURIALS—Following the recent advances by manufacturers, owing to the demand and scarcity for mercury, both hard and soft mercurials show higher ranges, the revised schedule of prices being as follows: Bichloride (corrosive sublimate), \$1.95@\$2.15 for crystal, and \$1.90@\$2.10 for powdered; bisulphate, \$1.80@\$2; cyanide, \$5.75; mild chloride (calomel), \$2.09@\$2.30; green iodide (protoiodide), \$4.75@\$5; red iodide (biniodide), \$5@\$5.15; red oxide (red precipitate), \$2.26@\$2.50; yellow oxide, per ounce, 26 cents.

PHENOLPHTHALEIN—Better supplies are reported, due to increased domestic production, and quotations show easier ranges from \$1.35@\$1.45 per ounce.

ALCOHOL—A sensational rise in prices on grain alcohol has featured the spot market, due to the rapid advance in the price of grain and an expected increase in the internal revenue tax on spirits. The use of alcohol as a solvent in the manufacture of war supplies and for other purposes has also contributed to the interest in this article, and prices have advanced to the following figures: Cologne spirit, 95% U. S. P., barrels, per gallon, \$3.20@\$3.25; less, \$3.35@\$3.45; commercial, 95% U. S. P., barrels, \$3@\$3.10; less \$3.26@\$3.36; denatured, barrels and half barrels, 85c@\$1 per gallon; Methyl alcohol (wood) is also higher at \$2.10@\$1.40 per gallon. It is said that the heavy demand from domestic and export buyers has made heavy inroads in the available supply.

COPAIBA—Stocks are limited and in consequence the market shows an upward trend, with jobbers quoting \$1@\$1.05 for South American. Para is held at 80c@85c per pound.

BELLADONNA LEAVES—There is a general scarcity of available supplies reported and a strong demand. Jobbers quote \$2.10@\$2.15 for 1-lb. bottles, and \$1.90@\$2 per pound in bulk.

HENBANE LEAVES—Quotations are largely nominal as stocks become more and more depleted. German leaves are held at \$4.75@\$5 per pound for whole, and \$3.60@\$3.80 for powdered.

CUBE BERRIES—Have advanced to 85c@90c per pound for sifted whole, and 90c@\$1 for powdered.

ESSENTIAL OILS—The risks attending importation, high freight rates, insurance, etc., have been felt most acutely in this department of the market and all quotations show advancing prices. Among those to be particularly noted are: Star anise seed, bergamot, cassia, eucalyptus, ginger, sweet orange, rue, and West Indian sandalwood. English or East Indian sandalwood oil is held at \$13@\$13.75, with the tendency upward, following reports that the Indian Government has prohibited exports of Mysore sandalwood, and intends to build a factory at that place for the distillation of the wood formerly sold at auction.

FATTY VEGETABLE OILS—The demand for lubricants, fats, glycerin, etc., has advanced prices for all products of this character, and the vegetable oils most affected are: Imported benne (sesame), \$2.60@2.85 per gallon for barrels or less; American castor, 27c@32c per pound; coconut, 28c@35c per pound; cottonseed, yellow and white, \$1.55@1.60 per gallon; rapeseed, \$1.75 per gallon; salad, \$1.55@1.60 per gallon.

LINSEED OIL—This commodity has been tending upward, owing to increased demand and a higher price for flax seed in primary markets. The possibility that importations from Argentine might be prohibited in the near future, and the report of crop failures in India, where considerable seed is grown, have tended to complicate the situation and have not been without effect on the market. Boiled oil is now quoted at \$1.35@1.40 per gallon, while raw in barrel lots is slightly lower.

FLAX SEED—As stated in the preceding paragraph, prices are advancing and jobbers now quote cleaned seed at \$13.50 per barrel, and 10c@13½c per pound for less. Ground is held at 10½c@13c.

FORMALDEHYDE—Manufacturers report a steady domestic and export demand, with no orders being booked for forward delivery. The higher cost of methyl alcohol is also a factor in the situation, and jobbing prices have been advanced to 25c@35c per pound.

GLYCERIN—Advances in the cost of raw materials, such as the fatty vegetable oils, lard, tallow, etc., and the increasing demand for glycerin for the manufacture of explosives and other purposes, have caused higher prices for all grades, C. P. in bulk, barrels or drums added, being now held at 57½c@58c per pound; in cans, 59c@60c, and less, 63c@67c.

EPSOM SALT—The demand continues and higher prices are quoted, U. S. P. being held at 5½c@10c; C. P. crystals at 20c@25c, and dried at 20c@30c.

JALAP ROOT—Selected is offered at 30c@35c for whole, and 40c@45c for powdered.

LAVENDER FLOWERS—Jobbers quote 40c@45c for ordinary, 45c@50c for extra, and 55c@60c for hand picked.

CAFFEINE—A good inquiry with higher prices is reported for pure, which is held at \$14.60@16.30 per pound, or \$1.10 per ounce. Citrated is \$9.25@9.50 per pound.

DRUGGISTS, PLEASE NOTE

Our attention has lately been called to advertisements by retail druggists in their local papers, quoting imitations of Marvel "Whirling Spray" syringes at a reduced price, under the name, Whirling Spray syringes.

The words, "Whirling Spray," is the trade-mark of the Marvel Company, and no one has the right to use said trade-mark in the sale of any syringe except the Marvel Whirling Spray. We have been unable to find any syringe other than the Marvel where the words "Whirling Spray" are printed on the labels, so that the sale under that name is a fraud to the consumer. It is also a fraud to the Marvel Company to sell an imitation, using the Marvel Company's trade-mark. The advertising clubs and the Federal Trade Commission will take prompt action on matters of this kind if brought to their attention. We hope it will not occur again.

MARVEL COMPANY.

McK & R'S ADVERTISING CAMPAIGN

McKesson & Robbins, Inc., 91 Fulton street, New York, are conducting a national advertising campaign during the current year in the *Saturday Evening Post*, *Delineator*, *Designer*, *Woman's Magazine*, and *Ladies' Home Journal* which is of interest, as it serves to show how the sale of the various McK & R specialties is made profitable to the druggists. The total circulation of these journals runs into many millions, but great as it is, this publicity is being supplemented by newspaper advertising in leading city dailies, with special page advertisements featuring dealers' names, while other advertising includes large painted billboards, the use of theatre programs, street car advertising, space in drug, medical and dental publications, and distribution of samples, booklets, novelties, etc. Included in this advertising scheme is a "special dealer proposition" which should interest every druggist. Be the first in your town to accept the offer and reap the financial returns.

FLORIDA PHYSICIAN HELD IN NEW YORK FOR ILLICIT SALE OF MORPHINE

Secret Service Agents Believe Dr. Hammers Is Selling Agent for Syndicate Smuggling Opium, Cocaine and Other Narcotics from Cuba and Mexico

Dr. Riley C. Hammers of Tampa, Florida, is held by the Federal authorities at New York for selling morphine and heroin to a secret service agent. The arrest was made at the Adams Express Company's office, 32 Trinity Place, where the secret service agent says he received from Dr. Hammers a package containing the drugs for which the agent paid \$1700 in marked bills. The police who assisted in the arrest say the package contained twenty-five ounces each of heroin and morphine.

The Federal agent met Dr. Hammers in Florida and made arrangements to purchase the drug. Hammers made frequent trips to New York and the government agent shadowed him and found it was his custom to have supplies of drugs sent to him in care of different express offices and to conduct his illegal transactions in these public places to disarm suspicion. Dr. Hammers is said to be a regularly licensed physician in Florida.

Secret service agents believe Dr. Hammers is one of the principal selling agents of a drug smuggling syndicate which brings into the United States \$15,000 to \$20,000 worth of drugs, every month, from Cuba and Mexico. These are adulterated and sold at a profit of several hundred per cent. It is said that the selling agents are scattered all over the country. Other arrests will follow in the near future. The government has started a country-wide roundup of men and women engaged in the illicit traffic in opium, cocaine, morphine and heroin.

Federal authorities admitted that Dr. Hammers was under arrest on the charge of selling drugs in violation of the Harrison Narcotic Law and that it was believed at least one gang of smugglers would be broken up by the arrests soon to be made.

The penalty for illicit selling is a fine of not more than \$2,000, or imprisonment for not more than five years, or both, in the discretion of the court.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

Of The Pharmaceutical Era, published monthly at New York N. Y., for April 1, 1917, State of New York, County of New York—ss:—

Before me, a notary public in and for the State and county aforesaid, personally appeared D. O. Haynes, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Pharmaceutical Era, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are: Publishers, D. O. Haynes & Co. Editor and Managing Editor, E. J. Kennedy. Business Manager, D. O. Haynes, all of No. 3 Park Place, New York, N. Y.

2. That the owners are: (Give names and addresses of individual owners or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) D. O. Haynes & Co. and D. O. Haynes, 3 Park Place, New York, N. Y. F. J. Haynes, St. Paul, Minn., E. King, 15 William St., N. Y.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) There are none.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner, and this affiant has no reason to believe that any other person, association, or corporation has an interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

D. O. Haynes, Business Manager.
Sworn to and subscribed before me this 4th day of April, 1917.
(Seal) JOHN F. COUCH, Notary Public, Kings Co., Certificate filed in N. Y. Co. (My commission expires March 30, 1918.)

ESTABLISHED 1887

THE PHARMACEUTICAL ERA

AN ILLUSTRATED MONTHLY PUBLICATION FOR THE DRUG TRADE

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POSSIBLY DIFFERENT BUT BETTER BUSINESS

In the confusion attending the entry of the United States into the war, there is a tendency on the part of some to become pessimistic over the future outlook for business. The prospect of heavy taxation and the spread of a spirit of economy, it is argued, are discouraging and the country is sure to experience hard times in a business way, whatever one may do to avoid such catastrophes. We have no sympathy with these pessimistic views. The teaching of all history and common knowledge are opposed to such beliefs, while the facts show exactly the converse to be true. While it may be true that a citizen here and there may be put to some hardship, the sum total of combined effort will show on the credit side for business.

From all directions come evidences that the volume of business will continue on a rising scale, at least as long as the war lasts and probably longer. The release of billions of capital, all of which is to be employed here, will give to general business a tremendous impetus and accelerate industry in a manner the country has never experienced. There will be readjustments, of course, but these will all be merged into a unity that will make for bigger and better business. The logic of the situation requires that all unnecessary work and expenditures should be eliminated, and that if we would progress we must place ourselves in line for the great volume of work that is to be done.

The opportunity for work is the foundation of all periods of increased business activities. The great basic industries—transportation, steel, agriculture, etc.—have ahead of them a long period of employment at full capacity of production, and there will be work for all. Work means wages which stand for and are productive of good business. As a distinguished financier said a short time ago, "the trouble is that there is more work in sight than can possibly be done, and the question is whether we shall cut off luxuries or necessities."

All may rest assured that there will be no business stagnation, and druggists, of all business men, should rid themselves of any foolish fears that economy will bring on a general paralysis of industry or trade. Adjustments will have to be made to meet new conditions, and these should be effected with a view to rendering the greatest possible efficiency to the country and the individual. What is most needed at this time is a patriotic devotion

to the needs of this great Republic, for the future presents unmistakable evidence of business transactions, which in magnitude and diversity of interests will call into play every energy and resource of human endeavor.

PROPOSED REVENUE LEGISLATION

If the proposed revenue law now before Congress becomes a law the Government expects to collect \$8,500,000 on proprietary medicines, \$4,750,000 on perfumery and cosmetics, \$20,000,000 on soft drinks, and \$1,000,000 on chewing gum. These industries will pay 5 per cent tax on the price for which the goods are sold. With this proposition is a decision to increase the tax on all forms of distilled spirits, including grain alcohol, and no arrangements will be considered for any form of reduced tax or rebate on alcohol used in the manufacture of non-beverage preparations, such as medicines, flavoring extracts, perfumery and the like. It is also possible that a substantial tax will be placed on denatured alcohol.

In just what form the proposed bill will finally be enacted by Congress cannot now be predicted with certainty, as many of the schedules are meeting with opposition even by the legislators themselves. Of all the interests affected the proprietary medicine man, the druggist and the specialty manufacturer are hardest hit. The first named, especially, has conditions to meet that will tax all of his resources and require an attention to detail unprecedented in the history of such manufacturing. Beginning with a personal income tax, augmented in many instances by a corporation tax; a tax of 10 per cent on his raw material and a tax on his increased profits, he is caught between the upper and nether millstone, and it is no wonder that the Proprietary Association of America has filed its protest with the Ways and Means Committee of the House.

In not all cases can the manufacturer pass these taxes along to the consumer, while there is in every enterprise a point beyond which expense and taxation cannot go without causing a slackening of industry and dampening the ardor of business energy. Whether the Senate Finance Committee, which is now considering the measure, will modify the provisions of the first draft of the bill remains to be seen. If unwisely laid, the imposition of these taxes, as all others for a similar purpose, will tend to operate as a check upon enterprise, upon industry and upon the country's trade, to the possible disadvantage of the Government in borrowing the great sums of which it will stand in need.

CO-ORDINATION OF LEGISLATIVE EFFORT

This is the time of the year when the president of nearly every State pharmaceutical association is casting about for ideas to embody in his annual address, and while we do not wish to detract from the importance of the half a dozen or more topics that will suggest themselves to the average officer at the head of a wide-awake organization of pharmacists, we believe that not one of them deserves greater attention than that expressed in the co-ordination of legislative effort. Experience has demonstrated that a large part of the attempted

legislation is not well thought out, and that if enacted into a law it would be ineffective or detrimental. Much of the legislation which would apply to pharmacy is of this type, and the fact that conditions are no worse than they are has been largely due to the intelligent effort of a few individuals rather than the work of a united calling.

The importance of trade organization must be apparent to anyone who will give the subject a moment's thought. Unity of action is productive of strength and centralization of interests and unity of purpose are necessary if real benefits are to be achieved for pharmacy. There must be the strongest kind of co-operation between the various units of organized pharmacy and a linking up of effort between the different branches of the drug trade if the business as a whole is to be protected and to receive fair treatment. The reason for the existence of strong State associations is that they give standing and moral support to the individual members who desire a hearing on State or local matters, but there is a greater need of co-operation when it comes to questions of National concern and legislation.

Happily this is being met in the work of the National Drug Conference, an organization representing five National associations of the drug trade, and which has rendered effective work, especially in connection with the evolution of the Harrison narcotic act. But there is strong need of still closer co-operation to obtain the best results. The various State organizations are detached units of a loosely articulated mechanism. What is needed is closer co-ordination of effort and particularly a complete co-operation in legislative affairs and other matters between the several divisions of the drug trade. The president of an association of pharmacists who can effectively preach such a doctrine and assist in bringing about such a co-operation will earn the gratitude of the advanced thinkers in pharmacy and not a little reputation for himself.

SUGGESTIONS FOR COMMENCEMENT ORATORS

The season of college of pharmacy commencements is here and in the ordinary course of events will last until the latter part of June, although some of the institutions are likely to have their exercises greatly curtailed or omitted altogether by the absence of students who have been called to the colors or who are otherwise assisting in the mobilization of the country's resources. To those who remain to receive their diplomas the commencement exercises may lack some of the panoply and furbelows of similar occasions in previous years, but the commencement orator will not lack the opportunity to fire the heart of youth with persuasive power in the defense of democracy and patriotic ideals.

Recently the Secretary of the Interior sent out a letter to all schools, colleges and universities suggesting that pre-eminence be given in the commencement exercises this year to the causes and purposes of the war. The list of the Secretary's suggestions covers a wide range of subjects, all suitable for commencement day essays or orations, a few of which could well be tied up with the interests of pharmacists in the war. Such subjects

as "specialization of industry in war time," "use of alcohol in war times," "the Red Cross—its history and work," and the "development of the various sciences during the war—medicine, surgery, sanitation, chemistry," etc., all present phases of consideration in which the young pharmacist about to receive his diploma is deeply interested. Salutarian and valedictorian may have their places on the program, but we shall be greatly mistaken if they do not take advantage of the opportunity offered this year to put in words the patriotic thoughts of their classmates and to urge them on to nobler deeds in the unexplored vista before them.

What can the pharmacist do for his country? Where lies the field of greatest accomplishment? Surely these are subjects enough to attract the attention of any pharmaceutical orator. The old topics standardized by years of usage should give way to our present day concerns. We are engaged in a mighty struggle in which the pharmacist will have a part. Let him therefore boldly enter into the discussion of those questions and problems with which he is most directly concerned. The commencement orator this year has the opportunity of his life. Patriotism, pharmacy, and triumphant victory should be his watchwords.

A FEDERAL LICENSE AND COMMERCIAL TAX

In this issue of the ERA we print an interesting article from *Drug and Chemical Markets*, entitled "A Federal License and Commercial Tax," which we commend to the attention of our readers. The plan proposed by our contemporary is a somewhat radical departure from any method heretofore employed or suggested, and has the merit of tending to simplify the vexatious details relating to the imposition and collection of Federal taxes, besides furnishing reliable statistics which should be invaluable to all lines of business.

The American Chemical Society, on behalf of the chemical manufacturers of the country, who are striving to provide our Government with its many necessities, and in behalf of those conducting scientific research for the public good, appeal to the loyal women of the United States to refrain from purchasing platinum in the form of jewelry and to help discourage the use of this metal for ornamental or other unnecessary purposes, so that the limited supply of this precious metal may be made available for use where it can do greatest good in service of our beloved country.

Few realize that the dictators of fashion have caused the price of platinum to advance within the past few years until today it is worth five times as much as gold. As a result of this mood of Dame Fashion the chemical industries of our country are finding it exceeding difficult to secure the supplies they need, while our government as well as all chemical laboratories and institutions throughout the land are greatly handicapped by its scarcity. Platinum is essential for producing sulphuric acid, which in its turn is an absolute necessity in the production of high explosives. The matter has become so serious that scientific and industrial advancement is suffering severely because of the lack of platinum, and its almost prohibitive price.

Increased prices of potash, which are to hold until 1920, are fixed in a bill amending the potash law which was passed recently by the Reichstag. During the debate it was said that America, the only profitable customer, had dropped out, and that it was necessary to accumulate large stocks of potash to be exchanged for other commodities immediately after the war. The statement was made that 500,000 tons of potash for German farmers was not delivered last fall, owing to the lack of freight cars.

LIQUOR "ADS" BARRED FROM MAILS

Postmasters throughout the country are calling attention to L. Quor Bulletin No. 1, recently issued by Postmaster General Burleson of the United States Post Office Department, in connection with the law which becomes effective July 1, 1917, prohibiting the mailing of publications or other matter advertising intoxicating liquors when addressed to certain States or portions thereof. The text of the bulletin is as follows:

Section 5 of the Act of Congress approved March 3, 1917, effective July 1, 1917, is as follows:

"That no letter, postal card, circular, newspaper, pamphlet, or publication of any kind containing any advertisement of spirituous, vinous, malted, fermented, or other intoxicating liquors of any kind, or containing a solicitation of an order or orders for said liquors, or any of them, shall be deposited in or carried by the mails of the United States, or be delivered by any postmaster or letter carrier, when addressed or directed to any person, firm, corporation, or association, or other addressee, at any place or point in any State or Territory of the United States at which it is by the law in force in the State or Territory at that time unlawful to advertise or solicit orders for such liquors, or any of them, respectively.

"If the publisher of any newspaper or other publication or the agent of such publisher, or if any dealer in such liquors or his agent, shall knowingly deposit or cause to be deposited, or shall knowingly send or cause to be sent, anything to be conveyed or delivered by mail in violation of the provisions of this section, or shall knowingly deliver or cause to be delivered by mail anything herein forbidden to be carried by mail, shall be fined not more than \$1,000 or imprisoned not more than six months, or both; and for any subsequent offence shall be imprisoned not more than one year. Any person violating any provision of this section may be tried and punished, either in the district in which the unlawful matter or publication was mailed or to which it was carried by mail for delivery, according to direction thereon, or in which it was caused to be delivered by mail to the person to whom it was addressed. Whoever shall order, purchase, or cause intoxicating liquors to be transported in interstate commerce, except for scientific, sacramental, medicinal, and mechanical purposes, into any State or Territory the laws of which State or Territory prohibit the manufacture or sale therein of intoxicating liquors for beverage purposes shall be punished as aforesaid: **Provided**, That nothing herein shall authorize the shipment of liquor into any State contrary to the laws of such State: **Provided further**, That the Postmaster General is hereby authorized and directed to make public from time to time in suitable bulletins or public notices the names of States in which it is unlawful to advertise or solicit orders for such liquors."

This Act is construed to bar from the mails matter of the character described when addressed to States or portions thereof in which it is by State or local law forbidden either to advertise such liquors or to solicit, personally or otherwise, orders therefor.

The following statement shows the territory to which it is unlawful to transmit such matter by mail: Alabama, Arizona, Arkansas, Colorado; Connecticut (excluded from ninety towns); Delaware (Kent and Sussex Counties); Georgia, Idaho; Indiana (effective April 3, 1918); Iowa, Maine; Michigan (effective April 30, 1918); Mississippi; Montana (effective December 31, 1918); Nebraska; New Hampshire (effective May 1, 1918); North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota; Utah (effective August 1, 1917); Virginia, Washington and West Virginia. Liquor advertisements are also excluded from those portions of Maryland, Ohio, Rhode Island and Texas which are in "dry" or prohibition territory. According to Postmaster General Burleson, full data has not been received from several States and the published information is not yet complete, but further bulletins will be issued from time to time.

OAK GALLS FOUND IN CALIFORNIA

WASHINGTON, D. C., May 23—New sources of oak galls have just been found near the Baird fishery station, and, according to Secretary of Commerce Redfield, this is going to help out a great deal in the tanning industry. Heretofore we have been importing our entire supply of oak galls from Turkey, but since the war this source of supply has diminished and is now practically cut off. These oak galls arise following the sting of an insect, the tree endeavoring to throw off the poison. The Baird naval station is located in California, near the Sierra mountains.

Secretary Redfield has a collection of oak galls brought back from the fishery station by Dr. Hugh M. Smith, of the Bureau of Fisheries of the Department of Commerce. It is said that these are rich in gallic acid. They are largely used in the tanning of leather, although the Government has been importing them from abroad for the dressing of sealskins that are now being sold in the American market instead of at London, as has been the practice in previous years.

"All we have to do now," said Secretary Redfield, "is to go out on our own property and pick these up. We have been paying \$50 a ton and the oak galls are very heavy."

A Federal License and Commercial Tax*

THERE are many different ways which a business firm or corporation can legally employ to avoid paying its full Income Tax. This applies to any additional tax on extra profits of corporations, or any super-tax, and all such forms of taxation have a tendency to encourage trickery in business and make us a nation of "side-steps."

Special taxes on teas, coffees, sugar, etc., primarily fall on the masses and the high cost of living makes such taxes most undesirable at this time. Stamp taxes on proprietary articles, receipts, stock certificates, etc., etc., are one big infernal nuisance to American business men and the amount of tax produced is small in proportion to the time involved and the trouble they cause. It is a petty form of business which has never been popular in this country and should not be encouraged. Employers have something else for their employees to do besides keeping them busy licking revenue stamps. Any business man would prefer to give the Government a check once a year and not be bothered with the details which stamps require.

If our law makers really want to know how to tax business in a practical way so as to raise all the revenue required, here is a plan which is earnestly commended to their serious consideration:

A—FEDERAL LICENSE—Each individual, firm or corporation in business for profit shall pay an annual license of \$3 a year, payable annually in advance for each calendar year. Each professional man who practices his profession for his own profit, shall pay a license of \$3 a year, but exempt all professional men who are in the employ of others.

The privilege of doing business in this country is surely worth something to every one in business; it is also worth something to the professional man to be able to practice his profession in the United States, and one cent a day is a moderate amount to pay for such a privilege.

For carrying out the provisions of this proposed "Federal License" use the machinery of the Post Office Department; require each Postmaster to notify all persons, firms and corporations in his district who must be licensed; also see that they have licenses by requiring them to make their applications through his office. Make this license cover the calendar year, and whenever any one goes into business during the year, or into the practice of his profession, compel him to apply to his Postmaster for a license; the latter gives him a receipt for his money and turns it over to the Internal Revenue Collector, who sends the applicant his license. In other words, make it easy and convenient for one to get his license. Post offices are everywhere, while Internal Revenue offices are few and far between.

B—TAX ON SALES—In addition to the above proposed license, all individuals, firms and corporations doing an annual business of \$5,000 or more shall pay a Federal tax on their gross sales, or gross earnings, the percentage of such tax to be determined each year.

Under the provisions of the above "Federal License" plan each individual, firm or corporation in business will be registered in Washington, and soon after the first of

each year each licensed business should be required to report the total amount of its sales or earnings for the preceding year. After deducting all those whose total annual business is less than \$5,000 a year require all others to pay a tax which would vary each year according to the gross amount of such sales and earnings and the amount of revenue to be raised.

For example, if the total sales should amount to five hundred billions of dollars and a revenue of one billion dollars is required the tax would be 1-5 of one per cent, or \$2 on each thousand dollars of annual sales. It has been estimated that a tax of less than 1-10 of one per cent, or less than one dollar per thousand of annual sales would raise more revenue than any sane Congress would ever ask for, even in war times.

Farmers should be required to take out a license the same as other people who are in business for profit, and they should pay a tax on their sales beyond the limit of \$5,000, which would let most of them out of this tax. The banks might best be taxed on their average loans and discounts or their average deposits. The sales of real estate could very justly be omitted, as realty already carries a very large part of our State, county and municipal taxes. Commission houses, brokers, etc., should be taxed upon the total amount of their commissions, and the owner of the goods or stocks which they sell should pay the tax on such sales made for him. Railroads and similar corporations to pay on their gross incomes or earnings.

There are two things which even the most ordinary business man is apt to know. These are the amount of his sales and the amount of money he has in the bank. He may not know how much he is worth or how much he has made or lost during the past year, but he does know, or can easily find out, how much were his annual sales.

From the Government standpoint a tax on gross sales and gross earnings is most desirable because it is a very large figure, how large even the best authorities have been unable to agree, but it amounts to several hundred billion of dollars each year, and a uniform tax on all sales and earnings would be a very small percentage of their total amount.

Business would soon adjust itself to this expense the same as it does for rent or insurance, and the amount would be so small as not to be a burden on any one business and so distributed that all business concerns would pay their proportion and not evade taxes as many thousands of them are doing at present.

Another great advantage of this commercial tax on sales would be the invaluable statistics which such reports would supply—an absolute line on the business of the country from year to year and in each branch of business. These statistics would not only be of great value to the Government, but equally valuable to business men in the various branches of business, and in no other way could such reliable data be secured.

MODIFY THE INCOME TAX

If this commercial tax on sales is adopted it would of course relieve all firms and corporations from the income tax. Continue the income tax if you must on individuals and let each individual fight it out with his own conscience and his own money, but do not throw this stigma on to our business firms and corporations, and do not tax any man with an income of less than \$5,000 a year. Above \$5,000 a year increase the tax rapidly as the income increases, but if we exempt the business man whose sales are less than \$5,000 a year so should we exempt the salaried man whose salary is less than \$5,000 a year. Tax business, tax profits and tax sales, but do not tax labor.

We are on the threshold of large war taxes and enormous sums of money must be raised by taxation. The business of the country can best pay these taxes, for it will gradually adjust itself to them and pass them along to the ultimate consumer, where all taxes eventually land.

* (Drug & Chemical Markets.)

'The Pharmacist's "Bit" In the War

What He Can Do In the Army and Navy

The call of men for the Hospital Corps of the Army and Navy has placed special emphasis upon the need for trained pharmacists. There is no doubt that, for the period of the war at least, the pharmacist who joins the colors will be given a life that is interesting and exciting, and which at the same time is not far removed from his more ordinary mode of living.

The Army and Navy need druggists. The system of recruiting and of voluntary enlistments has made it possible for the pharmacist to get a ranking or rating that is, in some measure, dependent upon his own ability. The Army and Navy authorities have endeavored to make their Hospital Corps high class units, and to that end have frankly looked for trained men as far as possible.

THE trained pharmacist, or clerk, whether he be registered or not, should join the Medical Corps, or "Hospital Corps," as this unit is more familiarly known in army circles. Recruiting officers, and army officials in general, seek to make each unit as efficient as possible. Since the Hospital Corps is mainly a surgical and pharmaceutical unit it is easy to appreciate why army leaders want pharmacists to join that body.

Recruiting is now going on along lines of business. Every effort is made to find the right niche for each recruit. It may be true that the line will offer more opportunities for fame and display of valor, and that its members will see more actual fighting than those of the Hospital Corps, but the main idea that is being pressed and pushed with vehemence among soldiers is "every man to what he is fitted for."

What does the Hospital Corps offer a registered pharmacist? It offers him, first of all, a chance to do for his country what his country in her time of need is most anxious for him to do. It offers pay, perhaps not commensurate with the labor expended when one reasons on a peace or professional basis, but pay that is adequate and good. The very lowest pay the Hospital Corps gives is \$15 a month—to a private. But a registered pharmacist will not be permitted to serve as a private. He will be probably rated no lower than a corporal, for which the pay is \$24 a month, but is more likely to serve as a sergeant with from \$36 to \$75 a month.

Pay and Grades in the Corps

In the Hospital Corps pharmacists are rated as a result of the examinations they take upon entering the service. The examinations are strict, but the professional education of the trained pharmacist goes a long distance in determining the final ranking. A pharmacist may enter the service as a lieutenant or even a captain. In doing so, however, he must pass a rigid examination in professional work, general fitness, education and character. He must measure up, in every way, to the standard of the United States Army officer of the line.

Aside from the commissioned officers, whose pay is \$2,400 for a captain, \$2,000 for a first lieutenant and \$1,800 for a second lieutenant, the ratings opened to pharmacists, upon examination, are as follows:

Master Hospital Sergeant	\$75 a month
Hospital Sergeant	\$65 a month
Sergeant, First Class	\$50 a month
Sergeant	\$36 a month
Corporal	\$24 a month

The pay of enlisted men "serving beyond the limits of the States comprising the Union and the Territories of the United States contiguous thereto (excepting Porto Rico, Hawaii, and Canal Zone, Panama)" is increased 20 per cent.



Training Naval Pharmacists, Newport, R. I.

Enlisted men, while in active service, also receive from the Government (in addition to their pay) rations, clothing, bedding, medicines and medical attendance.

Private soldiers in the corps are paid from \$15 to \$18 a month, and they have opportunity, if they can qualify as dispenser's or surgical assistants, of earning from \$3 to \$5 a month extra. The private, for the most part, is the man in the command who is taught all he knows about pharmacy and medicinal work after he joins the army. He is in no sense a trained man, under the usual circumstances, and to him are

assigned the general camp duties that fall to the private of the line. He is paid on the same basis as infantrymen, artillerymen and cavalry troopers are paid.

Of course the pharmacist who joins the army must pass a physical test just as other soldiers do. He must be at least 5 feet 4 inches tall, and the present regulations say that he must be between the ages of 18 and 45. During war time, however, there is always the possibility of the higher age limit being raised. He must be an American citizen, and to rate as a non-commissioned rank must have an average education. His eyesight must be fair, but a corrected eyesight will help to pass the examinations.

To the extent possible in the field pharmacists of the army have duties much the same as those at home. They are first of all dispensers. Then they are helpers in hospitals and medical store houses. Theirs is the work of controlling the drugs the armies use. The good health of the army in the field is placed, to a great extent, in the hands of the Hospital Corps. The unit, besides supervising drugs and medicinal stores, does sanitary work.

Duties in the Field

Once the Hospital Corps takes the field it acts as nearly as an independent unit as any body of troops attached to the army. The nature of the work demands that the personnel of the corps be good. For drugs to keep an army of 100,000 men in health, and to help the wounded after a battle, demand expert handling. Oftentimes the army pharmacist is thrown absolutely on his own resources. Oftentimes a corporal or a sergeant will be called upon to make a snap decision upon which may depend the fighting strength of the entire field army. That's why officials of the army seek an efficient Hospital Corps, made up, as far as possible, of trained men, who know drugs and who have had business experience to guide them in emergencies.

A lieutenant of a Hospital Corps attached to the Department of the East said recently that the pharmacist need not be afraid of field work.

"It's nothing more nor less than a gigantic and always moving store," he said. "There are times when it takes ingenuity to dispense while the stores are in movement, of course, and there are times when a great deal depends

upon the moving of those stores. But if the pharmacist member of the corps remembers his store training, and uses his brains to figure out the difficulties, there is absolutely nothing to worry about. And it's one of the most interesting services in the army."

Any army recruiting officer in any city or town where there is a station will enlist a man in the corps. The applicant will be sworn in as a private, unless he has previously taken the examinations for reserve corps, and his rating will be made after he joins the unit to which he has been attached. In case the pharmacist has taken an examination for reserve unit he will respond to the call for men in the rank that his examination credited him with. Hospital Corps are attached to army posts. The new recruit will be sent to one of these for his early training.

The Pharmacist in the Navy

Pharmaceutical work in the navy is different than in the army. There it is a specialized field. Owing to the character of the work an applicant is enlisted in the Naval Hospital Corps only after his qualifications have been determined by a preliminary mental and professional examination, and then only in ratings of hospital apprentice, second class or first class. It is possible to achieve a higher rating in the navy, but only through promotion or special and extraordinary fitness. The personnel of the Navy Corps is one that has been trained in actual naval pharmacy—and there is a difference between that and land work. One of the fundamental differences is that the conditions under which drugs are mixed on a battleship are entirely different from those ashore. Practice of pharmacy aboard ship is one of the things that requires experience, and the navy's theory is that efficiency in the Naval Hospital Corps is the first principle of success.

The pay and ranks are:

Chief Pharmacist's Mate	\$77.00 a month
Chief Pharmacist's Mate, Acting	\$66.00 a month
Pharmacist's Mate, First Class	\$44.00 a month
Pharmacist's Mate, Second Class	\$38.50 a month
Pharmacist's Mate, Third Class	\$33.00 a month
Hospital Apprentice, First Class	\$26.40 a month
Hospital Apprentice, Second Class	\$20.90 a month

The work of the Hospital Corps consists in attendance upon the sick of the Navy and Marine Corps, both officers and men, in naval hospitals, naval shore stations, on board ships and upon expeditions of the Marine Corps. The service is not attended by particularly arduous duties and fits the members of the corps for future work in connection with their profession within and without the naval service. Their duties are to act as nurses to the sick, administer first-aid to accident cases, injured or wounded, assist at surgical operations, care for the medical stores and property, and compound medicines as is done in a civil drug store.

The navy needs young men who have had the training of pharmacists, preferably those who are just through their studies, as men who have had several years' experience as registered pharmacists are able usually to earn much more in civil life than the navy can offer them at first. Recruits are sent to one of three training schools which have been established, one on the Atlantic coast, one on the Pacific coast and one on the Great Lakes, where they remain for a period of about six months.

At these training schools the newly enlisted men are given a thorough grounding in the following subjects: anatomy and physiology; general nursing, first-aid, emergency surgery, operating room and surgical technic; hygiene and sanitation, both general and field; pharmacy, materia medica, chemistry and toxicology. The pharmacy course includes an elementary knowledge of pharmacy, with simple compounding of prescriptions, administration and proper doses of simple medicines, a knowledge of the poisonous drugs used in medicine and their physiological effects, elementary chemistry, and the performance of simple chemical tests and other matters along this line. The courses given are, of course, not complete, but men showing an aptitude for the work or a desire for further knowledge are given all opportunities for further studies.

Other Work for Pharmacists.

There are other things that pharmacists may do to aid the country during the war. Not the least of these is to preserve the stability and equilibrium of their own business. Then, too, there is the Liberty Loan, a good investment which will help the country in a large way, and at

the same time return a fair interest on the investment. These things in themselves are important, but, of course, are not to be considered as important as actual war work.

Already some of the drug associations, manufacturers and retailers have discussed several things that can be done. The drug manufacturers are preparing plans by which they can supply the enormous quantities of drugs that the Government will use and at the same time maintain a fair supply for the drug trade. A committee, made up of important men in the trade, is now busy considering the problem from every angle.

Red Cross work is open to pharmacists, and the retail man can be of great assistance in that field. There are things he can do that will be great help to the Federal bodies. He can secure enlistments, aid local branches and to some extent supply drugs. The field that is open for the druggist is a large one.

DISCUSSES RECRUITING SYSTEM

The Philadelphia Drug Exchange directors have written the following open letter to the Secretary of War regarding the situation of the pharmacist in the army and navy branches.

Hon. Nelson D. Baker,
Secretary of War, Washington, D. C.

Dear Mr. Secretary:

The Board of Directors of the Philadelphia Drug Exchange earnestly urges the establishment of a Pharmaceutical Corps in the U. S. Army analogous to the Medical Corps, the Dental Corps and the Veterinary Corps, for the following reasons:

1. The present system of enlisting pharmacists in the army, not as pharmacists, but as privates, is hopelessly antiquated. France, Germany, Japan and other foreign countries have a Pharmaceutical Corps in their armies in charge of a pharmaceutical expert.

2. The present system is unjust to pharmacy and pharmacists. Pharmacy is a profession and the pharmacist of today has had years of collegiate training and practical experience in scientific work. To enlist professional men as privates is not only unjust to the man, but is unjust to the army, because it denies to the army the possibilities of service which such men could render.

3. The present system is faulty. The status of pharmacists in the army is very unsatisfactory. Officially they are not pharmacists, but non-commissioned officers with responsible duties and no possibility of advancement in the service as pharmacists. They can excel as privates and be promoted as privates, but they cannot excel as pharmacists and be promoted as pharmacists; and this injures the service.

4. The present service is detrimental to the efficiency of the army itself, because it fails to recognize the importance of proper and sufficient pharmaceutical service and denies to the sick and wounded the best pharmaceutical service that the Nation can give.

5. The present system is unfair to the medical corps, because it denies that body the assistance and support that a properly trained pharmaceutical corps could give. The pharmaceutical service could be made most valuable to the medical profession not only in the hospitals but also in the field.

We are informed by the dean of a medical school in Philadelphia that 14,000 physicians will be required for an army of a million, that there are less than 7,000 physicians with ages of less than 31, and that, of these, probably one-half are physically unfit for service.

If this is correct, then only one-fourth of the necessary medical material is available. In view of such a possibility it seems to us that pharmacists could be made, with extra training, most valuable "medical assistants" in the field, while in the hospitals they could be given charge of the medical supplies of the hospitals and render pharmaceutical and chemical service in the compounding and dispensing of drugs and in the chemical and bacteriological examination of excrements, foods, water, milk, etc.

Again we urge the establishment of a Pharmaceutical Corps in the army as most essential for proper pharmaceutical service.

(Signed) JOHN FERGUSSON,
President.

(Signed) J. W. ENGLAND,
Secretary.

PHARMACISTS ARE AIDING

(Special for PHARMACEUTICAL ERA.)

WASHINGTON, D. C.—What the pharmacists of the United States are doing to help out the Government in the present war emergency was outlined by Charles M. Woodruff, when, on behalf of the American Drug Manufacturers' Association, he appeared before the Senate Finance Committee when that body was holding hearings on the pending revenue bill.

"The first work assigned to the committee which was appointed to assist the advisory committee to the Council of National Defense, composed entirely of members of our organization, was to go over the schedules that the army and navy had been using for years, and find equivalents for certain things that under present conditions are unobtainable—that is, what we, from the pharmaceutical point of view, might consider equivalents—to be submitted to the physicians connected with the army and navy to see whether, from the therapeutic point of view they could be considered as equivalents. The greatest problem the pharmaceutical industry

I represent has to meet today is not the problem of business. Every one of our members has doubtless more business than he can attend to. I know that is the case with the immediate industry I represent. The problem is how to get the medicinal preparations that will be required in case of emergency without disturbing the drug trade at large."

Mr. Woodruff pointed out that at the annual meeting of his association in February, 1916, a series of resolutions were passed urging with great force upon the Government the necessity of industrial preparedness in the way of furnishing the medicinals that are required in the army and navy, and later when the matter was seriously taken up it was found that so far as medical supplies were concerned the industry had already mobilized, and quite recently all the manufacturers in the lines represented by the organization were called to Washington by the officials of the Council of National Defense and presented with a problem that under its existing organization the Government did not seem equal to.

The plan is to have the largest possible number of drug and pharmaceutical manufacturers get into the game and turn out whatever of their products the Government might require. As stated, this would prevent one or two firms standing the entire burden.

The committee composed of manufacturers of pharmaceutical chemical and disinfectant products is as follows: Chairman, Willard Ohliger, of F. Stearns & Co., Detroit; secretary, Frank G. Ryan, of Parke, Davis & Co., Detroit; Charles J. Lynn, of Eli Lilly & Co., Indianapolis, Ind.; Theodore Weicker, of E. R. Squibb & Sons, New York City; Milton Campbell, of H. K. Mulford Company, Philadelphia; R. C. Stofer, Norwich Pharmacal Company, Norwich, N. Y.; C. Mahlon Kline, of Smith, Kline & French Company, Philadelphia; A. G. Rosengarten, of Powers-Weightman-Rosengarten Company, Philadelphia; Herbert H. Dow, Dow Chemical Company, Midland, Mich., and D. W. Jayne, A. J. Marcus and S. Norvell, all of New York.

NOTES ON DISPENSING OINTMENTS*

By E. FULLERTON COOK

A marked improvement in the method for the dispensing of ointments has been advocated during the last few years and these few notes are submitted for the purpose of yet further stimulating its adoption.

The method in use for many years has been to introduce the ointment to a pot or jar having a slip or screw lid. An ointment in such a container is frequently exposed to dust and is almost invariably removed from the jar, as used, by means of the finger. Both of these conditions are undesirable and unsanitary. In addition the jar method of dispensing constantly exposed the ointment, over an extended surface, to the action of air and frequently to the action of light, and this greatly hastens rancidity in the fatty vehicles used if these are of animal or vegetable origin.

The new plan, i. e., using ointments in pure tin, collapsible tubes, avoids all of the serious defects of the jar method and at the same time costs no more and is just as easily handled. Emphasis should be placed upon the use of pure tin tubes as those made from composition metal are more readily attacked by certain ingredients which may enter ointments.

In closing a tube care must be taken to see that it is not filled too full; it should be folded over at least twice. The capacity of each side of the tube can be readily ascertained by a trial with petrolatum and this information may then become a permanent record for the prescription department.

Special plyers for closing tubes are obtainable at small cost; a check cancelling machine of the type which causes numerous small cuts in the check when stamped over the written numerals, has been recommended for closing and is very satisfactory, but the back of a heavy table knife is quite as effective as the more expensive devices. In using a knife or stiff spatula, hold the filled tube in the left hand on a counter with the open end to the right, run the knife lightly along the tube to slightly flatten it, when near the end increase the pressure and, when within a quarter of an inch from the opening, hold the knife firmly and raise the tube, laying it over upon itself. Repeat this a second time and the tube is closed.

*Read before the Pennsylvania Ph. A. and reprinted from the Proceedings.

If a stiff ointment or other heavy substance is to be used in tubes, a hard metal clip should be clamped over the fold to prevent the content being forced from the folded end when pressure is applied to the tube. The attachment of a clip, however, requires a special machine which is more expensive than the retailer will care to buy for prescription work alone. Fortunately, the consistence of most ointments is such that the clip is not needed, but it would be well to attach a sticker cautioning the patient to always press the tube from the folded end. For tooth pastes which are heavy and stiff in consistence, the clip is quite important if the container is to give satisfaction.

In filling the tubes with a soft ointment in prescription work the method which has given the greatest satisfaction because of its cleanliness, rapidity and simplicity is as follows: Place the finished ointment in the center of a piece of manila or other strong paper of sufficient size (for an ounce of ointment use a sheet about 8 by 10 inches), fold it over so that the edges meet, with the ointment inside, place a pencil on the top fold, on a counter and, holding the under sheet, slowly roll the pencil towards the ointment. This causes it to form into a cylinder and, when this is of a less diameter than the tube, roll this cylinder over on the remainder of the paper so as to form a paper tube with the ointment inside. Now slip this into the collapsible tube and start to fold over the protruding end of the paper tube. When the ointment has thus been forced completely into the metal tube, firmly grasp the metal end just below the paper and slowly withdraw the sheet, pulling it with the other hand. This leaves the ointment inside and the tube is ready to close permanently. It has also been suggested that the paper be cut off and left inside the tube, but its withdrawal seems preferable.

Now as to the labelling and finishing. If desirable, the tube may be dipped in compound tincture of benzoin or in a regular lacquer and afterwards allowed to dry. This will facilitate labelling, as without some treatment or special paste the labels will not hold to the tube. It is always desirable, if labels are applied, to use them in strip form so as to completely encircle the tube and prevent their coming off. It has also been suggested that solution of sodium silicate on the tube will cause the labels to stick. At best, however, labels are not very satisfactory, as the tube is likely to be completely rolled upon itself as the last of the ointment is used, so that some pharmacists are using a pasteboard box to hold the tube and carry the label, while the tube itself is stamped in the tin with the prescription number, using a numbering machine. This will permit the identification of the prescription and its renewal, even if the box is lost.

FAIRCHILD SCHOLARSHIP EXAMINATION

E. G. Eberle, editor of the *Journal* of the A. Ph. A., and chairman of the committee, announces that the examinations for the American Pharmacy Fairchild Scholarship will be held June 25. Particulars of how the examinations are to be conducted and the prize to be awarded have been sent to the boards of pharmacy and all schools of pharmacy belonging to the American Conference of Pharmaceutical Faculties. The value of the scholarship, which has been donated by Samuel W. Fairchild, is \$300. Candidates competing in the examination must be graduates of a four-year high school course and have had two years of drug store experience. The scholarship is awarded for the first year in a college of pharmacy of the candidate's selection, but which must be a member of the American Conference of Faculties.

According to the announcement, the examinations will be conducted jointly by a member of the State Board of Pharmacy and the dean or some member of the college of pharmacy designated by him. Only one scholarship is offered. Apprentices who contemplate a course in pharmacy and who can meet the preliminary requirements should matriculate and inform the dean of the school that they intend to compete.

F. A. THOMPSON & CO. SUFFER FIRE LOSS

F. A. Thompson & Co., Inc., manufacturing chemists, Detroit, Mich., on May 18 suffered a loss by fire aggregating between \$30,000 and \$40,000. The fire originated on the third floor of their building, which was considerably damaged, as was equipment, stock, etc. The loss is said to be fully covered by insurance.

Exhibition of Old Mortars

Many Shown by New York College of Pharmacy

COLUMBIA University College of Pharmacy has recently combed New York to find old mortars and pestles. The result of the effort was an exhibition in the college library that was interesting as showing the development of the mortar, but in addition was interesting purely from an artistic standpoint. Rarely ever is an exhibit brought together, outside a curio establishment or a museum, that contains so many antique and valuable pieces as was shown in this one.

Dr. H. N. Fraser of New York, in a way, is responsible for the strength of the exhibit. He first offered to show four or five old mortars, Italian and Persian, which he had, but when he had seen them placed on the library tables he became enthusiastic and set about getting a complete exhibit, with the assistance of the college authorities. So successful was he that a mortar was obtained that P. H. Henckel of Brooklyn insists was used by "Hippocrates in mixing the first liver pills." That particular mortar is built like a wash stand, about three feet high. The bowl was of solid marble and there is no doubt that it dates back over a long period in any event.

The value of the exhibit did not lie particularly in its antique value, however. It clearly traced the history of the drug mortar, not only as used in America but as used in many of the European countries. For instance, there were very old Dutch mortars, almost corroded with age, but built of solid iron; then there were more modern ones, cut out of lighter and more graceful stone, and finally the still more modern brass.

To a certain extent the history of the American mortar was traced. First there was an almost square piece of stone. A huge piece, of course, with unsmoothed edges and from the center was pounded out a small cavity. There is probably no chance for a belief that it was used in the actual compounding of drugs, but the stone was found in Pennsylvania and undoubtedly was an Indian cooking utensil. Since it was probably used to pound grain and wheat and even herbs the faculty of the college included it in the exhibition as one of the first druggist's utensils of the history of the United States.

Following that is a deep wooden bowl, looking for all the world like a present-day flower pot, made of wood. The "pestle" that goes with it is nothing more than the branch of a tree. The bough is used as the handle and a small portion of the trunk is used as the hammer head. And that was a drug mortar in Pilgrim days.

More Interesting Relics

Others of the American exhibit showed the polished wooden mortars and heavy rolling pin pestles of Revolutionary days. Still more brought them down to the present

day, to brass and copper. Perhaps in pointing to the American exhibit it would be well to mention the heavy solid old iron mortar with its unbelievably heavy pestle which is certainly old Dutch. On the sides of that mortar were seen festoons of flowers and an ornate decoration. It was the first mortar used in New York City, having been brought to this country by the early Dutch settlers, and there is a flavor of Peter Stuyvesant about it, even now. A companion mortar to that, perhaps, was the one actually used by the old governor in his household.

Strangely enough there were only two actually German mortars in the exhibit. One of these was the giant owned by Merck & Co., which held the center of a table given over to the exhibit of that concern. It was a tremendously big fellow, cast iron, with bands around it which proved that in the 16th and 17th centuries the chemists of Germany were artistic.

Two sets of mortars in the exhibit carried an interest not wholly pharmaceutical. These were three Chinese mortars of an early period, probably the 14th century or a little earlier, and two beautifully worked Persian models of about the same period. The Chinese mortars were of china, shaded blue, green and white. They appeared fragile, yet there were signs of hard work, and the bases were strong and rather heavy. The china was of a class that would make its possessor in society the envy of all her friends. Remarkably small, these Chinese mortars were still impressive and were certainly beautiful.

Persia's contribution made the librarian in the college exclaim that quite apart from the college itself she wanted at least one of them. One couldn't blame her in the least for desiring to own the brass mortar. In the first place it didn't look like a mortar; it appeared more like a vase. But it was hand worked, in brass, and around it was a series of figures, evidently illustrative of poetry of a technical nature, or of the profession itself. It was one of the most artistic pieces in the exhibition and was valued by its owner at over \$350. The other Persian mortar was of iron, but it looked like clay. It was moulded with a heavy flat rim, much like the "antiques" one finds in a five and ten cent store today.

Among the early French mortars shown were two of silver bronze. The tone of those mortars, when the pestle was hit against them, made it seem impossible for anyone to work with them. They sounded like bells, and aside from that both were beautifully wrought.

From a personal point of view one of the interesting exhibits was that of four early Italian mortars owned by Enrico Caruso, the famous tenor. Several mortars on exhibit have been presented to the college.

DEAN SAYRE SUGGESTS CORN FOR BREAD

Prof. L. E. Sayre, dean of the University of Kansas School of Pharmacy, has made a series of laboratory tests and kitchen experiments with a view to proving that good bread can be made from corn meal and wheat flour combined. He mixed one-third corn flour and two-thirds wheat flour, and the results were all that could be desired.

"We found that flour containing 14 per cent protein and the corn flour mixed in the proportion of one-third corn flour and two-thirds wheat flour gave a larger and in every respect an improved loaf," said Prof. Sayre. "This corn and wheat bread is much more nutritious than wheat and potato flour bread. Potato flour is only a third as rich in protein as wheat flour, and by its use the food content of the loaf is lowered.

"Corn gluten has none of the rising qualities so characteristic of wheat gluten and consequently has no particular value alone in breadmaking. But 10 to 40 per cent of corn starch may be added to wheat flour in making bread, crackers and sweet goods."

Prof. Sayre has not tried his experiments in a practical way but has confined them to laboratory tests. He anticipates making tests in Kansas kitchens and restaurants in the near future.

GERMAN BIOLOGICAL PRODUCTS

In view of the fact that some establishments licensed for the manufacture and sale of biological products located in Germany have not been inspected within the time required by regulation and on account of present conditions will be inaccessible to inspection for an indefinite time, the United States Treasury Department has revoked the licenses of these plants and published due notification.

The establishments in question are the following: Chemische Fabrik auf Actien, Berlin; Farbwerke, vormals Meister Lucius und Bruning, Hoechst on Main; The Behringwerk, Marburg; E. Merck, Darmstadt; Kalle & Co., Biebrich; Pharmaceutisches Institut Ludwig Wilhelm Ganz, Oberursel bei Frankfurt a. M.; and Chemische Fabrik Gustrow, Gustrow i. M., Germany.

As all pharmacists are aware, only such sera, vaccine virus, etc., may be sold or dispensed as have been prepared and propagated in establishments licensed by the Secretary of the Treasury, and the United States law requires that each container of serum sold or dispensed by licensed establishments shall bear upon the label, in addition to the name of the serum, the name, address and license number of the manufacturer, and the date beyond which the product is not likely to yield its specific results.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of *ERA* Subscribers



Drug Business and the Bone Dry Law

(H. A. K.)—"Give as much information as possible about the effect the bone dry law will have on the drug business, if any."

It is unlikely that anyone can give a definite outline of the probable effect of a "bone dry" law on the future of the drug business, a proposition that will be somewhat difficult for one to undertake for some years, even after the law has been in operation. However, in a number of prohibition States many druggists have favored such a law, and in numerous instances have petitioned their legislatures to prohibit the sales of liquor in drug stores for any purpose whatsoever. This has been the case in Virginia, West Virginia, Michigan, and possibly some other States. In our opinion we do not think the enforcement of such a law would injuriously affect the drug business as a whole. Whiskey and brandy are no longer recognized as official remedies by the Pharmacopoeia, and many druggists have frequently been heard to say that the small quantity of liquor they have ever sold for medicinal purposes has never paid them for the expense of a retail dealer's special tax stamp they were required to display, to say nothing of the worry and the espionage they were under by the authorities who wished to see that no violations were made. They argued that the returns for assuming the responsibilities that such selling entails, constitute too great a handicap to make the privilege a real financial business proposition.

On the other hand, it is possible that the druggist who operates a soda fountain will gain by the enforcement of such a law, as the absolute prohibition of the sale of alcoholic beverages will tend to increase the demand for soft drinks. To what extent the results will justify this belief one cannot definitely state until a sufficient length of time has elapsed under the new conditions and the returns shall have come to hand. We believe an increased demand for soft beverages will develop in many localities. At any rate, the outlook is promising in this direction and many druggists will take advantage of such an opening to push their business in these departments.

Solution of Citrate of Magnesia

(Porto Rico)—We can not improve upon the formula given in the U. S. P., Ninth Revision, for the preparation of solution of citrate of magnesia, a copy of which we take for granted you have. Further, any preparation sold under the official title must conform to the formula, else if discovered the seller would be liable to prosecution. However, like all solutions containing citric acid, this preparation is prone to deteriorate. When the solution of citrate of magnesia is made up for stock, trouble arises usually from the use of plain water, fungi appearing in the finished product after the lapse of some time, which renders the preparation unsightly and unsalable. This may be overcome by boiling and filtering the water to be used, then proceeding exactly as directed in the U. S. P. formula. The bottles should then be securely stoppered and kept on their sides, preferably in a refrigerator. The instruction to plug the neck of the bottles with purified cotton while the contents are cooling and before adding the potassium bicarbonate (or sodium bicarbonate, if the alternative process be followed), should be strictly observed, for unless this be done, fungous growths are soon apt to develop. Rapid deterioration of the finished solution is prevented by starting the manufacture with water that has been boiled and filtered, which is again practically sterilized when the mixed liquids are raised to the boiling

point (as directed in the Pharmacopoeia), the finished solution being kept as directed above. But however made, or whatever formula be employed in manufacture, the resulting solution is far from a permanent preparation, and only such quantities should be made up as are likely to be sold within a reasonable length of time. Druggists in the States, especially during the warm season, rarely prepare more at a time than will carry them over a week, for the solution will not keep an indefinite period without alteration, even under the most satisfactory conditions.

Liquid Smoke

(J. R. M.)—"Liquid smoke" has been the subject of two Food and Drug Inspection Decisions, the analysis of one sample being reported by the Bureau of Chemistry in a case where the manufacturer pleaded guilty, as follows:

"The odor, general appearance, precipitated and dissolved tar, acidity, behavior on distillation, neutralization and oxidation, together with the presence of methyl alcohol and acetone, indicated that this product was pyroligneous acid. Adulteration of the product was alleged in the information for the reason that it contained an added poisonous ingredient which might render it injurious to health, to wit, wood alcohol. Misbranding was alleged for the reason that the product was labeled as above set forth, which label and labels were untrue and were false and misleading in that the product was not liquid smoke, but was in fact a solution of crude pyroligneous acid."

Referring to that part of your inquiry concerning the identity of "rectified spirit of tar," we take this to be another name for rectified wood alcohol, formerly known as "spiritus pyroxylicus rectificatus," "pyroligneous spirit," etc., which is formed along with crude acetic acid, tar, etc., when wood is subjected to destructive distillation. The addition of such a compound to a product employed to give meat a smoky flavor, according to the above decision, would be prohibited. As has been stated, pyroligneous acid is one of the products of the destructive distillation of wood, and in large quantities can be obtained from such distillers or manufacturers, but as most wholesale druggists list it in their catalogues one should be able to get it from them. The dispensaries give a very good account of the production of this acid under "acidum aceticum (crude)." It has been used both as a preservative and as an application to give meat a smoky flavor, being diluted somewhat with alcohol and water and painted on the meat, which is then hung up to dry. The use of this product, however, at least for the purpose of interstate traffic, would appear to come under the regulation governing meat inspection, which is as follows:

"No meat or meat food product for interstate commerce, or for foreign commerce except as hereinafter provided, shall contain any substance which lessens its wholesomeness, nor any drug, chemical or dye (unless specifically provided for by Federal statute), or preservative other than common salt, sugar, wood smoke, vinegar, pure spices, etc."

We think the name "liquid smoke" is a misnomer as applied to solution of pyroligneous acid, although such a product does contain compounds similar to some of those found in smoke produced by the ordinary combustion of wood.

Mucilage of Quince Seed

(A. C. Co.)—"Can a permanent emulsion be made from quince seed?"

We know of no formula under the title of emulsion of

quince seed, although mucilage of quince seed has been used as a suspending agent for such liquids as tincture of benzoin when added to toilet preparations. The keeping qualities of this mucilage are not satisfactory, and the Pharmacopoeia of 1880, which contained a formula for the preparation of this mucilage, directed that it should be freshly made when wanted for use. This official formula, which is also to be found in the third edition of the National Formulary, is typical of preparing the mucilage for whatever purpose the latter may be used, viz.: Macerate 2 grams of quince seed for half an hour in a covered vessel with 100 Cc. of distilled water, frequently agitating. Then drain the liquid through muslin without pressure. A similar method, but calling for 4 grams of quince seed instead of the quantity given in the former U. S. P. formula, may be found in the British Pharmaceutical Codex. When the mucilage is employed in toilet preparations it is frequently prepared with rose water. Like most of the toilet creams of the gelatinous or mucilaginous type, an added preservative is needed to insure the keeping qualities of the resulting preparation, and mucilage of quince seed so used is no exception to the general rule. For this purpose glycerin, phenol, boric acid, salicylic acid, sodium benzoate, and other antiseptics are employed, the particular one selected depending somewhat on the character of the preparation.

There is no Pharmacopoeial standard for quince seed at the present time, but descriptions are to be found in most works of reference. The commercial supplies before the war came chiefly from Southern Russia and Portugal. For making mucilage, the seeds should be quite clean, the dirt being removed by rubbing in a cloth. The mucilaginous substance is known as cydonin and constitutes about one-fifth of the weight of the seeds, and about one part of the seeds with 40 parts of water should yield a thick, jelly-like mass. According to Kraemer ("Scientific and Applied Pharmacognosy"), apple and pear seeds are sometimes substituted for quince seed, but these are readily identified by their shape and color, and by the fact that they have a smooth, shiny outer surface, which is not mucilaginous. Here are two formulas that have been recommended for preparing "toilet creams" from quince seed:

(1)

Quince seed	1½	drams
Boric acid	½	dram
Salicylic acid	20	grains
Glycerin	1½	ounces
Eau de cologne	4	ounces
Water	4	ounces

Make a mucilage with the quince seed before adding the other ingredients.

(2)

Quince seed	3	drams
Glycerite of starch	4	ounces
Boric acid	8	grains
Glycerin	4	ounces
Rectified spirit	6	ounces
Carbolic acid	20	grains
Oil of lavender	40	minims
Water, enough to make	32	ounces

Prepare as directed in the preceding formula.

BOOKS ON URINE ANALYSIS

(E. M. W.)—The following are standard works on urine analysis, clinical chemistry, etc.:

Ogden, Clinical Examination of the Urine and Urinary Diagnosis	\$3.00
Wolff, Chemistry and Urine Examination	1.25
Holland, The Urine, Milk and Common Poisons	1.00
Memminger, Diagnosis by the Urine	1.00
Simon, Manual of Clinical Diagnosis	5.00

Information relating to microscopy, microscopic examination, staining, etc., may be found in the following books:

Gage, The Microscope	\$2.00
Winslow, Elements of Applied Microscopy	1.50
Hanausek-Winton, Microscopy of Technical Products	5.00
Schneider, Microscopy and Micro-Technique	1.50

Some Prescription Difficulties

(F. T., Manila) Sends us the following prescription in Spanish, with accompanying questions:

(1)

Naphthol salicylate	0.40	Gm.
Phenyl salicylate	0.75	Gm.
Bismuth salicylate	0.20	Gm.
Crude opium	0.02	Gm.
Extract of cannabis indica	0.01	Gm.

Mix. Make one seal (sello).

"In making up the seal it is unavoidable that there should be trituration in a mortar on account of the opium and extract, but the more the trituration proceeds the more the mass liquefies. What should be the means of preparing it without its liquefying? When it liquefies is there a chemical combination, and if so, the formation of a new compound? If so, what compound?"

Phenyl salicylate is no doubt the cause of the difficulty, for when triturated with naphthol salicylate a eutectic mixture results, the mass becoming pasty, then liquid, just as described. This tendency of phenyl salicylate (salol) to form a mass or liquid when triturated with many dry solids is well known, the example given being a case in point. The change is one of physical state and not one of the formation of a new chemical combination, at least in so far as we are aware. The use of a drying powder like slippery elm or licorice root has been recommended in compounding some prescriptions of this type, but it is doubtful if this would prove satisfactory in the above.

(2)

Lithium salicylate	3	Gm.
Sodium bicarbonate	6	Gm.

Mix and divide into 24 capsules.

"The capsules become sticky, adhere after some days, and later there appear many black spots in the capsules, and the capsules burst. What is the best method for compounding this preparation? When liquefaction occurs, is phenol or carbolic acid formed? If not, what would be?"

Lithium salicylate is incompatible with all alkali carbonates, the reaction here forming lithium carbonate, sodium salicylate, water and carbon dioxide. The black spots are either due to the excess of alkali acting on the salicylic acid, turning it pink, then red and brown, or to iron or other impurities. The water causes the capsules to become sticky, and the gas causes the capsules to burst.

(3)

Sodium borate	2	Gm.
Stovaine	2	Gm.
Distilled water	20	Gm.

"An abundant white precipitate is produced. Cannot the formation of this precipitate be avoided? What body or bodies cause the precipitation? This remedy, as can be seen, is used for local application."

Stovaine is a trade name for amylocaine hydrochloride, which is precipitated by alkaloidal re-agents and is decomposed even by very dilute alkalies. Borax is alkaline in reaction, and when brought in contact with the stovaine, as in the above prescription, decomposition ensues, the base being precipitated. It is probable that the difficulty can be avoided by the use of a little glycerin, substituting a small quantity for a portion of the distilled water. The glycerin decomposes the sodium borate and forms sodium metaborate and boric acid. The procedure would be to dissolve the sodium borate in a portion of the water to which the glycerin has been added, and to this solution add the stovaine dissolved in the remainder of the water.

(4)

Bromoform	30	drops
Validol	10	drops
Antispasmodic potion	150	Gm.

"The bromoform and validol form oily drops which float on the liquid; how can this incompatibility be remedied?"

We do not know the exact composition of "antispasmodic potion," but it is undoubtedly an aqueous solution in which both bromoform and validol are insoluble. Both of these substances are in the form of liquids which are practically immiscible with water. Both of these substances are miscible with alcohol, however, and the addition of a sufficient quantity to the mixture to dissolve the

bromoform and validol has been suggested as a method of making a solution, which would also increase the volume of the mixture with a corresponding increase in the volume of the dosage. We doubt the practicability of such an addition, however. Bromoform is too dense a liquid to be dispensed safely with aqueous vehicles, as there is always a risk of an excessive amount being taken in the last dose of the mixture unless made in the form of an emulsion, which is usually done by dissolving the bromoform in about three times its volume of almond oil, and emulsifying with acacia in the usual manner. It is suggested that this method be tried in compounding this mixture, although it is said that validol is best administered alone on sugar or in a little sweet wine.

(5)

Codeine phosphate	0.3 Gm.
Potassium bromide	4.0 Gm.
Ammonium bromide	4.0 Gm.
Syrup	30.0 Gm.
Water, enough to make	120.0 Gm.

"Once made up the prescription produces a precipitate. Can the formation of this precipitate be avoided? What method should be followed?"

The difficulty here is due to codeine bromide which is formed when codeine phosphate is compounded with the alkali bromides, the codeine bromide being difficultly soluble in the liquids of the mixture, the solubility also being lessened still more by the presence of 8 grams of bromides. According to the books, codeine bromide requires 82 parts of water to dissolve it, and we think if you were to dissolve the codeine phosphate in a portion of the water, and the bromides in the syrup and the rest of the water, and then mix the two solutions you would come very close to getting a clear solution, the syrup thus employed acting as a "protective agent" by retarding the reaction. The addition of a little glycerin might also help.

(6)

Strontium bromide	2.0 Gm.
Sparteine sulphate	0.5 Gm.
Arrhenal	2.0 Gm.
Distilled water	50.0 Cc.

"The preparation appears as a milky liquid. I wish to know if this prescription can be prepared so that a transparent liquid will result? To what is the milkiness due, if there is chemical decomposition, what body or bodies decompose and what are the products of decomposition?"

Two reactions will occur, strontium sulphate being precipitated when strontium bromide and sparteine sulphate are brought together in solution, a difficulty which ordinarily might be avoided by using sparteine hydrochloride instead of the sulphate, if you could get it. The other reaction is that between sparteine sulphate and arrhenal, the latter being a trade name for sodium metharsenite, which, according to the B. P. C., forms in aqueous solution precipitates with solutions of the alkaloidal salts. These precipitates are due to double decomposition taking place, and alkaloidal methyl arsenites being formed, which are definite, crystalline compounds. Under the circumstances we think the prescription should not be dispensed.

Formaldehyde Disinfectant Liquid

(G. B. M.)—The following formula taken from a French technical journal, is recommended for deodorizing and disinfecting purposes in the manner you suggest:

Formaldehyde solution	1 part
Soft soap	50 parts
Alcohol, 96 per cent	50 parts
Oil of lemon	25 parts
Oil of bergamot	5 parts
Oil of spike lavender	25 parts
Oil of thyme	10 parts
Oil of verbena	30 parts
Oil of rosemary	5 parts

Mix the oils with the soap, then add the alcohol and stir until the soap is dissolved, which will be in 15 to 30 minutes. Filter. Twenty-five Cc. of this liquid is added to 500 Cc. of water, which is then sprayed in the atmosphere it is desired to deodorize and disinfect. It is stated that this formula has been employed with success at L'Hopital des Enfants Malades, and in the wards of similar institutions.

A simple deodorizing spray for office use, which can be used with an atomizer, is the following from the Era Formulary:

Guaiacol	10 Cc.
Eucalyptol	10 Cc.
Menthol	5 Gm.
Thymol	2 Gm.
Oil of gaultheria	30 Cc.
Oil of peppermint, enough to make	75 Cc.

Mix.

Alpine Herb Tea

(B. P.)—We cannot give the formula for the proprietary preparation, but from the name you employ it is assumed that it belongs to the type of medicinal herb teas somewhat extensively used in European Continental countries, types of which are to be found in the various formulas offered in the National Formulary. Under the title "Species Herbarum Alpinarum (Alpine Herb Tea)," the Formulary of the Deutschen Apotheker-Verein (Berlin, 1912) gives the following:

Buckthorn bark	20 parts
Senna leaves	10 parts
Tilia flowers	5 parts
Elder flowers	5 parts
Mullein flowers	2½ parts
Acacia flowers	2½ parts
Ononis root	2½ parts
Lovage root	2½ parts

Reduce the drugs to a coarse powder and mix them uniformly. Dose, one tablespoonful to make one cupful of tea (used as a laxative and diuretic).

A somewhat similar mixture is the following from the Era Formulary:

Buckthorn bark	4 ounces
Dandelion root	4 ounces
Senna leaves	4 ounces
Licorice root	1 ounce
Coriander seed	½ ounce
Anise seed	½ ounce

Reduce the drugs to a coarse powder and mix uniformly. The cathartic effect may be increased by incorporating a proper quantity of coarsely ground rhubarb. The decoction or "tea" is made from the mixture by steeping one tablespoonful in about ¾ pint of hot water and allowing it to stand for about twenty minutes. Adult dose, about a teacupful.

Still another formula we take from Hager's Manual under the titles

**Species Herbarum de Le Roi
(Krauterthee Le Roi's)**

Milfoil flowers	60 parts
Senna leaves	60 parts
Buckthorn bark	40 parts
Coltsfoot herb	40 parts
Violet herb	40 parts
Centauray herb	40 parts
Walnut leaves	40 parts
Althea root	40 parts
Couch grass root	40 parts
Licorice root	40 parts
Red poppy petals	20 parts
Mullein flowers	20 parts

Contuse to a coarse powder and mix uniformly.

Charles S. Bradley, commenting on the statement of Prof. Wilhelm Ostwald of Leipsic University that Germany can dictate terms to all other nations because of the monopoly of the potash deposits of the world, says: "The professor forgets that we have potash-feldspar in unlimited quantities, which runs as high in percentage of potash content as the average output of the German mines, and which does not have to be deep-mined 2,000 feet below the surface, as theirs does. Ours is already at the surface, thus eliminating the large investment for deep-mining, and he also forgets that these deposits are close to the points of distribution, which means a much cheaper freight rate."

BOARDS

OHIO

The Ohio Board of Pharmacy on May 2 announced the results of the examination of candidates for admission to practice pharmacy, held at Columbus on April 3 to 5. In the class there were 168 applicants for licenses as registered pharmacists, and 45 for licenses as assistants. In the larger class Byron Spoon of Forest won first place with a percentage of 92, while Frank A. Smith of Antwerp led the class of assistants with 89.3 per cent. Among the successful applicants were six Sisters of Mercy from Cincinnati, five of whom qualified as registered pharmacists and one as an assistant. Of the class 76 were successful and were granted registered pharmacists' licenses and 28 were granted assistants' licenses. Licenses as assistants were also issued to 17 of the applicants who took the major examination but who did not receive high enough rating to pass them as registered pharmacists. The board unanimously adopted a resolution granting full credit as experience to applicants serving in the Army or Navy Hospital Corps during their enlistment. One applicant, detected in using a "pony" in attempting to pass the examination, was refused the privilege of continuing and will be barred from subsequent examinations for at least one year. The next examination will be held in Columbus, commencing on June 19.

VIRGINIA

Of the 50 applicants who took the examination of the Virginia Board of Pharmacy as registered pharmacists at the April meeting in Richmond 24 were given certificates as registered pharmacists, and nine received certificates as assistant pharmacists. Of the 10 who took the registered assistant pharmacist's examination five were successful. T. Ramsay Taylor, recently appointed by the Governor, qualified as a member of the board, succeeding H. S. Arrington of Norfolk. On reorganization of the board John E. Jackson of Tazewell was elected president; E. L. Brandeis, secretary and treasurer, and Miss Helen Adams, clerk, Mr. Brandeis and Miss Adams being re-elected to their respective offices.

The attention of the board was called to the statement that under the conscription act the druggists of the State will be very seriously affected, as it is estimated that at least sixty per cent of the registered pharmacists are eligible for enlistment and will respond to the call.

WISCONSIN

Eighteen registered pharmacists' certificates and four-teen registered assistants' certificates were granted by the Wisconsin Board of Pharmacy at its recent meeting held at Madison. Sister Anselma Betzen was granted a registered pharmacist certificate without examination on the basis of a certificate of examination and registration issued by the Kansas Board of Pharmacy. The next examination of the Board of Pharmacy will be held at Madison on July 17 to 20.

KENTUCKY

The Kentucky Board of Pharmacy examined a class of thirty-six applicants for registered pharmacists and nineteen for assistants at its recent meeting held at Louisville, of which eighteen successfully passed and qualified as registered pharmacists, and nineteen as registered assistants. The next meeting will be held in Dawson Springs on July 10 and 11. Applications should be filed with J. W. Gayle, secretary of the board, Frankfort, at least ten days before the meeting.

CALIFORNIA

At a recent meeting of the California Board of Pharmacy registration was granted to twenty-six applicants who successfully passed the examination as licentiates, while twenty-four were registered as assistants. Ten applicants were granted registration on credentials and twenty years' experience. The next meeting of the board will be held in Los Angeles on July 16, the examinations commencing on July 18, and in San Francisco on July 23, the examinations beginning on July 25.

ILLINOIS

At the April meeting of the Illinois Board of Pharmacy twenty-six applicants passed successful examinations for licenses as registered pharmacists and seventeen for licenses as assistant pharmacists. Two applicants were granted licenses as local registered pharmacists. The next meeting of the board for the examination of registered pharmacists will be held in Chicago on June 5 at the County Building, and of assistant pharmacists on June 7. The next apprentice examination will be held in Chicago on June 1.

ALABAMA

The Alabama Board of Pharmacy will hold a meeting for the examination of applicants for registration on June 18 and 19 in the Board of Trade rooms, Tuscaloosa, just prior to the annual convention of the Alabama Pharmaceutical Association, which meets at the same place on June 20.

DELAWARE

At the quarterly session of the Delaware Board of Pharmacy, held in the Hotel du Pont, Wilmington, recently, the examination papers of fifteen applicants for registration were passed upon. Licenses were granted to two of the applicants as pharmacists, and one was registered as a qualified assistant.

MINNESOTA

Certificates of registration were granted to nineteen applicants who successfully passed the April examinations for registered pharmacists held by the Minnesota Board of Pharmacy. Twenty-eight applicants, including two women, were granted registration as assistant pharmacists.

MISSOURI

At its recent meeting held at Kansas City, Mo., the Missouri Board of Pharmacy granted certificates to thirteen applicants who successfully passed the examination for registration as pharmacists, and twelve applicants for registration as assistant pharmacists. The next meeting of the board will be held at Excelsior Springs on Monday, June 11, just preceding the annual convention of the Missouri Pharmaceutical Association, which begins June 12.

CONVENTION CALENDAR

- June 4-8—American Medical Association, at New York; Alex. R. Craig, 525 North Dearborn street, Chicago, secretary.
- June 11-13—American Association of Pharmaceutical Chemists, at Atlantic City; Dr. C. H. Searle, 215 W. Ohio street, Chicago, secretary.
- June 12-14—Arkansas, at Memphis, Tenn.; Miss Mary A. Fein, Little Rock, secretary.
- June 12-14—Mississippi, at Memphis, Tenn.; Miss Flora Scarborough, Laurel, secretary.
- June 12-14—Tennessee, at Memphis; T. J. Shannon, Sharon, secretary.
- June 12-15—Missouri, at Excelsior Springs; H. M. Whelpley, St. Louis, secretary.
- June 12-15—New Jersey, at Lake Hopatcong; Jeannot Hostmann, Hoboken, secretary.
- June 13-14—Georgia, at Macon; T. A. Cheatham, Atlanta, secretary.
- June 13-14—Washington, at Spokane; A. W. Linton, Seattle, secretary.
- June 18-20—Iowa, at Dubuque; Al. Falkenhainer, Algona, secretary.
- June 19-20—Alabama, at Tuscaloosa; W. E. Bingham, Tuscaloosa, secretary.
- June 19-22—Illinois, at Springfield; Wm. B. Day, Chicago, secretary.
- June 19-21—Indiana, at Lake Wawasee; Wm. F. Werner, Indianapolis, secretary.
- June 19-21—Michigan, at Grand Rapids; F. J. Wheaton, Jackson, secretary.
- June 19-21—Nebraska, at North Platte; J. G. McBride, University place, secretary.
- June 19-22—New York, at Richfield Springs; E. S. Dawson, Syracuse, secretary.
- June 19-21—North Carolina, at Asheville; J. G. Beard, Chapel Hill, secretary.
- June 19-21—Pennsylvania, at Pittsburgh; Robert P. Fischelis, Philadelphia, secretary.
- June 20-21—Utah, Salt Lake City; Frank Folland, Salt Lake City, secretary.
- June 20-22—Kentucky, at Louisville; J. W. Gayle, Frankfort, secretary.
- June 25-29—Wisconsin, at Milwaukee; E. G. Raenber, Milwaukee, secretary.
- June 27-29—Maine, at Kineo; M. L. Porter, Danforth, secretary.

WOMEN IN PHARMACY

The Woman's Viewpoint on Patriotism

By EMMA GARY WALLACE

WE are going through a peculiar and critical time in our retail business life just now, and the woman pharmacist especially must have a clear vision, a cool head and a steady hand.

To begin with, the cry of economy which immediately followed the declaration that a state of war exists met with a prompt, answering response from the public at large. This was largely the case because space writers in the newspapers everywhere took up the cry and urged everything they could think of in the way of retrenchment and conservation of supplies and funds.

A Misapprehension

No one would deny that at the present time the United States should conserve its food supplies, make the best use of all its resources, and aim to increase its production, but economy does not mean parsimony or the foolish contraction of business to the detriment of the people at large.

Fortunately the nation is beginning to get this vision and to see that our industries must be kept going, our people busy and earning good wages, if we are to be prosperous and able to pay the heavy war taxes imposed upon us. We cannot keep business going if everyone hoards his money and goes without necessities.

Right here the woman pharmacist can render a valuable service. Women who do at least eighty per cent of the buying for the home are prone to say:

"Men do not understand. First they advise us to save our money, now they say, spend it. Which shall we do?"

The woman pharmacist in her advertising, in her personal contact with her customers, and through her organization and club affiliations, should use her influence to counteract the hysteria which is evident on every hand. Point out that women in the homes will render the greatest service of which they are capable to keep their families well, and that preventive means are better than remedial ones.

In short, let the woman pharmacist use her influence to keep business going. This is not the time to contract one's advertising, but rather to make it more liberal and more emphatic than ever before.

This is the time to push first aid to good health vigorously and to impress the public with the thought that it is our duty to ourselves to keep well at any time, but that now it is our duty to our country as well as to ourselves to keep in good physical condition, for every person who becomes sick is a non-producer and prevents others from producing as well.

In the event of active hostilities about one per cent of our population will be engaged in the actual work of military and naval defense. It is absolutely necessary for national prosperity, that the other ninety-nine million go about their business in a normal and reasonable manner and that business be kept going.

Everyone has an influence. The woman pharmacist has an unusual influence, more perhaps than any other professional woman, because she comes in contact with a very large number of people. Community hysteria in the way of panic which expresses itself in hoarding supplies and funds can be materially checked by the woman behind the counter who is prepared to do her intelligent part.

CONSERVING THE BABY WEEK ENTHUSIASM

Just to make a big spurt, to get up an exhibit or a series of exhibits, to advertise freely, and then to let all the enthusiasm generated fall off, is mighty poor economy. All over the country merchants who know their work are making plans to conserve the good done by the community during Baby Week.

Let this be the foundation, and your own advertising

through the following months of the year the logical superstructure. Keep track of the new babies born, send them a letter, perhaps a little gift such as a box of talcum, and a list of supplies you are prepared to furnish. Many young mothers do not know what the drug store offers for their help.

The women will have been impressed with the idea that pasteurizing milk is necessary to keep their babies well in summer. Exhibit and demonstrate pasteurizers, explain the uses of sugar of milk and why it is superior to cane sugar; list the baby foods you have for sale, and explain that some have a greater fat content than others, consequently one baby may digest and thrive on one food and another on another. Let the doctor prescribe what will be given to the individual child. It is his business to know.

In fact, doctors and druggists should work together hand in hand to make the most of the educational campaign waged on behalf of child welfare.

A RED CROSS CAMPAIGN

The National Red Cross is the only relief organization of which the United States Government makes official recognition. The President of the United States is the President of the Red Cross; Congress directs and regulates its activities; no fat salaries are paid; there is no graft connected with it; and the money is disbursed intelligently and scientifically. All other organizations of patriotic purpose must work through the Red Cross. It is the general clearinghouse of mercy and humaneness.

An annual membership costs but one dollar and entails no obligation of service whatever; a contributing member gives five dollars; a life member twenty-five dollars, and a patron one hundred dollars. Those who cannot give of their time or personal service are glad to help with their money. Almost any one can give the dollar or some help.

In the city in which the writer lives a Red Cross campaign has recently been waged. The campaign lasted seven days and between twenty and twenty-five per cent of the entire population was enrolled. This was excellent, as many of those who did not enroll were children or those who could not afford the dollar. Some were plain indifferent, and yet those very people who are indifferent may be glad of help for themselves or their loved ones in the near future.

It is important to remember that half of every dollar given to the Red Cross remains in the community from which it is contributed for local relief work. This local relief work includes needed aid for soldiers' families, prevention of tuberculosis and similar work.

It is possible to start a Red Cross Chapter anywhere, and many times it is possible for the Government to send an organizer direct. The headquarters of the Red Cross, Washington, D. C., will send particulars.

Why is it not an excellent plan for the drug folks of any community to constitute themselves the leaders in Red Cross promotion, making the drug stores the official enrolling stations? These enrolling stations are kept open morning, afternoon and evening during business hours, and should be in charge of some prominent club or society woman.

WAR, MORALS AND WOMEN

It is a well-known fact that as soon as a large body of men leave the restraint of home and community life and step backward into the semi-barbaric condition involved by war that their morals suffer.

This has been true in past wars; it is claimed that most regrettable conditions prevail abroad; and already the menace of similar conditions darkens our own horizon.

The woman pharmacist, and the man pharmacist, too, for that matter, do not need to be told of the far-reaching evils of immorality, which reaches not alone unto the third and fourth generation, but science now tells us unto the thirtieth and fortieth as well.

We do not want even a fraction of our soldier boys to go out and fight for their home and native land, perhaps to be gloriously victorious, and then to come back to be slain at their own firesides by the evils they have brought with them.

Already the Congress of Mothers and the National League for Woman's Service, as well as the Government itself, have taken steps to safeguard our men. Canteens are to be established where home-cooked food will be sold at cost and where wholesome recreation will be offered. The usual camp followers of questionable character are to be kept at a distance and the public urged to co-operate to make conditions as nearly right as possible surrounding the concentration camps.

Here, again, the woman pharmacist who can speak with a voice of authority and who is prepared to do her "bit" for her country, can render valuable service by working in local organizations which aim to further the work of safeguarding our boys in brown. She may not have a great deal of time for such effort, but she can at least give her moral support and some practical aid.

If there is no such local patriotic organization in your community, start one; if you don't know how to go about it, communicate with the Editor of this Department.

PHONOGRAPHS

A great many drug stores have recently taken on mechanical music boxes of different makes as a side line. A number who have done this report fairly good sales and reasonable profits.

The margin of percentage is approximately about forty per cent. This is no more liberal than it should be considering that the druggist has to do the selling, make the collections, and pay for the advertising. To be sure, a sale of an instrument listed at \$150 or \$200 gives quite a lump sum of profit, but such sales take some time and effort to make and are usually preceded by demonstration, both in the store and at the home.

If the druggist has sufficient floor space not to crowd his other stock, and the competition is not too keen in other lines, he may make a fairly good thing out of a musical side line, especially if he has a strong talking point, such as exclusive records of the world's greatest artists, indestructible records, attachments which permit the playing of the records of the different leading makes of mechanical music boxes, etc. Then, too, the quality and quantity of the national advertising done by the firm putting out the particular musical line is to be taken into consideration. It is easier to sell an instrument well known than one which has its reputation yet to make.

Some of these firms require that the druggist sign up a contract, taking on a fair sized stock of instruments, thus making him a musical dealer. If the line is a new one and not any too well known the manufacturing company should be willing to arrange conditions of exchange or return. If a good selling musical line is properly handled it is a constant feeder in the way of cash come-backs, for every one owning such a box will buy new records from time to time and by advertising leaders it is not difficult to keep the record stock moving along briskly.

AROUND THE CIRCUIT

The April meeting of Milwaukee Chapter No. 19 was held at the home of Mrs. F. X. Hufschmidt. After a short business session the chapter heard William Allen Bours, baritone, in several selections. Then followed an illustrated lecture by Prof. O. V. R. Smith of the biological laboratories of Parke, Davis & Company, Detroit, on "Antitoxin and Vaccines."

The May meeting was held Tuesday, May 29, at the Deutscher Club, the change of date of meeting being made on account of Decoration Day. The May meeting is the annual election of chapter officers.

The April meeting of Philadelphia Chapter No. 6, W. O. N. A. R. D., listened to a very interesting talk on "Red Cross Work in Hospitals," by Dr. Walter Estelle Lee. Dr.

Lee has been abroad twice serving as a surgeon in the American Ambulance Hospital in France.

Philadelphia Chapter is organizing a branch of the Red Cross. Mrs. F. R. Rohrman is chairman of the Red Cross Committee. The chapter re-elected its roster of officers for another year.

The Woman's Club of the Allied Drug Trades of Chicago held an April card party at the Edgewater Beach Hotel. There was a good attendance.

The sympathy of the organization is extended to A. F. Pierce of Irving Boulevard, Chicago, upon the occasion of the death of his wife.

Chicago Chapter No. 2, W. O. N. A. R. D., held a very enjoyable theater party April 24 at the Cort Theater. The outing was followed by a supper at the Bismark.

Mrs. Ida C. McCracken, a Berkeley, Cal., drug store proprietor, has discontinued her partnership in the McCracken pharmacies of Oakland and Berkeley and will henceforth give her entire time and efforts to the Alcatraz Pharmacy, which she has purchased.

Boston Chapter, W. O. B. A. R. D., held its April meeting at the Hotel Brunswick. An address on "Colonial Women and Their Times" was given by Mrs. H. C. Muligan of Natick.

Youngstown Chapter No. 14, W. O. N. A. R. D., has become a member of the City Federation of Women's Clubs. It has been a member of the State Federation since 1913. Plans are being made to take part in the national convention of the W. O. to be held in Cleveland the week of September 17. Mrs. F. E. McBride is president of the city chapter and also one of the past presidents of the national organization.

Cincinnati Chapter No. 5, W. O. N. A. R. D., held its April meeting at Bethesda Hospital, Miss Bertha Ott, the hospital pharmacist, acting as hostess. The following officers were nominated for the ensuing year:

President, Mrs. Otto Katz; first vice president, Mrs. Doctor Beaman; second vice president, Mrs. A. Fletcher; secretary, Mrs. A. D. Wells; corresponding secretary, Miss Addie Fallon; treasurer, Mrs. L. A. Lutterman; board of control, Mrs. Charles Ehlers.

The May meeting was held with Mrs. C. Waldvogel when the nominations were ratified and the roster of officers determined for the coming year.

Carter, Ky., has a new drug store of which Mrs. Peachy O. Ramsey, formerly of Cincinnati, is the proprietor.

Miss Marian Shott, a Cincinnati drug store proprietor, has given up her old location and moved her stock to a Reading road location.

The Milwaukee Druggists' Ladies' Society held their April meeting in the Wisconsin Hotel. They were addressed by a representative of the Associated Charities on "Relief Legislation." A committee was named to nominate officers for the May meeting.

Louisville Chapter No. 11, W. O. N. A. R. D., is busy as always. A 500 party was recently given at the Hotel Watterson. The proceeds were added to the club house fund.

The chapter is affiliated with the Kentucky State Federation and is frequently addressed by prominent women from other clubs of the city. The chapter has endorsed the Ashurst-Stevens Bill, has taken an interest in the meetings of the Woman's Suffrage Association, and has been ready to do its "bit" in the boycott against the high cost of living. It is the aim of the members to keep in touch with everything of vital interest to women.

Mrs. William Anz, a Louisville drug store proprietor, was the hostess of the April meeting of the executive board which was held at Main Library.

SCHOOLS AND COLLEGES

UNIVERSITY OF ILLINOIS

Thomas A. Wisniewski of the junior class, who enlisted in the navy some six weeks ago, has been granted a furlough in order to permit him to undergo an operation for appendicitis. He expects to return to service as soon as possible following the operation.

Donald Simmons of the senior class, who enlisted in the National Guard as hospital sergeant, has been called to the colors.

The senior students of the School of Pharmacy took part in a joint meeting with the students of the other Chicago departments of the university on the 11th of May at the Medical School and listened to a stirring address by Dr. Wm. E. Quine of Chicago "On the Needs and Work of the Red Cross."

The fifth of a series of monthly meetings known as Pharmacologic Seminars, was held at the School of Pharmacy on May 4. These seminars were inaugurated at the suggestion of Dr. Bernard Fantus and have been participated in by the faculty members of the Medical School and Dental College of the university. The program is divided as follows: Pharmacological Chemistry, A. H. Clark and G. F. Vaupell; Materia Medica, W. B. Day and E. N. Gathercoal; Pharmacy, C. M. Snow and B. L. Eicher; Pharmacodynamics, H. S. Browne and B. H. Schlomovitz; Non-Pharmaceutical Therapeutics, W. E. Simmonds and L. Stofa; Radiotherapy, M. W. Stillians; Dental Therapeutics, E. D. Coolidge; General Therapeutics, B. Fantus.

Dean William B. Day attended the dinner to Dr. Frederick J. Wulling of the College of Pharmacy of the University of Minnesota at Minneapolis on May 4 and represented the school on that occasion.

H. A. Pieper, who was enrolled as a senior student but who left school on account of illness in December, died at his home, Jacksonville, Ill., on May 9 of tuberculosis. He was a member of the Kappa Psi Fraternity.

All plans for the W. B. Day testimonial dinner have been completed and invitations have been issued by the arrangements committee. The dinner will be held in the Louis XVI room of the Hotel Sherman on Wednesday evening, June 6. Dr. H. M. Whelpley will act as toastmaster. It is planned to have a representative from every pharmaceutical and allied organization on the program, among them being the State Board of Pharmacy, the Veterans and the W. O. N. A. R. D. Numerous representatives of the State association will be present, and it is expected that at least two representatives of the American Pharmaceutical Association aside from Dr. Whelpley will have a place on the program. Many classes graduating within the last ten years are planning to make the event a reunion occasion.

NEW JERSEY

The twenty-fifth anniversary of the founding of the New Jersey College of Pharmacy was celebrated by more than 100 members of the alumni association of the institution by a dinner on May 10 in Newark. A. F. Marquier served as toastmaster, and speeches were made by William O. Kuebler, president of the college; Judge C. C. Pilgrim, Prof. P. E. Hommel and Dr. William B. Buermann. Members of the State Board of Pharmacy were present in a body. President Kuebler spoke of the effort that had been made to secure a prerequisite law in New Jersey, and Prof. Hommel and Dr. Buermann related experiences connected with the history of the college. Brief speeches were also made by George M. Beringer and Garret Byrnes, of Maplewood, president of the N. J. Ph. A.

HIGHLAND PARK

Many pharmacy students have joined the two companies which have been organized at Highland Park College, Des Moines, and are being drilled on the campus by Col. Lambert of the U. S. Army. The companies number about 150 men, and the officers elected from their number have all had one or more years of cadet service. School for drill is held three nights per week in the engineering laboratory. One or two pharmacy students have left the college to join their home units.

UNIVERSITY OF IOWA

Dean W. J. Teeters of the College of Pharmacy attended the testimonial dinner given to Dean Wulling of the College of Pharmacy of the University of Minnesota at Minneapolis on May 4, where he spoke on behalf of the American Conference of Pharmaceutical Faculties, of which he is secretary.

The Phi Delta Chi Fraternity gave a dance recently at the chapter house, Prof. and Mrs. R. A. Kuever chaperoning the guests.

Walter Albert Jessup was inaugurated president of the university on May 11 and 12, the opening session on Friday being a symposium presented by a number of speakers, chief of whom was President Bryan of Indiana University. In the evening there was a reception at the president's house, the program of the second day consisting of greetings from delegates of other institutions, followed by a luncheon and the formal inauguration, the delegates and members of the faculty appearing in the procession in academic costume. Later in the day there was a review of cadets on Iowa Field, the exercises closing with an informal reception at the Triangle Club.

At the recent session of the Iowa Legislature a prerequisite law was passed which will make it necessary for every individual who desires to become a pharmacist in the State to attend a reputable college of pharmacy for two years before he will be permitted to take the State Board of Pharmacy examination. The final vote of 38 to 8 in the Senate and of 76 to 12 in the House was very gratifying to the friends of the measure and indicative of the work done by the executive committee of the State association, which at its mid-year convention voted unanimously to ask for a prerequisite law. The original pharmacy act was passed in 1880.

OKLAHOMA

Many of the students in the school of pharmacy have joined some branch of the army service during the past month. Claude Aikman, Ross Gahring and F. A. Jackson have been selected to go to the Officers' Training Camp. The navy has claimed Clarke Bonham, Edgar Risley and William Moore. Glenn Bradley and Tom Mitscher have enlisted in the machine gun corps of the Oklahoma National Guard.

According to Dean C. H. Stocking, the war will have no effect upon the summer course in pharmacy which is to be offered by Prof. C. V. Nichols. In fact, it is decidedly to the interest of the young man to enter the army with a thorough knowledge of pharmacy, for the pay in the hospital corps is good, with special privileges, including that of becoming a petty officer. The demand for drug clerks still far exceeds the supply.

A regimental band of 30 pieces, numbering among its members many students from the school of pharmacy, has been selected by Band Director L. A. White. The band has been practicing diligently and it is expected to be an important factor in the regimental dress parade.

The women of the university have formed a Red Cross chapter of 108 members for instruction in first aid. Text books have been ordered on the subject and a charter has been requested from the national organization for the university section.

Phi Delta Chi held an initiation recently for Frank Patterson, Martin Robert and Ross Gahring. After initiation a seven-course dinner was served at the chapter house.

Dr. Curtis, of the University of Colorado, grand master alchemist of the Alpha Chi Sigma, a chemistry fraternity, addressed the Sooner Chemical Society at a luncheon given in his honor at the Sooner shop. He was here on an inspection tour of the society who have petitioned the fraternity. It is thought that a chapter will be installed before commencement.

At a meeting of all medics it was decided, upon the recommendation of Dean LeRoy Long, for the medical school of the university to run the full twelve months instead of nine. This ruling will apply to the medical school for the next three years.

The State Board of Education authorized President S. D. Brooks of the university to ask the Federal Government for a military instructor at Norman. This makes military training under a regular army officer a part of the curriculum of the university since the State Board of Education has provided in such a way that a branch of the reserve officers' training corps can be established in Norman next fall. At the present time the Sooner Regiment will have to do without the active supervision of an army officer since the shortage in officers makes the retention of them for further training imperative. As equipment in the army is at a premium and more can be secured only in limited quantities, the Sooners will have to be content with practice without army rifles and supplies. The War Department expressed a desire for the students under drill to continue that instruction until the bill now pending in Congress passes.

VIRGINIA MEDICAL COLLEGE

A body of some thirty students of the School of Pharmacy, Medical College of Virginia, at Richmond, went to Baltimore on May 3 and spent two days going through the laboratories of Sharp & Dohme and of Hynson, Westcott & Co. The young men were under the guidance of Albert Bolenbaugh, one of the faculty of the school, and at the establishment of Sharp & Dohme they were taken in charge by Charles C. Neal, who showed them all over the laboratories and explained the different departments and processes.

SCHOOL OF PHARMACY TO CLOSE

Acting President Thomas F. Holgate of Northwestern University, Chicago, has sent an announcement to the patrons, alumni and students of that institution that the School of Pharmacy will end its existence as a department of Northwestern University at the close of the present school year. Beside the School of Pharmacy, Evanston Academy, conducted by the university, and one of the oldest preparatory institutions in the Middle West, will also close its doors. The discontinuance of these two branches of university work is laid to a retrenchment policy because of the war.

The School of Pharmacy was established as the Illinois College of Pharmacy in 1886, becoming a department of Northwestern University, and which for a quarter of a century had at its head the late Dr. Oscar Oldberg, whose death occurred in 1913. For many years it ranked in the number of students among the largest pharmacy colleges in the country. According to President Holgate, "the pharmacy students can be taken care of by the pharmaceutical school of the University of Illinois in Chicago." It is probable that a merger with this institution will be sought. Dr. John Harper Long is the present dean of the Northwestern school.

BROOKLYN COMMENCEMENT

Brooklyn College of Pharmacy held commencement on May 16. Thirty-seven students were graduated at the exercises held in the Academy of Music, the largest theater in the city. Dean W. C. Anderson presided. The first prize, a gold medal, went to Agatha Tetz. Saul Handelsman won the silver medal, which was second prize, and Frances C. Chapiro won the bronze medal as third prize. The Anderson medal went to Ida H. Dunn, and Rebecca Ocheret won a membership to the A. Ph. A. The junior silver medal for scholarship was won by W. Clifford Raynor.

MARYLAND

Their last examination off their hands, the graduating class in pharmacy of the University of Maryland held a dinner in Kernan's Hotel, followed by a theater party at the Maryland Theater. A special toast was given by G. T. Lyon to John H. Harp, retiring president of the class, who was called to Fort Myer last Monday for training in the Officers' Reserve Corps.

The members of the class are: E. B. Truitt, president; R. C. Huddleson, secretary, and Edwin L. Murphy, treasurer; G. T. Lyon, Harry Lemler, R. C. Foster, R. Paulk, W. E. Snead, M. D. De Conway, J. O'Neil, R. J. Spittell, George F. Bigby, G. E. Wise, S. R. Warfield, R. C. Kerr and Carl O. Leonhart.

HONOR DEAN WULLING

Dean Frederick J. Wulling of the University of Minnesota College of Pharmacy was given a testimonial dinner by his friends in the Elks' Club, Minneapolis, on May 4. Both Dean Wulling and his wife responded with appropriate speeches when they were presented with a silver service. Dean Wulling was honored both as dean of the college and president of the A. Ph. A.

Representatives of all the pharmaceutical societies of the Northwest were present at the dinner. Deans of five State Universities as well as presidents of three State pharmaceutical associations or societies were among those who sat down at the banquet. The actual occasion of the dinner was to celebrate the 25th anniversary of Dean Wulling's introduction to Minnesota pharmacy. The dinner was under the auspices of the Northwestern Branch of the A. Ph. A.

Truman H. Griffin was toastmaster and the speakers were Dr. Cyrus Northrop, Wallace G. Nye, W. P. Porterfield, president of the North Dakota Pharmaceutical Association, and J. A. Pool, president of the South Dakota association; Dean W. B. Day, University of Illinois; Dean W. J. Teeters, Iowa; Dean R. A. Lyman, Nebraska; Dean Edward Kremers, Wisconsin; Dean Charles E. Mollett, Montana; Herman W. Rietzke, Professor Gustav Bachman, R. W. Frank, Manley H. Haynes, Mrs. S. D. Andrews, C. R. Noyes, L. D. Aberwald, Henry Rauch, Professor E. L. Newcomb, E. A. Otto, St. Paul; William A. Abbett, Duluth; Stewart F. Gamble, Mrs. A. J. Klein, C. A. Robinson, Mrs. Wesley St. Clair, J. H. Smeltzer, Charles H. Huhn, W. A. Frost, St. Paul, and Professor Charles H. Rogers.

BOOKS REVIEWED

THE 28th ANNUAL REPORT of the State Pharmaceutical Examining Board of Pennsylvania, for the year ending June 30, 1916.

This bulletin of 42 pages details the Pennsylvania Board of Pharmacy activities during the year stated, and from it we learn that the total number of pharmacists registered in the State under the act of 1887 is 11,423, and of assistant pharmacists, 8,388, making a total registration of 19,811 since the approval of the act.

PROCEEDINGS OF THE NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION. Forty-second annual meeting held at Baltimore, October 2 to 6, 1916.

This volume contains a very complete report of the meeting of the association held at the Emerson Hotel, Baltimore, last year, as also the full text of the various committee reports, such as those on credits and collections, employers' liability and workmen's compensation, legislation, fire insurance, proprietary goods, etc., and the report of the address delivered by Prof. J. H. Beal on the trend of modern legislation relating to the drug trade. At the time the Proceedings went to press the association roster contained the names of 255 active and 334 associate members. Three active and 22 associate members were elected at the Baltimore meeting. Half-tone cuts of all officers, members of the board of control and members who died during the year appear in the volume. The 1917 meeting of the association will be held at the Congress and Annex Hotel, Chicago, during the week of October 1.

REPORT OF THE COMMISSIONER OF EDUCATION for the year ended June 30, 1916. 8 vo., 2 vol.; Vol. I, 692 pages; Vol. II, 663 pages, Washington. Government Printing Office.

From the data submitted in this report it is calculated that the number of persons enrolled in educational institutions in the United States is increasing at an average rate of half a million annually, the estimated number of persons attending schools of some kind during the year under review being 23,500,000, and that for the year 1916-17 the figure will go well above 24,000,000. This means approximately 24 per cent of the inhabitants of the United States are attending school, as compared with 19 per cent in Great Britain, 17 per cent in France, 20 per cent in Germany and a little over 4 per cent in Russia. The comment is also made that the result would be much less favorable to the United States if daily attendance rather than enrollment formed the basis of comparison, since some of the other nations have better attendance and a longer school term than the United States.

Summer Breezes

Will Blow Profits to You in Spite of War

THIS summer, war is here. It's a rather unwelcome guest in some respects, and some of us are possessed of an extraordinary fear that it will ruin the entire summer. We can't even decide whether to take that \$10-a-week room at the seashore or stay in the city and save money by spending \$12 on car rides and automobiles. We haven't been able to get around the cartoon pictures of Mars. Every time we start we run smash into a mailed fist and all our hopes for prosperity go flying off.

We've forgotten all about England. No one can say England isn't in the war. And no one can say England isn't making money. At the present writing the activity of one Field Marshal von Hindenberg is the very best testimony to England's presence in the war, and the general condition of the country and its people is the testimony for the other fact. In reality, war hasn't worried England's prosperity; it's now experiencing the richest years of its existence.

American druggists who let war knock them over backwards because they are cautious, can decide now to enter their names in the "also ran" class when it comes to dividing the spoils. There are to be sales made this summer. The druggists hereabout can work it out for themselves whether they'll be in on them.

Natural Selling Time

In the first place, it's well to remember that in capitalizing patriotism certain acts commercialize it. You shouldn't offer to sell anything because you are a patriot. You can appeal to the other fellow's love of country, to patriotic events and those things, but it is pretty bad taste to suggest that a man will be a patriot if he buys a bar of soap from you. This, parenthetically, in the way of a warning.

Last summer there was a call for talc powder, perfumery, cameras, films, post cards, stationery, bathing caps and many other specialties. There will be the same call for these things this year. People *are* going to the country or seashore. They *are* going to need supplies. The live druggist, with brains to foresee and courage to realize, is going to supply the needs.

Special Summer Sales

The advent of the summer girl, who will make her appearance about the middle of this month, is the signal to get started. She will need not to be told she wants powders and perfumes, but she will count it a big advantage if she gets them shown to her in an attractive way. Most of these young women will pass right by a window so full of goods that the glass is bent outward. She prefers to stop and look at a window that has something novel and attractive in it. One bottle of perfume, cheap in price, but displayed in its lonesomeness in such a way as to be artistic, will create more interest than a hundred high-priced ones forced into a window until every inch is filled up. It's the nature of the summer girl to like airy, cool things. A crowded window gives the impression of stifling heat.

In showing summer goods the window display is surely one of the most important features. It must be cool and refreshing. If it isn't, it isn't part of the general scheme of things and the summer atmosphere is lost. Charles P. Moll, a druggist of Newark, N. J., is a great believer in that theory. He keeps his windows unencumbered so that air may circulate. He shows his goods, but he does it simply and without extravagance. But his windows are certainly attractive.

Say, for a moment, that you wanted to display perfume. A good suggestion would be to place a small stand in the center of the window with a bottle of the perfume to be shown on top. At the base of the stand place a few more bottles. In the corners of the window place another bottle and from the necks of these to the center stand attach wide pink or blue ribbon. You can achieve that window display without using more than eight bottles and perhaps eight yards of ribbon. But you've put something into

your window that you need not be ashamed of, and it is something that can't help but attract.

There certainly is no room for selling summer specialties by an absent treatment, on the other hand. You can't hope to get them off the stock shelves if you don't call them to your public's attention. The idea is, however, to call them up in a judicious and attractive manner so that they will be as dainty as they ought to be when they are placed on display.

Take the Bert Chambers store in Coney Island. Right in the center of the popular resort that store is. It sells a great deal more powder, perfume, beach utensils and soda than it does pure drugs—at least in the summer time—but the windows of that store are always shown attractively. Not the least interesting display was one shown last summer. The window was filled with green leaves. They hung from the ceiling, from the sides and from the back. They made a carpet on the floor. And in the midst—in the center of a cooling bower of green—talc powders of all descriptions were displayed. They weren't thrown up in piles. They were just tossed around in a studied and interesting neglect which made the entire window appear like nature and made the display give a breath of what the powder could be used for. It was in every way a crowning achievement.

Pushing by Advertising

There is still another way to get your special sales across. It is by the medium of advertising. And here again the most successful will use nature's methods. If the specialty is something delicate and dainty, the advertisement calling attention to it should be the same. If you use a cut it should be a cut that gives an idea of the gentleness or refinement of the product you seek to put before the public. That is the secret of good advertising—getting the wording to carry a breath of the product. But in summer specialty sales, if they are to bring profits, the reader must be taken away from the heat; he must be confronted with a series of cool, convincing ads.

One of the very best methods of summer specialty advertising naturally is cards. Almost anything can be done with the direct-by-mail method when cards are used. Certainly posters or letters shouldn't be used. If you wanted to advertise a sale of face powder and did it by sending out a series of posters which began in heavy black type to warn of sunburn, your prospective purchaser would toss the thing away, both because it was "too heavy to read when it was so hot" and because it reminded him of the sunburn by its very type. But if you sent out some dainty little cards on which a light, summery verse extolled the good points of that self-same powder, it's dollars to doughnuts the stuff would sell. And at such odds the writer wouldn't want to even bet the hole of the doughnuts.

There is no need to suggest what may be offered in specialty sales. The only thing is that summer is here and it's up to the druggist to take advantage. The success train this season isn't going to fool around and wait for a druggist who insists upon worrying about what the war is going to do to him. The only thing that can be said to that person is "remember England," and then let the train go on ahead while he stays behind and takes a place at the end of the line of men bankrupt because they didn't have the nerve to forget the war.

LOUISVILLE DRUGGISTS ELECT

The Louisville Retail Druggists' Association held its annual meeting recently and elected the following officers for the coming year: President, I. Wittelshofer; vice president, A. Lee Suter; treasurer, William Votteler; secretary and editor, Robert J. Frick. Executive committee, I. Wittelshofer, A. Lee Suter, William Votteler, John J. Seiberz, Addison Dimmitt, Fred Kranz, Simon N. Jones, Fred Otterbach, Edward Schweitzer, A. Dralle, Leon Abraham and Robert J. Frick.

NEWS OF A. PH. A. BRANCHES

DETROIT BRANCH ELECTS OFFICERS

Among the subjects brought up at the May meeting of the Detroit Branch of the A. Ph. A. were compulsory health insurance, the status of the pharmacist in the European war, and the A. Ph. A. Year Book. The following resolution was unanimously adopted:

The Detroit Branch of the American Pharmaceutical Association desires to express its disapproval of the compulsory health insurance bills introduced in the Michigan and other legislatures during the last few months. It may be that, in the interests of the wage earners of very limited income, something in the way of social insurance should be provided under the supervision of the State, but the present plan as worked out by the promoters of compulsory health insurance certainly goes much too far and is open to serious objection.

It would involve a tax burden that would be enormous. It would deal out charity so lavish as to pauperize and enervate the very people whom it is designed to assist. There is a grave question, too, as to whether the compulsory feature is wise or not, since it would compel two-thirds of the entire male population of the country to go into the plan whether they wanted to or not; and the element of un-American discrimination is seen in the fact that the remaining third of the male population would not only be left unprotected, but would have to contribute very largely toward the protection of the others.

At the present time the subject is being carefully studied by experts in various sections of the country, and when some more equitable and judicious plan is offered to the American people, we shall be glad to give it our approval and our support. In the meantime, however, we are unalterably opposed to the proposition for reasons so numerous that they could not well be stated in a resolution of this kind.

A resolution was also adopted by the branch favoring the discontinuance of the A. Ph. A. Year Book. This step was taken because it was felt that the Year Book is not appreciated by the members in general and that the matter now used in that publication could be incorporated to better advantage in the journal of the association.

Talks were given by Carl M. Green on "Nationally Advertised Goods as a Means for Increasing Sales," and by Walter W. Kennedy, who explained the use of the lung-motor in the treatment of asphyxiation, and gave a demonstration of the way in which the device is of service in cases of apparent drowning.

Officers for the season of 1917-18 were elected as follows: President, Ernest Kimmich; vice president, F. T. Bradt; secretary, Miss Mary Strawn; treasurer, Charles F. Mann; chairman of the program committee, E. R. Jones.

NEW YORK BRANCH DISCUSSES U. S. P.

Interesting papers read at the May meeting of the New York branch of the A. Ph. A. were presented by Dr. Jacob Diner on "Diagnostical Reagents and Chemical Tests," and by S. B. Penick on "The Crude Drugs of the U. S. P., IX, from a Commercial Point of View." These papers were discussed by Dr. Thomas E. Satterthwaite, former professor of medicine in the New York Post Graduate College and Hospital, and by Dr. Joseph Weinstein and Otto Raubenheimer.

Proceeding on the line that constructive criticism had its particular value, Dr. Diner asserted that the chapter on diagnostical reagents in the U. S. P. included some antiquated reagents and did not include some up-to-date methods. In his criticism of the chapter he cited the lack of proper instructions as to the diazo nitrite reagents, as also that no warning was given of the tendency of the nitrite to change to nitrate. Much used reagents for sugar tests were omitted, while unnecessary instructions were given for the preparation of blood test reagents. The omission of alizarin solution and the specification of N/10 KOH solution while NaOH was very much cheaper and answered equally well, were also noted.

Mr. Penick stated that U. S. P. standards had brought the crude drug market out of a condition of crudity. Drugs containing definite alkaloids easily meet the standards, but it is not easy to explain why a drug at one time will run low in content and at another time run high, especially when their physical condition apparently shows a great variation. Buchu containing sticks is still supplied by natives in producing regions, despite all of the pressure brought to bear upon them. Labor conditions at times affect the purity of crude drugs, some of them containing much dirt, allowances for which are made

under the new standards. The difficulties in complying with these standards are few in number compared with those met in trying to observe physiological standards. Fluctuations of the Wall street "War Bride" stocks, he said, "were as nothing to those of the crude drug market. Crude drug stocks must be real, and supply and demand alone are responsible for market conditions." Examples of the spectacular advance in prices due to the war were: henbane, from 8 cents to \$6 per pound; arnica, from 8 cents to \$2.75 per pound; cantharides, from \$1.25 to \$4.50 per pound. The customers of the crude drug market belong to widely different callings, including the "butcher, the baker and the candlestick maker."

The severance of commercial relations with the Central Powers had not yet been fully realized. The world has been ransacked for surplus stocks and the quantities thus obtained have been ridiculously small. "A few supplies," said Mr. Penick, "are coming from neutral countries. Far-East drugs are all distressingly high in price. Correspondence no longer suffices to carry on this business. We must cable and re-cable. The prospects for American-grown belladonna, henbane, digitalis, and one or two other drugs this year were bright and promising of good crops. Colchicum, aconite and some other drugs have not yet been successfully grown in the United States."

Dr. Satterthwaite advocated the establishment of first and second class drug stores as on the Continent. He also favored an understanding among all the belligerent nations whereby much needed drugs could be obtained when needed to save human lives. Mr. Raubenheimer stated that the chapter on diagnostical reagents in the U. S. P. had been prepared by Dr. Anderson of the Public Health Service. The chapter was not supposed to be a text book, but merely an outline, listing the reagents which one at the least should have. Such an outline is given in both the German and Swiss pharmacopoeias.

Dr. Jacob Diner and Dr. Jeannot Hostman presented the applications of twenty-three pharmacists.

REVENUE BILL DANGERS

Retail Druggists Will Be Hard Hit—Several Articles to Bear Heavy Taxes—Toilet Water and Cosmetics Included.

WASHINGTON, D. C.—Retail druggists will be hard hit and a considerable dent made in their cash capital if section 603 of the pending general revenue bill goes into effect. This section provides that upon a number of articles which are not in the possession of the retailer on May 1, and which, on the day the act is passed, are held and intended for sale, a five per cent tax is to be paid by the person, corporation, partnership, or association so holding such articles.

The commodities subject to this tax are as follows: all perfumes, extracts, essences, toilet waters, cosmetics, vaselines, petrolatums, hair oils, pomades, hair dressings, hair restoratives, hair dyes, tooth and mouth washes, dentifrices, tooth pastes, aromatic cachous, toilet soaps and powders, and similar substances, articles and preparations by whatsoever name known or distinguished, used or applied for toilet purposes; all pills, tablets, powders, tinctures, troches, or lozenges, sirups, medical cordials or bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters (except those otherwise taxed in preceding sections of the bill), essences, spirits, oils, and all medicinal preparations, compounds, or compositions, of which the manufacturer or producer claims to have any private formula, secret, or occult art for making or preparing the same, or has or claims to have an exclusive right or title to the making or preparing thereof, or which are prepared, uttered, vended, or exposed for sale under any letters patent, or trade-mark, or which, if prepared by any formula, published or unpublished, are held out or recommended to the public by the makers, venders, or proprietors as proprietary medicinal articles or preparations, or as remedies or specifics for any disease, diseases, or affection whatever affecting the human or animal body; all chewing gum or substitute therefor.

BUYING AND SELLING

DRUG MERCHANDISE

SELLING FIRST AID KITS

Becoming Popular Because of the War—How a Druggist Is Specializing—Combining Red Cross Work and Business—Gaining a Reputation for Good Goods.

Several things of interest have come from Cambridge, Mass., at various times, and in spite of its conservatism that city has given many novel ideas to the country. Perhaps there is little novelty in the scheme used by a druggist there to further the Red Cross work at the same time he furthers his own business, but there is enough merit in the idea to warrant a description of it.

This druggist has hit upon the plan of selling first aid and Red Cross kits, small ones. His belief is that many women are either taking up Red Cross work now, because of the war, or will be doing so in a short time. He has, therefore, offered his kits not as things to take into the field, but as combinations from which much practice may be had while they are actually being of use in the home. It is no new thing to sell first aid kits, of course, but it is rather a new thing to make them the leader of a store. The Cambridge druggist has done that, however, and in the days since war started his plan has shown results. While the sale as yet is not great it has been steady and it has grown slowly.

He began to offer his kits in the "indirect way." He advertised and did not mention that he had them for sale. He said in his advertisements that as a patriotic druggist he wanted to do something for the country. He believed, he wrote, that the women of Cambridge wanted to do something. And he invited them to the store to look over his stocks of drugs and other things that would be of use in war time. And in the advertisement he pointed out the value of Red Cross service.

Women did not come in droves. But a few of them did come and he suggested that they consider Red Cross work. Most of them thought at once that if they took up Red Cross work they would have to be nurses. And they said they couldn't qualify. But the druggist pointed out that many workers would be needed to roll bandages, assemble field aid kits, and do such work. And he suggested that practice with a small first aid kit, such as he could supply, would give the women ability in handling drugs, bandages, knives and salves.

A Recruiting Station in the Store

In addition, he offered his store to the local branch of the Red Cross Society as a recruiting station. He worked hand in hand with the society, even gave it a small amount of money and offered its representatives every inducement he could. When he began he had no other idea than to make money out of war. He was frank about that. But now he is satisfied with selling his kits, together with the other stock that naturally moves because he has made the store an important center, and giving aid and real help to the Red Cross Society whenever and wherever he can. He has joined and is doing "his bit" in that way.

The purpose of this article is not to praise the patriotic feeling that has been aroused to fever pitch in that druggist. It is merely to show that in first aid kits, handled in the right way, there is a way of capitalizing patriotism that is beneficial to everybody. It helps the druggist, it helps the person who buys the kit, and it helps the society. There is no way of telling how many new members the society has made through the campaign, small as it is, but it is certain that the store station is doing a good business in recruits.

12,000 PENNSYLVANIA DRUG USERS

Dr. Horatio C. Wood, of Philadelphia, startled members of the Pennsylvania General Assembly last month by stating that there are 12,000 narcotic users in the State and the number is steadily growing.

HOW TO KILL A DRUG BUSINESS

1. Make up your mind that it is the meanest business on earth and explain this to everybody you meet.

2. Do just as little as you can day by day, let the dust collect, litter accumulate, bills stack up, and accounts go uncollected.

3. Go around the store in your shirt sleeves smoking a pipe or cigar and encourage the help to do the same.

4. Read a newspaper, or stand and talk with a friend while customers wait.

5. Never try to please a dissatisfied customer. Give him to understand that what is done is done and there is no use talking about it.

6. Don't advertise; and if you do, go to it in spasmodic gasps.

7. Buy everything of everybody who comes in to sell to you, especially if their proposition includes loading you up with more goods than you can get rid of in a year.

8. Carefully avoid anything in the way of original business promotion. Be a follower and not a leader.

9. Cry hard times, high prices, the war, the lack of public spirit on the part of the town's citizens, and the meanness of people in general.

10. Don't take any interest in your customers. Be sure when an old customer asks to have a package sent home to say, "What name, please, and where?"

11. When goods are out, don't order for a few days so you will have a chance to tell part of your customers they better go somewhere else because "You're just out."

12. When you promise to send medicine at a given time be sure and forget about it. When people ring you up act as though you didn't remember what they are talking about.

13. Use such words in your advertisements as "Stupendous values," "Mammoth bargain opportunity." Such bunco doesn't mean anything, but it might impress some folks while it prejudices others.

14. Don't your best customers up hill and down dale whenever they are a little bit slow and let the rest slide.

15. Get into a rut and refuse to get out.

ST. PAUL CLERKS JOINING ARMY

The call for volunteers for the Army and Navy is being felt by St. Paul pharmacies. Already there is a shortage of young men available for work in drug stores, particularly at the soda fountains. F. M. Parker & Co.'s pharmacy, Fifth and Wabasha street, lost two men through service for Uncle Sam, and a third would have gone had he been old enough.

Walter Dodge, apprentice pharmacist, member of the First Minnesota Infantry, who was down on the Mexican border last summer with his regiment and returned to the Parker store when the border duty ended, was called out by the recent mobilization. Now he is at Fort Snelling. Ragnar Nelson, of the same pharmacy, joined the naval militia. He had entire charge of the soda fountain department of the store.

DRUG CLERKS VOLUNTEER SERVICES

At a special meeting of the executive board of The National Drug Clerks' Association held in Chicago, a resolution was adopted pledging the services of the members of the organization to the support of the authorities in the war with the Imperial German Government, and that the members would volunteer their services to the American Red Cross, the Army and Navy Hospital Corps, or such other departments as may be demanded by the President and the Secretary of War.

At the close of the meeting and following the adoption of the resolution, a conference was held with the American Red Cross pertaining to the enrollment of pharmacists for volunteer duty in the Federal service.

BUYING IN WAR TIMES

The Danger of Curtailment of Purchases—Chances for Increased Profits—Need for Thought Greater Than Ever—Should Know Goods and Conditions.

Buying during a war is a dangerous business. One can get too much or too little. He can easily overstock, and just as easily understock. The danger lies in leaning both ways. War times bring out the ingenuity of a buyer. They show whether he buys with wisdom or just because the price is right.

Of course the price has much to do with the goods to be bought. But the retail druggist who is offered 200 boxes of a certain article at a price comparatively low, and takes the whole 200 boxes merely because of that, is likely to find himself in trouble if it happens that his trade doesn't want that particular article. He'll be so badly overstocked that he'll lose not only the money he paid for the 200 cases but trade he would have had on other things. For during war time one of the most important things to a retailer is the confidence of his trade. People are afraid that any retailer, no matter what his business, will take advantage of war to raise the price. Or they fear that he will curtail his own stock until the trade can't get what it wants. Then they'll go to some store that does supply what they are looking for.

It has always been a danger to druggists, this matter of buying. Perhaps seven out of every ten know but very little about it. They'll buy when a case of stock is empty, and not before. They'll lose on the interim between cases and wonder why the bank balance doesn't grow. They'll take a bargain without a thought of what the trade wants.

James M. Farrar is a retired druggist and lives in Brooklyn. He owned a store during the Spanish war period and had troubles in his buying. He realizes that this war is a hundred per cent worse than the Spanish war, and he warns about buying as follows:

Things to Consider

You can't buy in war times with the freedom you use in peace times. There are three things to consider. First, your trade; second, the price; and third, your own financial condition. These are the chief things that enter into buying, but you should always see that good sound horse sense governs your action.

If I was running a store in East New York now (for the benefit of those who don't know Brooklyn, East New York is not a wealthy section) I'd not put in a stock of goods that sell over \$1.00. That is in sundries. Of course I'd have to keep my actual drug supply up, since prescription work will have to go on. But in sundries and specials I'd pick and choose my stuff as carefully as I'd pick an automobile if I was going to buy it.

The temperament of East New York will not permit the people to buy phonographs, for instance. I'm strong for the plan to sell talking machines in a drug store, but I wouldn't do it in East New York in war time. It would be all right on the Heights or in Flatbush. I'd put in a good stock of serviceable but comparatively cheap stuff. In war time, I'd compete with the five and ten cent stores rather than the department shops, in a community of that sort.

I'd try to buy as cheaply as I could. That would be wisdom. But before I gave an order I'd see that the price was worth it, and then I wouldn't buy a large amount of anything simply because I could get 2 or 3 per cent off for a large purchase, I would prefer to buy a small amount that would turn over than a large amount that would stick on the shelves, take up a lot of room, and perhaps spoil.

Then I'd be sure, too, that my financial condition would stand the strain. If I figured I couldn't hold out, I'd try to borrow right away. The druggist who goes into bankruptcy in war time is down and out. He's in a bad way. I'd see that my funds would carry me for awhile. And then I'd buy, if possible, on as long terms as I could get. If I could bulldoze the salesman into giving me 60 days instead of 30, I'd do it. Not in fear but as a matter of protection. A long rope in war time is much better than a short one.

Buying in war time is a matter of common sense plus. Any druggist who buys with his purse alone without his brains to support him in peace time is a fool. If he tries it in war time there'll be a committee around trying to arrange a benefit for him. The big stores will buy advantageously. Why shouldn't the smaller retailer? Principally because he doesn't know how. I've long ago lost patience with the druggist who buys \$100 worth of goods while he's selling a soda. He hasn't the faintest idea why or how he bought the stuff.

Just because it's war, however, is no reason for a druggist to cut down on buying. Supply your trade, and it'll supply you. Above all, I'd see to it that I kept the confidence of my trade if I had to lose money on my sales. It'll help when the time comes to make big sales in which there is lots of profit.

STRAIGHT TALK

Temerity in business is a dangerous thing. It breeds ultra-conservatism, and that is bad for any retail trade, especially the drug trade. It is perfectly advisable to be conservative in war time; it is even a necessity; but temerity with the resultant ultra-conservatism which bends the profit sheet of the store so far backward that it suddenly disappears is as ill-advised and as reprehensible as a campaign so strongly progressive that it outreaches war and its economic effects.

There is no reason to fear adversity in war time. England's experience may well be taken as an American criterion. And in Great Britain retailers have never known such prosperity. As the war opened there was an atmosphere of fear among druggists. Today there is confidence, a supreme lack of temerity, and the bank accounts are steadily growing.

True, druggists here will meet increased prices for supplies. But there will also be an increased demand. War is not going to take American money out of the hands of customers, in spite of its great cost. It will even tend to equalize money. Economists are busy pointing out that the United States will enjoy prosperity even during the period of its first expeditionary force's action. And the retail druggist will share in that prosperity.

If he is afraid, if he loses his confidence, he will be swept aside. It is only those who dare to progress against the odds of war who will divide the spoils. And there will be spoils, don't forget that. War is going to be hard, of course, but it is going to be twice harder for the druggist who loses his nerve, who sweeps his profits aside by a steady and relentless policy of fear and terror of possibilities.

Druggists are finding it difficult to keep pace with the increase in prices for their supplies. Consumers are in the same boat. In most cases, however, consumers have to pay. It is regrettable that a ten-cent bottle of alcohol, for instance, is now twenty cents; but it is not the retailer's fault. A frank explanation, printed, would help to simplify matters and to bring the customer to an understanding of circumstances.

Now is the time to think of summer. Special sales are at hand. The early bird catches the worm. Do you want to be a worm?

It's all very well to talk progress, but it doesn't amount to much unless you prove that you are actually progressing. And in these days practicing what one preaches is a necessity. Preach progress, perhaps, but make your store live it.

We saw a drug store the other day in which the window display had something of everything imaginable. As a matter of fact, we wanted to buy some goods in the store, but we got the idea that it wasn't an attractive place to patronize. A neat window display, not overdone, does bring trade, you know.

The progressive West is always doing new stunts. This particular one was originated by the Hendricks Drug Company and it works pretty well in Sterling, Ill. The company has placed a large mirror on a pole in front of the store in such a way as to show shoppers whether a street car is coming behind them. It is a corner store and the shopper can look in, see if the car is coming and if it is not, run into the store and buy something.

ANSWERING OPPORTUNITY'S KNOCK

Glen Tanner, a druggist of Grand Rapids, Mich., believes in taking advantage of every opportunity that is offered, and further than that knows the value of unique advertising. Not so long ago Mr. Tanner found a large potato that had evidently fallen from a huckster's wagon.

He hit upon a clever idea, answered the knock at his door by Miss Opportunity and carried the tuber to the store. There he put it in the center of his window, printed a sign reading "Wanted: The Owner of This Potato." Because of the present high price for potatoes his honesty attracted a crowd. His sales force did the rest.

WHO'S WHO AND WHAT'S WHAT IN THE DRUG WORLD

PERSONAL NOTES

DR. RUSBY'S EXPEDITION DELAYED

An expedition organized by Dr. H. H. Rusby, dean of the New York College of Pharmacy, was scheduled to sail on May 8 on the steamship Matapan from New York for Porto Colombia, but was delayed at the last moment by the refusal of the State Department to issue a passport



DR. H. H. RUSBY

to Maximilian von Hoegen, a lawyer of New Haven, who was to accompany the expedition as photographer and interpreter. Von Hoegen had done legal work for Captain Franz von Pappen, German military attaché, previous to that officer's recall. His pro-German views, it is said, were not looked upon with favor by the Government. The expedition was further delayed by the illness of Dr. Rusby at his home in Newark.

As planned by Dr. Rusby, the expedition was to start from Porto Colombia for an extended exploration trip through the wilds of South America, up the Magdalena River Valley and across the Andes to the headwaters of the Orinoco. The special object of the journey was to be the study of the medicinal plants of the region and the means of increasing the supplies of important drugs, particularly those which would be required in the present emergency. General and other scientific collections were also to be made. Dr. F. W. Pennell, of the New York Botanical Garden, is scheduled as the assistant botanist of the expedition, the financial backer of which is F. H. Putt, of Youngstown, O., a brother of Earl B. Putt, a chemist with whom Dr. Rusby was closely associated in the work of the New York branch of the laboratory of the Bureau of Chemistry when the latter was Government pharmacognosist.

The career of Dr. Rusby has been one of varied experiences. He has explored the plains and mountains of the Western United States and has made two long and perilous trips through South America, the results of which have added not a little to the knowledge of medicinal plants and general botanical science. Dr. Rusby had planned to return to this country next fall, in time for the opening of the College of Pharmacy.

GREEN OPENS NEW DRUG STORE

Henry L. Green, long identified with the drug business in Worcester, Mass., recently opened a new store in that city, which is said by those who have visited it to be the "latest word in its particular sphere." On the opening day the store was crowded with patrons, each of whom on making a purchase of \$1 worth or more was presented with appropriate souvenirs. Floral decorations sent by business associates and retail dealers in the vicinity helped to add to the attractive appearance of the establishment. All of the employees are residents of Worcester and all sales clerks will share in the profits. This fact was made a feature of the advertising announcing the opening and which was printed in the various newspapers of that city, including the Catholic, labor, French and Scandinavian publications. Among the features announced by the management of the new store are delivery at all hours, telephone stations ideally located, postage stamps on sale, and profit-sharing coupons for every customer.

HONOR HERMAN A. METZ

Herman A. Metz, former controller of New York and recent congressman, and president of the Farbwerke-Hoechst Co., was given an impressive demonstration of his popularity with the people of Brooklyn May 16, when nearly 500 representatives of that borough gathered at the Hotel Imperial to dine in his honor. The dinner was without political significance. Judge Almet F. Jenks, the presiding justice of the Appellate Division of the State Supreme Court, presided, and speeches were made by many representative men. Judge Jenks said that the gathering was a tribute to Mr. Metz's great ability as a public servant of New York City and as one of New York's sturdy civic and philanthropic upholders.

—W. L. SARGENT, after a service of thirty-one years in the drug business at Ottumwa, Iowa, has retired, selling his stock and fixtures to C. A. Hill, of Cedar Rapids, who also takes a long term lease on Mr. Sargent's building at the corner of Main and Market streets. Mr. Hill, who will conduct the business under the name of "Sargent's," is a native of Ottumwa, having been with W. H. Mynard in South Ottumwa for ten years previous to embarking for himself in Cedar Rapids, where he was located for four years.

—H. K. MULFORD COMPANY'S employees in the biological laboratories at Glenolden took part in a flag raising recently, which was followed by an impressive and patriotic program. The flag was raised by Superintendent Charles E. Hayward in front of the main laboratory building, many prominent guests being present. Addresses were made by the Rev. Dr. Robert Johnson, E. J. Cattell, Dr. Howell L. Amoss of the Rockefeller Institute; President Milton Campbell and Vice President H. K. Mulford.

—J. A. DONNELLY, who has been with Brewer & Co., wholesale druggists of Worcester, Mass., for the last three years, has severed his connection with that company to become a travelling salesman for Moore & Co., Inc., manufacturing chemists of the same city. He will sell pharmaceuticals to the drug trade in Connecticut. Mr. Donnelly was formerly a pharmacist of Manchester, N. H.

—JAMES A. PIERCE is now managing pharmacist in the firm of Pierce & Woodward, which succeeds the Arrasmith Drug Co., at Griswold, Ia. Mr. Pierce has been employed in the store of which he is now proprietor ever since he was big enough to run errands, and is most highly respected in Griswold and vicinity. He is a graduate of the School of Pharmacy of Northwestern University.

—HERMAN DIETEL, JR., a graduate of the Department of Pharmacy, University of Maryland, who afterward went to Texas and engaged in the drug business there, has decided to go into the officers' reserve corps and recently wrote from the Lone Star State to Dr. Henry P. Hynson, his instructor at the University of Maryland for a recommendation. He stood at the head of his class and captured all the prizes he could get.

—DR. C. W. BROWN, of the H. K. Mulford Company's biological laboratories, Philadelphia, recently gave an address at the N. C. R. City Club auditorium, Dayton, O., on "Medicinal Plants and the Manufacture and Standardization of Drugs." Before going to Dayton he gave a similar address at the University of Cincinnati.

—JAMES L. FRANKEN one of the founders of the firm of Druehl & Franken, Salt Lake City, and present proprietor of the Acme Pharmacy, of the same city, recently applied for enlistment, but was barred by the age limit. He was registered, however, in the event that the limit should be waived in the future.

—W. C. DUMAS, formerly connected with the N. P. Pratt laboratory, manufacturing chemists, of Atlanta, and later with the A. M. Lloyd laboratory, was recently ap-

pointed State Chemist of Georgia and assumed his new duties on May 1. He graduated from the Georgia School of Technology in 1906.

—LOUIS C. FIX, sales manager in charge of the middle western territory of the H. K. Mulford Company, recently returned from a trip through the Southwest, visiting the company's branch houses and depots and meeting many of the salesmen in their respective territories. He reports business booming all along the line.

—ROBERT S. MCKINNEY, president of the Maryland Pharmaceutical Association, stopped in Baltimore recently on the way home at Taneytown, and called on Dr. Henry P. Hynson to exchange reminiscences about the time when both of them were clerking for the late Dr. Charles R. Pue, at Baltimore and Stricker streets.

—MRS. CHARLES A. STOVER, of Cambridge, Mass., was re-elected president of the Cantabrigia Club, the leading women's club of Middlesex County, May 4. Mrs. Stover attended the General Federation Council of Presidents at New Orleans, and on the way home stopped at Detroit as guest of honor at the Detroit Federation of Women's Club's annual luncheon.

—THE LIGGETT Co., it is stated, plans to open one of the most up-to-date drug stores in Boston in the new Little building, Tremont and Boylston streets, on the site occupied for a long time by Paul Kline's pharmacy. The soda fountain, it is understood, will be brought from one of the Riker-Hegeman stores that was closed in New York.

—MISS MAZIE DOUGHERTY, cashier of the H. K. Mulford Company, Philadelphia, was recently presented by her employers with a handsome jeweled pin on completion of twenty-five years of continuous service with the company. President Milton Campbell made the presentation.

—LEN BOYD, former drug clerk at Jackson, Cal., who served on the border with the Fifth California Infantry, recently passed the examination for second lieutenant in the U. S. Army and is now at the Service School at Fort Leavenworth.

—JOSEPH COLLETTI, proprietor of a drug store at Fifth and Grand streets, Hoboken, N. J., was recently adjudged insane by the Commissioners in Lunacy and a jury of twelve men. Colletti had previously been declared a bankrupt.

—DR. J. C. HESSLER, head of the department of chemistry of Milliken University, Decatur, Ill., was made an associate member of Phi Lambda Upsilon, an honorary chemical society of the University of Illinois, at Urbana recently.

—E. L. ROBEY, druggist, Herndon, Va., in one of the largest fires that has occurred in Northern Virginia, recently suffered the loss of his drug store, stock and fixtures and also his home. The loss, estimated at about \$17,000, was partially covered by insurance.

—EDWARD A. KREMER, of the Kremer Drug Company, Fond du Lac, Wis., grand knight of Fond du Lac Council No. 664 Knights of Columbus, was chosen delegate to the national K. of C. convention, which meets in August in Old Point Comfort, Va.

—ARTHUR HOMBLETT, formerly of Appleton and now employed as registered drug clerk in the Barnett Pharmacy, Neenah, Wis., recently became a member of the hospital corps of the Wisconsin National Guard. He is a graduate of Marquette University.

—JOHN MAGUIRE, a clerk, on opening the drug store of R. H. Billings, Fields Corner, Dorchester, Mass., one morning recently, was seized and choked by an unknown man, who demanded money. Maguire fought the man off before he got anything, and gave a good description of the would-be thief, but the police were unable to pick up his trail.

—MAYOR CURLEY, of Boston, appointed John J. Tobin, chairman of the State Board of Registration in Pharmacy, to represent Boston at the recent drug conference in Washington, in recognition of his loyal work for Massachusetts druggists.

—M. R. LOUGHLIN of Ottumwa, Ia., received \$11 through the mail recently. He believes that the money, which was accompanied by no explanation at all, was re-

turned by a man who robbed the store of that amount several years ago.

—V. C. LOHR, instructor and head of the chemistry department in Joliet, Ill., High School, has resigned his position and is going to join the army for the period of the war. He hopes to go in for sanitary engineering.

—MOSES H. GOODWIN, druggist of Sanford, Me., was nearly killed last month when a revolver held by a friend exploded. The bullet passed beside Mr. Goodwin and into a phonograph horn not more than a foot away from him.

—ARTHUR F. ANGELL, one of the best known druggists in Illinois, has been elected Mayor of DuQuoin and took office last month. Mr. Angell is serving his third term in the position, although he did not serve last year.

—LOUIS K. LIGGETT has presented to the Massachusetts Legislature a plan for an international exposition in Boston in 1920 in connection with the 300th anniversary of the Landing of the Pilgrims.

—EDWARD MALLINCKRODT, JR., son of the president of the Mallinckrodt Chemical Works, St. Louis, has been chosen to serve on the subcommittee on chemicals of the Council of National Defense.

—SAMUEL C. SMITH, a druggist of Omaha, Neb., was badly wounded when robbers held him up in his store. Smith was shot after he had put his "hands up" as commanded.

—FRANK E. MCINTYRE, junior member of the firm of Parker & McIntyre, druggists, 255 Framington avenue, Hartford, Conn., is dead. He was a member of the Hartford Druggists' Association.

—O. P. BENNETT, formerly of the Brower Candy Co., who left his firm only a few weeks ago to become a farmer, has given up the rural life and will return to business.

—ROLAND ROWE, of 700 Colfax street, Evanston, Ill., has sold a lucrative drug business in that city in order to devote all his time to farming as a war-aid measure.

—RICHARD H. SOUTHWERT, G. W. Worthman and W. E. Armstrong, all druggists of Petersburg, Va., have left their positions and are to join the navy at once.

—EDWARD B. ROUND, a drug clerk of Brooklyn, who is a graduate of Columbia, left early in May for France to serve with a hospital corps in the war zone.

—FRED J. BAKER, of Janesville, Wis., has received orders to go to Chicago, where he expects to pass examinations for the Naval Reserve Hospital Corps.

—MILTON CAMPBELL, president of the H. K. Mulford Company, was recently elected a director in the Guaranty Title and Trust Company of Philadelphia.

—W. W. BAXLEY, of Chattanooga, was ill for two weeks in May. It was the first time he had been away from his store for a day or more in eighteen years.

—ELMER ZINSER, of Washington, Ill., is laid up with a broken rib and several other injuries as a result of falling down stairs in his drug store recently.

—LEO G. KOHL, druggist of Belleville, Mo., not far from St. Louis, has announced his engagement to Miss Ursula Marie Doerfler of St. Louis.

—THE RHYNE DRUG Co., Gastonia, N. C., has moved to Bowman, Ga., where it will continue the business under the name of Rhyne's Pharmacy.

—DR. L. C. FEREBEE, of Norfolk, Va., has purchased the G. A. Thompson store there. The Thompson store is one of the oldest in the city.

—PROF. J. E. GUERNSEY, formerly of the University of California, it is announced, will soon open a drug store in Orange Cove, Fresno, Cal.

—CHARLES FALKENHAINNER, a druggist of Dubuque, Ia., has been appointed a member of the Iowa Board of Pharmacy.

—C. M. CLAUSEN, of Cedar Falls, Ia., has retired from the drug business after eighteen years in one place. He has no definite plans.

—E. L. SWINNEY, of Shell Lake, Wis., has added an ice cream making machine to his drug business and will sell cream in the city.

—EDWARD SIM has left the Sim Drug Company of Urbana, Ill., to go to Chicago to continue his work in a Red Cross unit.

DEATHS IN THE DRUG TRADE

THOMAS F. MAIN

Thomas F. Main, former president of the National Wholesale Druggists' Association, trustee of the New York College of Pharmacy, and one of the founders of the Drug Trade Section of the New York Board of Trade and Transportation, died at St. Mary's Hospital, Orange,

N. J., on April 27. He was taken ill while attending services at Grace Church, New York City, on the previous Sunday, pneumonia developing after he had reached his home at Montclair, N. J. He was 68 years of age and a native of Greenwich, England. He was unmarried.

Mr. Main was widely known in the drug trade, his activities beginning just prior to his graduation from the New York College of Pharmacy in 1871, and continuing until his death. He was one of the organizers of the N. Y. C. P. Alumni Association, serving as president from 1880 to 1882. He was a trustee



THOMAS F. MAIN

of the college for many years and had served as its secretary since 1897. He was also active in the work of the A. Ph. A., an organization which he joined in 1872 and in which he held the office of honorary president in 1912-13. He was also a member of the New York State, New Jersey and Connecticut Pharmaceutical Associations, secretary and treasurer of the Metropolitan Drug Club, and belonged to a number of other organizations, including the St. George's Society and the British Schools and Universities Club.

Shortly after his arrival in this country, when but 18 years of age, he secured a position with the old house of Tarrant & Co., at that time engaged in the wholesale and retail drug business. In 1876 he went to New Britain, Conn., where he conducted a retail pharmacy under the name of Thompson & Main, but in 1878 he returned to New York and again took up work with Tarrant & Co. as general superintendent. He later became president of the company, and when it was reorganized a few years ago as The Tarrant Co., he became president and treasurer of the new corporation.

In all of the associations to which Mr. Main belonged he was looked upon as an active member, and whether in the church, the N. W. D. A., A. Ph. A., college or fraternal organization he was an indefatigable worker, a pleasant companion and a kindly friend. The funeral exercises, held at Grace Church, Broadway and Tenth street, New York, were attended by many men prominent in the trade and representatives of the various organizations to which he belonged, including a large delegation from the New York College of Pharmacy. The body was taken to the Moravian Cemetery, New Dorp, Staten Island, for burial.

WILLIAM A. ROBINSON

William A. Robinson, a member of the Robinson-Pettet Company, wholesale druggists of Louisville, Ky., died at the Johns Hopkins Hospital, Baltimore, on May 10. He had been for some time previous in poor health, and finding that he was not getting relief went to the hospital. Mr. Robinson was born 74 years ago in Louisville, and entered the drug trade when only fourteen years old. The greater part of that time he had been with the Robinson-Pettet Company, rising from a very subordinate position to the headship of the corporation. He is survived by his wife, a daughter and four brothers. Former Governor Goldsborough of Maryland is his cousin.

OSCAR GOLDMANN

Oscar Goldmann, a graduate and for many years a trustee of the New York College of Pharmacy, and for many years a member of the German Apothecaries Society, died recently at his home at Richmond Hills, L. I. He was 53 years of age. He was born in New Orleans, where he entered the drug business as an apprentice. He served as business manager of the New York Consolidated Drug Company for a number of years. He was also active in establishing the Druggists' Liability Insurance.

FREDERICK T. GORDON

Frederick T. Gordon, pharmacist, retired in the U. S. Navy, and well known member of the American Pharmaceutical Association, in which he had served as secretary of the Historical Section, died recently in Philadelphia, where he had lived for some years. He was a native of Georgia, and held a Bachelor of Science degree from Johns Hopkins University. Previous to his retirement from the navy he served for a number of years in the Surgeon General's office at Washington with ability and credit to himself. For a few years back he served as demonstrator in physics and chemistry at the Hahnemann Medical College, Philadelphia. He is survived by a widow.

GEORGE GREGORIUS

George Gregorius, who retired some years ago and who was one of the oldest druggists in New York City, died on May 4 at his home, No. 701 St. Nicholas avenue. He was born in Germany and came to New York in 1864, where he established a drug store at No. 40 Carmine street, in which he was very successful. He was a member of the German Apothecaries Society, the German Liederkrantz and Holy Trinity Church. He is survived by his widow, three sons, a daughter and one brother.

DR. JOSEPH WEINSTEIN

Dr. Joseph Weinstein, former secretary of the Eastern branch of the New York State Board of Pharmacy, chairman of the section of practical pharmacy of the A. Ph. A., and prominent New York pharmacist, died suddenly on the evening of May 14, being taken ill while attending a meeting of the New York Branch of the A. Ph. A. He had just concluded speaking and had taken his seat when he was seen to be gasping for breath. Physicians present did all in their power to relieve him but without avail. He died soon after.

Dr. Weinstein was born in Kurland, a German province of Russia, in 1860. After graduating from the gymnasium in 1878, he entered a pharmacy in Vilna and received his first pharmaceutical degree from the Imperial University of Kharkoff in 1882. Five years later he began a more advanced course in the Imperial University of Moscow, from which he graduated in 1890 with the degree of Provisor. The following



DR. JOS. WEINSTEIN

year he came to the United States, settling in New York, where he purchased a retail pharmacy, which he conducted until a few years ago when he withdrew from the business to devote all of his time to analytical work. He was one of the founders of the New York Retail Druggists' Association, which he served as president for a number of terms. He was a member of the American Pharmaceutical Association and of the New York State Ph. A., being a regular attendant of the annual meetings of these organizations for many years. He was also a member of the American Chemical Society and served as

a member of the Board of Education of New York City from 1908 to 1915. He was the first recipient of the university degree of Doctor of Pharmacy from Columbia University. His widow and two children survive.

ROBERT E. ALDEN

Robert E. Alden, 60 years old, associated with his brother, William O. Alden, for the past 25 years in the management of the retail drug store of C. H. Guppy Company, of Portland, Me., died Wednesday, April 18, at a local hospital, following an operation for appendicitis. He was one of the best known and among the oldest in point of age in the State of Maine. The deceased came to Portland from Belfast, where he was born, August 12, 1857, and served as a conductor on the Maine Central Railroad for a number of years. Previous to that his brother entered the drug business as a member of the firm of Guppy, Kinsman & Alden, and a quarter of a century ago the firm name was changed to the C. H. Guppy Company, with the Alden brothers as sole owners. They have conducted a retail drug business ever since as well as a wholesale business in cigars.



ROBERT E. ALDEN

Robert E. Alden was a charter member of Portland Lodge of Elks, established 26 years ago, and served faithfully as its treasurer for 20 years. He was a member of the Cumberland County and Maine Pharmaceutical associations.

Out of respect to their deceased business associate proprietors of Portland drug stores closed their doors and remained inactive from business during the funeral, which was held on Friday. The services were conducted by Rev. James F. Albion, D. D., pastor of the Congress Square Universalist Church. Many of the local druggists and a large delegation of members of the Elks attended the services. Burial was in Evergreen Cemetery.

RECENT DEATHS

—SAMUEL C. SMITH, proprietor of the Clifton Hill Pharmacy, 2213 Military avenue, Omaha, Neb., was shot to death by one of three bandits who held up and robbed his drug store on the night of April 28. The druggist was known to have kept large sums of money in his place of business on Saturday evening to cash checks, and the robbers are thought to have been aware of this. Mr. Smith was about 34 years of age. He is survived by his widow and one son six years of age.

—GEORGE F. HAWLEY, who for forty-five years was a member of the wholesale drug firm of Carter, Harris & Hawley, now Carter, Carter & Meigs, of Boston, died on May 7 at his home in Winchester. He was 81 years of age and a native of Skaneateles, N. Y. He went to Boston in 1857. For the past few years he had been in the real estate business in Winchester. He is survived by his widow, a daughter and a son.

—WINTHROP C. FOGG, 51, for thirty years a leading druggist in Freeport, Me., died suddenly on May 1. Mr. Fogg was born in New Gloucester, Me., in July, 1866. He established a drug store in Freeport thirty years ago. He has served as a member of the Freeport School Board, Postmaster for eight years and as a member of the Maine Legislature. Besides his wife, one son, two daughters, a brother and three sisters survive.

—CHARLES G. IVES, who for more than thirty years conducted a drug store at Mt. Carmel, Conn., died on May 11 from pneumonia. He was 74 years of age and a direct descendant of William Ives, who landed in Connecticut in 1648 and who was a prominent figure in the formation of New Haven Colony.

—HENRY A. PIEPER, a pharmacist in the Jacksonville

State Hospital, and a former student in the University of Illinois School of Pharmacy, died at Jackson, Ill., on May 9, after an illness of five months. He was 22 years of age and was a member of the Kappa Psi fraternity.

—FREDERICK SCHROEDER, proprietor of the Red Cross Pharmacy, Leavenworth, Kan., died on May 8 of a complication of diseases. He was 47 years of age and had lived in Leavenworth all his life. He is survived by his widow, one daughter and four sons.

—HENRY VADNIE, a druggist of McHenry, N. D., was drowned in Red Willow Lake in Griggs County, whither he had gone on a fishing trip. He was accompanied by a local banker, who was also drowned. It was known Vadne could not swim.

—A. EDWIN SCHMIDT, a Baltimore druggist, died recently at the Johns Hopkins University Hospital of a complication of disorders. He was born in 1862 and is survived by a widow and brother.

—S. D. PHILLIPS, 64, for forty-five years a druggist at Odin, Ill., died recently of heart disease. He had been a Mason for 32 years. He is survived by his widow and three children.

—DAVID C. SMITH, 41, a drug broker, and for many years a resident of the Bushwick section of Brooklyn, N. Y., died recently from tuberculosis. He is survived by his widow and his mother.

—DR. R. C. KENNEDY, a former druggist of Nashville, Tenn., and also a physician, died at Fayetteville, that State, recently from paralysis. He was 61 years of age. He is survived by his widow.

—EMIL J. HUELS, 44, a retired pharmacist, for twenty-five years in business in Brooklyn, N. Y., died at the German Hospital on May 7, after an operation for appendicitis.

—BERNARD F. BROER, 44, proprietor of the South End Pharmacy, Toledo, O., died recently at St. Vincent's Hospital, where he underwent a surgical operation. He was an Elk.

GRUBER-FREELAND PHARMACIES

The Gruber-Freeland Pharmacies, Inc., incorporated about two years ago as the successor of the West Palm Beach Drug Company, now operates three stores in West Palm Beach and one in Miami, Fla., the last named being opened in October last. The capital stock is \$100,000 and the corporation is said to do probably the largest retail drug business in the State, the total yearly turnover being said to be \$250,000. The officers of the corporation are: Dr. B. B. Freeland, president; M. E. Gruber, vice president, and Miss L. E. Newell, secretary-treasurer. An illustrated history of the corporation appears in a recent issue of the *Tropical Sun*, published at West Palm Beach, Fla.

CORRESPONDENCE

ON PRESCRIPTION PRICING

Editor *The Pharmaceutical Era*:

In your issue of May, page 152, I note an article on "Prescription Pricing." The writer cites a few instances where the N. A. R. D. price mark when placed on prescriptions was "abused" or "misused" by some scallawags in the profession. There is no doubt but that some of these animals exist who will do whatsoever they can in order to do business, but let me ask the writer if he does not believe that these Judases are in the smallest minority? Let us continue to have faith in druggists as a class and not condemn the craft as a whole. My experience has been that ninety-nine per cent, and more, will adhere to the N. A. R. D. mark. To bring the others into the fold seems to me to be an impossibility. The present prices and fluctuations make it a simple matter to convince the public that *no prices or quotations* can hold for more than a day. In the event that our friend is confronted with such an unpleasant occurrence let him spend a few minutes in pleasantly explaining conditions and without question he will gain his point. I hope that he will continue to use the N. A. R. D. price mark for the benefit of his honest colleagues.

E. A. SENNEWALD, St. Louis.

Full Text of New Narcotic Act

Law Passed by State Legislature Will go in Effect July 1, 1917

AN ACT

To amend the public health law, in relation to the sale of habit-forming drugs.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Sections two hundred and forty-five, two hundred and forty-six, two hundred and forty-seven of chapter forty-nine of the laws of nineteen hundred and nine, entitled "An act in relation to the public health, constituting chapter forty-five of the consolidated laws," as added by chapter three hundred and sixty-three of the laws of nineteen hundred and fourteen and amended by chapter three hundred and twenty-seven of the laws of nineteen hundred and fifteen, are hereby amended to read, respectively, as follows:

245. Sale prohibited; exception. No pharmacist, druggist or other person shall sell, have or offer for sale or give away any opium or any of the salts, alkaloids or derivatives or any compound or preparation of any of them except upon the written prescription of a duly licensed physician, veterinarian or dentist, provided that the provisions of this article shall not apply to the sale of domestic and proprietary remedies, nor to physicians' prescriptions, compounded solely for the person named in the original prescription, actually sold in good faith as medicines and not for the purpose of evading the provisions of this article and provided further that such remedies, prescriptions and preparations do not contain more than two grains of opium, or one-fourth grain of morphine or one-eighth grain of heroin or one grain of codeine, or their salts in one fluid ounce or if a solid preparation, in one avoirdupois ounce, nor to plasters, liniments and ointments for external use only, provided further that all such preparations shall contain other active drugs in sufficient proportions to confer upon them other and additional medicinal properties than those possessed by the unmixed drugs, salts, alkaloids or derivatives specified in this section. It shall not be necessary, however, to negative any of the exceptions or exemptions contained in this article, in any information or indictment, and the burden of proof of any such exception and exemption shall be upon the defendant.

246. Prescriptions; certificates. It shall be unlawful for any person to sell at retail, give away, furnish or traffic in or aid, assist or abet in the traffic in any of the drugs, their salts, derivatives or preparations mentioned in section two hundred and forty-five of this chapter except as herein provided without first receiving a written prescription signed by a duly licensed physician, veterinarian or dentist. The prescription must contain substantially the following: The name in full of the physician, veterinarian or dentist issuing such prescription, his office address, and the name, age and address of the person to whom and date on which such prescription is issued. If such prescription is issued to a person addicted to the use of any of the drugs specified in section two hundred and forty-five of this chapter, such prescription shall contain a statement that the same has been issued in a case of addiction. It shall be unlawful for any duly licensed physician, veterinarian or dentist to issue any such prescription containing any of the drugs, their salts, derivatives or preparations mentioned in section two hundred and forty-five of this chapter, and for any duly licensed physician or dentist to dispense, give or deliver any of the said drugs, their salts, derivatives or preparations, except after a physical examination of the person for whom said drugs are prescribed for the treatment of disease, injury or deformity. It shall be unlawful for any person to sell at retail or furnish any of the drugs or preparations of any of those mentioned in section two hundred and forty-five of this chapter, without first verifying the authority of any prescription containing more than four grains of morphine, thirty grains of opium, two grains of heroin, or six grains of codeine. Such verification can be made by telephone or otherwise. Such prescriptions so received shall be filled out at the time of receiving the same for the full quantity prescribed and no prescription so received shall be filled out more than ten days after the date which said prescription be dated. Such prescription, from which no copy shall be taken, shall be retained by the person who dispenses the same and shall be filled but once. A separate file of all such prescriptions shall be kept by the pharmacist, druggist or other person filling the same, showing:

1. The file number given to each prescription filled.
2. The name of the physician or surgeon signing the same, and
3. The name and address of the person for whom such prescription is filled, and the name of the person to whom such prescription is delivered.

Any person who sells at retail, furnishes, gives away, or dispenses any of the drugs mentioned in section two hundred and forty-five of this chapter upon a written prescription by a duly registered physician or veterinarian or dentist shall at the time of dispensing the same, place upon the package or container of such drugs, a label or deliver therewith a certificate stating the name and address of the person selling or furnishing the same, the name and address of the physician, veterinarian or dentist upon whose prescription such sale is made, the date of sale, and the name of the person to whom such sale is made. Any person, other than a manufacturer of any of the drugs mentioned in section two hundred and forty-five or a wholesale dealer in drugs or a licensed pharmacist, licensed druggist, duly registered practicing physician, licensed veterinarian or a licensed dentist, who shall possess any of the drugs mentioned in section two hundred

and forty-five, or their salts, derivatives or preparations, shall be guilty of a misdemeanor, unless said possession is authorized by the label or certificate described in this section. The authorized possession of a certificate or label issued on the filling of a prescription or the dispensing as provided in this article, shall be a defense to a charge of misdemeanor under this article, provided the person possessing such substance shall not have in his possession an amount exceeding the amount specified in such certificate or label, and provided, however, that fraud, deceit, or misrepresentation, or the use of a false name, in obtaining treatment under the provisions of this section shall be deemed a violation thereof and no willful false or misleading statement made in violation of this section shall be deemed a privileged communication. Nothing herein contained shall be construed to prohibit the sale of any of such drugs by any manufacturing pharmacists or chemists or wholesale or retail pharmacists or druggists, to other manufacturing pharmacists or chemists, or wholesale or retail pharmacists, or druggists, or to hospitals, colleges, scientific or public institutions, except that such sale shall be made in the manner provided in the next succeeding section. It shall be lawful, however, subject to the requirements of this article, for any duly licensed physician after a physical examination, personally conducted, to administer to, or prescribe for any person, whom such examination discloses is addicted to the use of any habit-forming drugs, any of the drugs herein referred to, in reasonable quantities dependent upon the condition of such person and his progress toward recovery, provided such physician acts in good faith, solely for the purpose of relieving physical stress or of effecting a cure of such habituate. Such physician shall first satisfy himself that such applicant is thus seeking a means of relieving physical pain and not procuring or attempting to procure drugs for the purpose of illegal sale or distribution.

247. Order blanks; filing. The state commissioner of health shall prepare official order blanks, serially numbered in triplicate form, bound in books. Such official order shall be furnished by the state board of health to any duly licensed physician, dentist, pharmacist, druggist or veterinarian, who shall have reported to the state board of health, as hereinafter provided, and to all wholesale dealers and jobbers in drugs upon which official order must be written all orders for the purchase of any of the drugs enumerated in section two hundred and forty-five of this chapter for the use of such physician, dentist, pharmacist, druggist, veterinarian, hospital, college, scientific or public institution or for the purchase thereof by all wholesale dealers and jobbers in drugs. It shall be unlawful for any person in this state to sell, furnish or dispose of, to any physician, pharmacist, druggist, veterinarian, dentist, hospital, college, scientific or public institution or wholesale dealer or jobber in drugs conducting a lawful business within the state any of the drugs or derivatives, enumerated in section two hundred and forty-five of this chapter, without first receiving from such physician, pharmacist, druggist, veterinarian, dentist or wholesale dealer or jobber in drugs an official order blank as provided by this section, which official order shall be retained by the person or corporation who sells, furnishes or dispenses any of the drugs enumerated in section two hundred and forty-five of this chapter. One of such official orders shall be forthwith delivered by the person ordering or purchasing any of such drugs to the state department of health at Albany, New York, except in cities of the first class where such official order shall be delivered to the local board of health, where the same shall be open to inspection by any person charged with the duty of enforcing the provisions of this article. One copy of such official order shall be kept by the physician, dentist, pharmacist, druggist or veterinarian, hospital or institution, or wholesale dealer or jobber in drugs, issuing the same for the period required by section two hundred and forty-nine of this article. Such official order hereby required to be kept by the person or corporation selling, furnishing or dispensing such drugs, shall be kept in a separate file or book and an entry made or caused to be made on the order at the time of making such sale, stating the date of sale, the name and address of the purchaser.

It shall be unlawful for any physician, dentist, pharmacist, druggist, veterinarian, hospital, institution, sanitarium, wholesale dealer or jobber in drugs to have any of the drugs enumerated in section two hundred and forty-five of this chapter in his possession after the first day of July, nineteen hundred and seventeen, except when the same shall have been received pursuant to a written order of the purchaser thereof upon the official order blank mentioned in this section, and except when such person having in his possession such drugs, shall also have delivered a duplicate of such order blank to the state department of health, or local board of health as the case may be, as in this section required; provided further that the provisions of this section shall not apply to the possession of any of said drugs by physicians, dentists, pharmacists, druggists, veterinarians, hospitals, institutions, sanitariums or wholesale dealers or jobbers in drugs at the time this act shall take effect when the same shall have been lawfully acquired pursuant to existing law. The provisions of this section shall not prohibit the sale of drugs enumerated in section two hundred and forty-five of this chapter to persons registered under the laws of the United States and residing outside the state of New York.

Every person, corporation or institution authorized under the provisions of this article to engage in the sale or distribution of the drugs or articles herein referred to shall on or before July tenth of each year file with the state department of health a verified itemized statement of all of the drugs mentioned in section

two hundred and forty-five of this chapter in his or its possession on July first of the year in which such statement is filed. Provided, however, that after July tenth, nineteen hundred and seventeen, where such person, corporation or institution takes a stock inventory, either at the close of a business fiscal year or of the calendar year, such inventory showing the amount of the drugs mentioned in section two hundred and forty-five of this chapter may be filed with the state department of health at Albany in lieu of the statement hereinbefore mentioned. Such inventory or statement shall be verified by oath or affirmation.

2. Such chapter is hereby amended by adding after section two hundred and forty-seven, a new section to be section two hundred and forty-seven-a thereof, to read as follows:

247-a. False representations, et cetera. No official order blanks shall be issued to any person who shall have been convicted of a wilful or intentional violation of the provisions of this article or to any person other than a duly licensed physician, veterinarian, pharmacist, druggist or dentist, or wholesale dealer or jobber in drugs, nor shall any physician, veterinarian, druggist, pharmacist or dentist, or any wholesale dealer or jobber in drugs have, keep, sell, dispense or furnish any of the drugs in section two hundred and forty-five of this article mentioned, unless he shall, within ten days after the first day of July, nineteen hundred and seventeen, and each year thereafter, file with the state board of health a report setting forth his name, residence, age and occupation, and the places where he has so practiced such profession or business within the two years next preceding the filing of said report and if a hospital, college, scientific, or public institution, setting forth the name and place of business thereof. Provided, however, that such blanks be issued to persons legally conforming to the regulations and statutes of this state who shall newly establish or engage in the practice or business of prescribing or dispensing narcotics subsequent to July tenth, nineteen hundred and seventeen, or any year thereafter. All official order blanks shall, when issued by the state department of health, bear thereon the name of the person, firm, association or corporation to whom such blanks are delivered plainly written or stamped, and no person other than the purchaser shall use any of said blanks bearing the name of the purchaser, and if any person shall obtain or attempt to obtain by means of said order blanks any of the drugs mentioned in section two hundred and forty-five of this article for any purpose other than the use, sale or distribution by him in the conduct of a lawful business in said drugs or in the legitimate practice of his profession, he shall be guilty of a felony.

Any person who, for the purpose of obtaining any of the drugs mentioned in this article, and for the purpose of evading any of the provisions thereof, shall falsely assume of use the title of "licensed pharmacist," "licensed druggist," "licensed physician," "licensed veterinary surgeon," or "licensed dentist," or in any manner falsely represent himself to be a licensed pharmacist, licensed druggist, licensed physician, licensed dentist, or licensed veterinary surgeon, or who shall falsely represent himself to be an importer, manufacturer, or dealer engaged in the conduct of a lawful business in said drugs, or who shall utter any false or forged prescriptions, or shall alter an original written prescription or order for any of the drugs mentioned in this article shall be guilty of a felony. Any person who shall make any false report, return or certificate, required by the provisions of this article to be

3. Section two hundred and forty-eight of such chapter as added by chapter three hundred and sixty-three of the laws of nineteen hundred and fourteen and amended by chapter three hundred and twenty-seven of the laws of nineteen hundred and fifteen, is hereby amended to read as follows:

248. Physicians, et cetera, to keep records. All persons authorized by law to sell, administer, prescribe, dispense or dispose of any of the drugs enumerated in section two hundred and forty-five of this chapter, shall forthwith keep on record the name and address of each person to whom such drug is dispensed, given or in any manner delivered and the quantity so dispensed, given or delivered, and all such persons shall likewise keep a record of the disposition made of any quantity of such drugs referred to, whether such disposition be in the preparation of compounds or otherwise, and if used in the preparation of compounds the quantity so used in each compound and where placed. Such record shall be preserved for two years and shall always be open for inspection by the authorities charged with the enforcement of the provisions of this article. Every physician, institution, hospital or sanitarium prescribing or furnishing any of the drugs, their salts, derivatives or preparations mentioned in section two hundred and forty-five of this chapter, to be taken or used by any person who shall be ascertained by such physician, hospital, institution or sanitarium, as a result of a physical examination or otherwise, to be a habitual user of any of the drugs enumerated in section two hundred and forty-five of this chapter, shall keep a separate record of such prescriptions, and upon the first day of each month, such physician, hospital, institution or sanitarium shall deliver to the state board of health a report, which shall state the name, age and residence of each such narcotic drug addict for whom he has prescribed or furnished any of the drugs specified in section two hundred and forty-five of this chapter. Each physician, hospital, institution and sanitarium, shall, for the period enumerated in section two hundred and forty-nine of this chapter, keep a copy of such report which shall always be open to the inspection of the authorities charged with the enforcement of the provisions of this article. All papers, records, information, statements, and data filed with the state board of health pursuant to the provisions of this article, and all records of proceedings or actions taken by the state board of health pursuant to the provisions of this article, shall be regarded as confidential, and shall not be open to inspection by the public or any person other than the official custodians of such records, and such persons as may be authorized by law to inspect such records, and those persons duly authorized to prosecute or enforce the federal statutes or the laws of the state of New York, but only for the purposes of such prosecution or enforcement; and any employee, or other persons who shall disclose or aid in the disclosure of such, or any part of such papers, records, information, statements, or data to any person not authorized by law to inspect the same, shall be guilty of a misdemeanor.

No person shall aid, abet or assist any other person, not a licensed druggist, licensed pharmacist, licensed physician, licensed veterinarian or licensed dentist or wholesale dealer or jobber in drugs or a designated official of a hospital, sanitarium or institution to procure any of the drugs enumerated in section two hundred and forty-five of this chapter, except as provided in section two hundred and forty-seven of this chapter or upon the prescription of a duly licensed physician, dentist or veterinarian. Any violation of this section is hereby declared to be a misdemeanor.

4. Such chapter is hereby amended by adding after section two hundred and forty-eight as added by chapter three hundred and sixty-three of the laws of nineteen hundred and fourteen and amended by chapter three hundred and twenty-seven of the laws of nineteen hundred and fifteen, a new section to be section two hundred and forty-eight-a thereof, to read as follows:

248-a. Prescriptions of veterinarians and dentists. No veterinary surgeon shall prescribe, dispense or furnish any of the drugs mentioned in section two hundred and forty-five of this chapter for the treatment of or consumption by a human being. No dentist shall issue any such prescription for, dispense or furnish any of such drugs for the use of any person not then under his immediate treatment as a dentist or for any other purpose than as a part of such treatment, and no dentist shall dispense, furnish or issue a prescription for any of such drugs in quantities greater than is necessary for the immediate treatment of the person to whom the drugs are furnished.

5. Sections two hundred and forty-nine, two hundred and forty-nine-a and two hundred and forty-nine-d of such chapter as added by chapter three hundred and sixty-three of the laws of nineteen hundred and fourteen and amended by chapter three hundred and twenty-seven of the laws of nineteen hundred and fifteen, are hereby amended to read as follows:

249. Hypodermic syringe; sale of; record; penalty. It is unlawful for any person to sell or retail or to furnish to any person other than a duly licensed physician, dentist, or veterinarian, an instrument commonly known as a hypodermic syringe or an instrument commonly known as a hypodermic needle, without the written order of a duly licensed physician, dentist, or veterinarian. Every person who disposes of or sells at retail, or furnishes or gives away to any person, either of the above instruments, upon the written order of a duly licensed physician, dentist, or veterinarian, shall, before delivering the same, enter in the book kept for that purpose the date of the sale, the name and address of the purchaser, and a description of the instrument sold, disposed of, furnished or given away. It shall be unlawful for any person or persons, except a licensed pharmacist, licensed druggist, licensed physician, licensed dentist, licensed veterinarian, hospital or regular dealer in medical or surgical supplies, to possess such instrument, without having in their possession a certificate from a physician certifying that the possession of such instrument is necessary for the treatment of injury, deformity or disease then suffered by the person possessing the same, or if possessed by a nurse, a certificate from a duly licensed physician that such possession is for professional purposes. Any person or persons who sell, dispose of or give away an instrument commonly known as a hypodermic syringe, or an instrument commonly known as a hypodermic needle, except in the manner prescribed in this section, shall be guilty of a misdemeanor, provided, however, that any person owning or having in his possession any such hypodermic syringe or hypodermic needle at the time this section, as amended, takes effect, may lawfully keep or retain the same upon obtaining from a duly licensed and registered physician, dentist or veterinarian within ten days after this section as hereby amended shall take effect, a certificate to the effect that such syringe or needle was purchased before this section, as amended, took effect and that such syringe or needle may be required for future use for treatment of an injury, deformity or disease which the person possessing the instrument is then suffering from.

249-a. Commitment of habitual drug users; procedure; treatment; discharge. The constant use by any person of any habit forming drug, except under the direction and consent of a duly licensed physician, is hereby declared to be dangerous to the public health. Whenever a complaint shall be made to any magistrate that any person is addicted to the use of any habit-forming drug, without the consent or direction of a duly licensed physician, such magistrate, after due notice and hearing, if satisfied that the complaint is founded and that the person is addicted to the use of a habit forming drug, shall commit such person to a state, county or city hospital, or institution licensed under the state lunacy commission, or any correctional or charitable institution maintained by the state or any municipality thereof, for the treatment of disease or inebriety, provided, however, that such magistrate may suspend sentence and parole such addict to the care of such addict's physician, where such magistrate is satisfied that the interest of such addict so requires, and it satisfactorily appears to such magistrate that such addict is able to defray the expense of competent medical treatment. Any court having jurisdiction of a defendant in a criminal proceeding, if it appears that a defendant is a habitual drug user, may commit such user for treatment as herein provided at any stage of such proceeding against such defendant, and may stay proceedings, withhold conviction or suspend sentence, pending the period of such commitment. Whenever the chief medical officer of such institution shall certify to the committing magistrate or court that any person so committed has been sufficiently treated or give any other reason which is deemed adequate and sufficient, he may in accordance with the terms of commitment discharge the person so committed, or return such person to await the further action of the court, provided, however, that when such a commitment is to an institution under the jurisdiction of a department of correction, or other similar department in a city of the first class where there is a parole commission established pursuant to law, such commission shall act in the place and stead of a chief medical officer for the purpose of making such a certificate. Every person committed under the provisions of this section shall observe all the rules and regulations of the institution or hospital. Any such person who wilfully violates the rules and regulations of the institution or repeatedly conducts himself in a disorderly manner may be taken before a magistrate by the order of the chief medical officer

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of the institution. The chief medical officer may enter a complaint against such persons for disorderly conduct and the magistrate, after a hearing and upon due evidence of such disorderly conduct, may commit such person for a period of not to exceed six months to any institution to which persons convicted of disorderly conduct or vagrancy may be committed, and such institution shall keep such persons separate and apart from the other inmates, provided that nothing in this section shall be construed to prohibit any person committed to any institution under its provisions from appealing to any court having jurisdiction for a review of the evidence in which this commitment was made.

Nothing herein contained shall be deemed to preclude any of the institutions referred to, from accepting as a charity patient, any person voluntarily applying for treatment for drug addiction, and any such institution may if a voluntary applicant signs a statement that he is suffering from drug addiction and desires treatment in the same manner and subject to the same rules and restrictions as if committed by a magistrate, receive such person without formal commitment, with like effect as if formally committed, subject to discharge when sufficiently treated, or for any other reason deemed adequate. Any local health board or officer may, likewise, with the consent of such hospital and the approval of the proper officials charged with the care of the poor, on such an application and signed statement place the applicant in any hospital receiving such patients. The local health board or officer shall adopt a blank form of application for such treatment and on request shall furnish copies thereof for the use of any such institution.

249-d. Penalties. Any violation of any of the provisions of this article shall be deemed a misdemeanor, except as otherwise provided in section two hundred and forty-seven-a of this chapter, and except that the sale, offering for sale, giving away or dispensing of any of the drugs mentioned in section two hundred and forty-five of this chapter, otherwise than as permitted by this article, to any child under the age of sixteen years shall be deemed a felony. Nothing contained in this article shall be construed to amend or repeal section seventeen hundred and forty-six of the penal law relating to the sale of cocaine or eucaïne and regulations respecting their possession.

6. Such chapter is hereby amended by adding after section two hundred and forty-nine-d, two new sections, to be sections two hundred and forty-nine-e and two hundred and forty-nine-f, to read as follows:

249-e. Supply of drugs to addicts. Any local board of health may furnish, or authorize to be furnished, without charge, to any person found upon a physical examination to be addicted to the use of any habit forming drug, a prescription as provided for in section two hundred and forty-six of this chapter, for such a sufficient quantity of any such drug as is necessary, in the opinion of a physician of any such board of health, to provide for the necessities of such person, pending treatment. The state department of health shall prescribe appropriate regulation under which said drugs are to be prescribed and dispensed by such local board of health.

249-f. Records to be preserved; fees; inspectors. All records, prescriptions, orders, certificates and other instruments in writing, by the provisions of this article, are required to be kept, and preserved by such persons and officials for a period of two years from the date of the same, and shall at all times be kept open to inspection by officers and agents of the state and local boards of health and to all other persons charged with the enforcement of the law. The state board of health is hereby authorized to appoint such inspectors and agents as may be necessary to enforce the provisions of this article.

All state, county and city hospitals, all correctional and charitable institutions, all private hospitals, institutions and sanitariums purporting to treat and cure drug addicts, and all persons using, dispensing or possessing any of the drugs mentioned in section two hundred and forty-five of this article, shall keep records showing the time and amount of any quantity of said drugs so received and the times when and the persons to whom any of said drugs are dispensed, which records shall be kept and preserved for the period mentioned in section two hundred and forty-nine-e of this article, and shall be at all times open to the inspection of the authorities charged with the enforcement of the law. All official blanks shall be sold to the person entitled to possess the same pursuant to the provisions of this article at a price to be fixed by the state board of health, which price shall not, however, exceed the sum of one dollar per hundred triplicate blanks.

7. This act shall take effect July first, nineteen hundred and seventeen.

COMMITTEES ON GOVERNMENT SUPPLIES

A. R. L. Dohme, C. Mahlon Kline and Irving McKesson have been named by the Drug Trade Conference to confer with the Council of National Defense to secure recognition of the Pharmaceutical and Chemical trade in the Advisory Commission.

The committees announced by the Council of National Defense to serve under Bernard M. Baruch, chairman of the Committee on Raw Materials, and Julius Rosenwald, chairman of the Committee on Supplies, include the following:

A. C. Bedford, chairman of the committee on oil; Horatio S. Rubens, committee on alcohol; W. H. Childs, of The Barrett Company, committee on coal-tar products; Clinton N. Crane, committee on lead; Henry Whiton, sulphur; Edgar Palmer, zinc.

To work out plans for using chemicals in the most efficient way, a sub-committee on chemicals has been named, with Dr. William H. Nichols, of the General Chemical

Company, as chairman. Four sub-divisions of the sub-committee will be under the chairmanship of the following: Acids, E. R. Grasselli, of the Grasselli Chemical Company, of Cleveland, O.; fertilizer, Horace Bowker, of New York City; alkalis, J. D. Pennock, of the Solvay Process Company, Syracuse, N. Y.; miscellaneous chemicals, Edward Mallinckrodt, of St. Louis.

NEW PREPARATIONS FOR 1916

(Concluded from May ERA, Page 155)

MELARGEN.—Silver-protein compound.—Fine, brown powder, easily soluble in water.—Uses as of other silver compounds, particularly in ophthalmology, in 2-5% solution.

MENOSAL.—Methyl Menthylsalicylate.—Oily liquid soluble in alcohol, ether, oils and chloroform.—Passes the stomach unchanged, the salicyl being liberated in the intestines.—Dose: 3 minims.—Also used externally.

MERCURIC IODIDE, COLLOIDAL.—See Lutosargin.

MESOXOHIMBINE.— $C_{21}H_{26}N_2O_3$.—White needles soluble in dilute alcohol, but insoluble in cold absolute alcohol and benzene.—Resembles yohimbine in chemical and physiological properties.

METHYL MENTHYLSALICYLATE.—See Menosal.

MODENOL.—An arsenic-mercury salicylate solution marketed in ampuls, and intended for use like enesol.

ORTHOXYQUINOLINE SALICYLATE.—See Aguttan.

PARAAMINOBENZOYLAMINOETHANOL HYDROCHLORIDE.—See Atoxicocaine.

PARALAUDIN.—Diacetylhydromorphine.—Uses, as of morphine, in like doses.

PARATOLUENESODIUM SULPHOCHLORAMIDE.—See Chlorazene.

PARLODION.—A shredded form of concentrated collodion for imbedding tissues for section cutting.

PELLIFORM.—A carbon tetrachloride-soap solution intended for use in skin diseases due to staphylococci, and also to animal parasites.

PYROCHININ.—Quinine-Pyramidon Camphorate.—Used as an antipyretic and analgesic.

QUININE FORMATE, BASIC.—See Quiniform.

QUININE-PYRAMIDON-CAMPHORATE.—See Pyrochinin.

QUINIFORM.—Basic Quinine Formate, $C_{20}H_{24}N_2O_2$, $COOH_2$.—Intended for subcutaneous use in chills and malaria.

SALASPIN.—Acetylsalicylic Acid.

SEPTOVINCE.—Iodol; Trichloracetylphenol Diiodide.—Bactericide, employed in acute rheumatism arthritis, and erysipelas by intramuscular injection in doses of 5 mils (Cc.) of a 1 + 7 solution. Also applied locally in glycerinic solution in sepsis.

SILVER-AMMONIUM GLYCOCHOLATE.—Colorless powder soluble easily in water and hot 90% alcohol, difficultly in cold alcohol, and insoluble in ether and benzene.

SODIUM AMINOPHENYLARSINATE.—See Arsinosolvin.

SOLARSON.—Ammonium Heptinchlorarsenate, $CH_3(CH_2)_4C_2Cl$.—Has $O(OH)_2$.—Fine needles melting at $115^\circ C$. Marketed as a 0.7% solution. To be used in anemia, anorexia, neurasthenia, Basedow's disease, etc., subcutaneously.

STRONTIUM ALPHAPHENYLGINCHONINATE.—See Iriphan.

SUSSOL.—Ketoimidotetradiazol.—Yellowish-white powder insoluble in water.—Used as a sweetener.

TETHELIN.—Growth-controlling principle of the anterior lobe of the pituitary body.

THEOPHYSENE.—Condensation product of ethyl iodide and thiourea, C_8H_8NH . CS . NH_2 . C_2H_5I .—Colorless crystals; garlicky odor; soluble in water and in alcohol.—Dose: 0.5 Gm.

TRICHLORACETYLDIPHENOL DIODIDE.—See Septovince.

TRIMETHOL.—A 50% emulsion of trimethylmethoxyphenol, $C_6H_4(CH_3)_3(OCH_3)OH$.—Intestinal antiseptic.—Dose: $2\frac{1}{2}$ minims.

TRIMETHYLMETHOXYPHENOL.—See Trimethol.

UREA ACETYLSALICYLATE.—See Diafor.

VENARSEN.—A sterile solution of organic arsenic and metallic mercury for use in syphilis by intravenous injection. Dose 0.7-1.4 Gm.

DRUG TRADE CONFERENCE

The National Drug Trades Conference in Washington, early in May, took up the question of habit-forming drugs almost entirely. Representatives of practically all the bodies in the conference were present as well as representatives of the Navy, Internal Revenue Service and Public Health Service. Prof. James H. Beal of Urbana, Ill., representing the A. Ph. A., submitted his analysis of the questionnaire he sent to 65 members of the wholesale drug trade.

Representatives of the Internal Revenue service showed that an average of 66.2 per cent decrease in the sale of narcotics had been found on the official blanks. Compounds exempt under the Harrison Law also showed diminished sales, but 34 of the proprietary makers said they had experienced little or no change in the sale.

There had been an increase in non-proprietary medicines exempt. R. C. Stofer of the Norwich Pharmaceutical Company reported that the American Association of Pharmaceutical Chemists, that druggists and doctors, with whom his association had worked, showed a marked decrease in their sales of habit-forming drugs since the last report was made. Cocaine has decreased 47 per cent, opium 34, morphine 45, heroin 29 and codeine 53 since 1915. Heroin, it was said, is apparently replacing codeine and morphine among drug users. It was agreed that most of the abuses of the habit-forming law are due to smugglers and robbers, although Abraham C. Webber, Boston District Attorney, declared it was his belief that druggists and doctors who had found means of evading the law were responsible.

NEW SIZE OF GRAY'S GLYCERINE TONIC

The Purdue Frederick Company, manufacturing chemists, New York, announce that Gray's Glycerine Tonic Comp. is now put up in small size, 50c, and is recommended to druggists as most convenient for prescriptions, while its introduction will mean fewer broken packages on his shelves. It will also enable the retail druggist to meet the allusion of customers to the "high cost of living," for with two sizes in stock he should never lose a sale of this well known preparation. The Purdue Frederick Company is conducting a very active campaign in retail drug papers and medical journals, acquainting physicians and others not only as to the new size, but of the merits of this well known preparation, which has been prescribed, recommended and endorsed by the medical profession for twenty-five years. Druggists should carry both sizes in stock.



SEES BOOM IN BUSINESS DURING WAR

J. I. Holcomb, president of the Holcomb & Hoke Mfg. Co., manufacturers of popcorn and peanut machines, Chicago, Ill., recently returned from a visit to Canada, where he spent considerable time investigating business conditions, interviewing managers of commercial agencies, Government officials and others, and he states that the unanimous opinion is that Canada is now enjoying the greatest prosperity ever known. Workers are scarce, wages are high, collections are good, and business is booming. In comparing the conditions here with those in Canada Mr. Holcomb finds a close resemblance. He says:

"It is fair to assume that conditions will be identical. The countries as a whole are very similar, resources, except in size, are identical, and the people here look, talk and act like our cousins in Canada. Trade conditions, therefore, will be similar, and it seems to me that the business man who imagines that his trade will be seriously curtailed by the war has groundless fears. He should rather make every effort to get his share of the \$7,000,000,000 which Congress recently voted for war purposes. Most of this money will go for new business in this country. The middle and laboring classes will have more actual cash to spend than they have ever had before. The prob-

lem of the business man should not, therefore, be one of retrenchment, such as cutting down expenses by reducing his clerical force, stock or advertising, but he should go after business for all he is worth."

To show that the trade is wideawake, Mr. Holcomb said that if Butter-Kist machine sales are an indication—his company is the largest manufacturer of popcorn and peanut machines in the world—business shows great activity. His concern has sold more machines since rumors of the war first started than ever before, March business being more than double that of the same month last year. Many people, he says, think they are practising economy when in reality they forget the dimes and remember the dollars. The big profits that are made on Butter-Kist Popcorn depend upon 5 and 10 cent sales and are due to the volume of business the machine does. Owners of these machines are averaging from \$3 to \$10 a day profits, by just going after business and furnishing something within the reach of all patrons. "The little fellow," says Mr. Holcomb, "should go after business. Sell war prosperity—don't peddle war scare."

PLUTO WATER A PROFITABLE LINE

A progressive druggist, with a reputation for keen business ability and success, says that by keeping a close tabulation on the turnover of his various lines, especially on products and preparations of the same character, he is able to eliminate all "dead" issues and to keep his shelves filled only with profitable merchandise. He found that in its line Pluto Water was one of the fastest turning stocks he carried, for the rapid turnover, coupled with the nice profit on individual sales, made it one of the most profitable lines in the store and the best in its department. Figuring on turnover stock furnishes data for interesting comparisons and is indicative of business ability. Try it on your stock of Pluto.

WILLIAM R. WARNER & CO.'S NEW HOME

William R. Warner & Co., manufacturing pharmacists, will move into their new quarters at 110 West 19th street, New York, about August 1, according to present plans of the firm. The firm abandoned a new building under construction in Philadelphia to take advantage of the facilities for export business which New York offers. The properties acquired in New York cost the Warner firm more than \$1,000,000. William R. Warner & Co. and the perfumery firm of Richard Hudnut, Inc., will occupy the buildings formerly known as the Altman stores.

ALBERT PICK & CO.'S NEW CATALOGS

Albert Pick & Co., Chicago, Ill., have just issued three new catalogs which contain a large amount of information of direct interest to successful buyers in the drug trade. The titles of these are "Candy," "The Soda Book," and "Druggists' Sundries," each of which carry a very large number of new items in the various departments named, including many specialties that can be successfully handled by the drug trade. Such items as vending machines, candy makers' accessories, soda fountains, utensils, fountain requisites, etc., are fully described, while in "Druggists' Sundries" the articles listed cover practically everything from "advertising labels" to "wrist bands," each item being accompanied by a short description and illustration, including the price, the information thus provided affording the reader points for comparison with similar articles in his own stock. Druggists in search of specialties or novelties in any of the above lines, as well as standard and useful equipment or fountain accessories will do well to consult these catalogs.

"A Gift Shop for Golden Profits" is the title of a little book recently issued by the Pohlson Galleries, 2004 Bank Building, Pawtucket, R. I. This sets forth in a most attractive form the Pohlson idea of a gift department for druggists. It is a clever little publication and copies will be sent gratis on application.

—S. SORENSON, senior member of Sorenson & Son, druggists, Shannon, Ill., dropped dead recently while at work in his pharmacy. Death was due to heart disease. He was about 55 years of age and is survived by his widow and one son.

Credit and Commercial Cases for May

BY GEORGE H. MURDOCH, Newark, N. J.

Fraud cannot be presumed; the presumption being that individuals are honest.—*Shera v. Merchants' Life Insurance Company*, 237 F. (U. S.), 484.

A party has the absolute right to change his attorney and have the one he prefers substituted as the attorney of record.—*Gill v. Southern Pacific Company*, 161 P. (Cal.), 1153.

One seeking to set aside as fraudulent a conveyance made on adequate consideration must show that both the grantor and grantee had an intent to defraud.—*Byerley v. Conlin*, 161 P. (Cal.), 1150.

Inadequacy of consideration alone, at least unless such as to shock the conscience, does not constitute or establish fraud in settlement of an action.—*Gill v. Southern Pacific Company*, 161 P. (Cal.), 1153.

The rendering of a bill and repeated demands for payment, which were refused by the mere silence of defendant, does not establish an account stated.—*United Iron Works v. Rathskeller Company*, 161 P. (Wash.), 1197.

On a bill for an accounting, etc., the original taint of usury attaching to an entire store account attached to all the consecutive obligations growing out of the original transaction.—*Compton v. Collins*, 73 So. (Ala.), 334.

A composition in bankruptcy proceedings against the maker of notes did not discharge the indorsers on the notes, the release being effected by operation of law, and not by consent of the parties.—*Silverman v. Rubenstein*, 162 N. Y. S., 733.

Where plaintiff accepted in cash a check without noticing statements on each side thereof that it was in full payment of the account, there was no accord and satisfaction.—*Stoddard v. Post Express Printing Company of Rochester*, 162 N. Y. S., 839.

Where seller, reserving property in goods shipped which buyer refused to accept unless allowed offset, left them on dock without providing for their safety, the seller must suffer the loss where goods were destroyed by fire.—*Rylance v. James Walker Company*, 99 A. (Md.), 597.

Where one party to an executory contract prevents the performance of it or puts it out of his own power to perform, he commits a breach of the contract relieving the other party from the obligation of full performance on his part.—*Rosenthal Paper Company v. National Folding Box & Paper Company*, 162 N. Y. S., 814.

Where one of two accommodation makers of a note before the payee bank had advanced money thereon notified the bank that he desired to withdraw from the note, he did not become a cosurety upon the note, and his release did not release the other accommodation maker.—*First State Bank of Teague v. Hare*, 190 S. W. (Texas), 1113.

Where evidence does not show that seller, shipping goods with bill of lading to his order, attached to draft, retained title merely to secure performance of the contract by buyer, under Code Pub. Civ. Laws, art 83, §43, the goods were at the seller's risk until the property was transferred.—*Rylance v. James Walker Company*, 99 A. (Md.), 597.

Plaintiff represented that a stock of goods which he offered in exchange for other property was of the invoice value of \$12,000. It is held that the expression "invoice value" should be construed as having reference to the cost price for which the seller invoiced the goods to the purchaser, and not to their actual value.—*Knopfler v. Flynn*, 160 N. W. (Minn.), 860.

That the maker of a note received therefor a transfer of the payee's business, with a covenant that the payee would not do business in that neighborhood, which covenant was broken, is not a defense in action on the note, as showing failure of consideration; the covenant being an independent one, enforceable only in a separate suit.—*Pinto v. Pulidora*, 162 N. Y. S., 736.

The creditors of an insolvent bank had the right, not only to subject its directors as stockholders and the other stockholders to their statutory double liability, but had the right to seek indemnity from the directors if they had been guilty of negligence in the management of the bank, and such negligence resulted in loss to the creditors.—*Caldwell v. Ryan*, 190 S. W. (Ky.), 1078.

Where a promissory note is given in settlement of an open account, without an express agreement that the note shall extinguish the pre-existing debt, it is a condition precedent to a final judgment upon the account that the note be surrendered to the maker, or accounted for by showing that it is not in any event enforceable against him.—*Standard Cooperage Company v. O'Neill*, 91 S. E. (Ga.), 82.

Where plaintiff concealed true value of express packages and paid a lower rate upon an agreed valuation, the company's rates being filed as required by Interstate Commerce Act Feb. 4, 1887, c. 104, 24 Stat. 379, as amended (U. S. Comp. St. 1913, §8563 et. seq.), plaintiff could not recover true value from express company, where goods were stolen by its agent.—*D'Utassy v. Barrett*, 14 N. E. (N. Y.), 786.

A bankrupt's discharge will not be denied on the ground that he made extended representations for the purpose of securing credit, because one who extended credit relied on an incorrect statement made two years before by the bankrupt to a commercial agent; the statement not having been made in contemplation of securing credit, and the creditor having failed to make additional inquiry.—*In re Kean*, 257 F. (U. S.), 682.

The directors of a corporation before its dissolution do not, by virtue of their office, hold or possess any title to or interest in the property of the corporation; the title being wholly vested in the corporation. When a corporation ceases to exist, its property belongs to the persons who are its stockholders at the time; it being no longer capable of holding title or possession.—*Rossi v. Caire*, 161 P. (Cal.), 1161.

If a vendor sells personal property and in the contract of sale promises the vendee, in consideration of the order for the goods, to allow commissions to a selling agent who is a friend of the vendee but who has not negotiated the sale, and if the vendor after the sale has been completed refuses to pay the commissions, the vendee suing for the use of the selling agent can maintain an action to recover the commissions.—*Jordan & Phillips v. Dixie Culvert & Metal Company*, 91 S. E. (Ga.), 68.

As a general rule, a corporation is not liable for services rendered by a promoter, though the promoter may recover for services where it appears that he expected to be compensated therefore, that his services were rendered at the request of or under contract with the associate promoters or a majority of them, and where the acts done were necessary to the organization and its objects and the corporation received and enjoyed the benefits.—*Van Zandt v. St. Louis Wholesale Grocer Company*, 190 S. W. (Mo.), 1050.

A person desiring to rescind a contract for fraud is entitled to a reasonable time in which to investigate the facts, and, unless there is such delay that reasonable minds would not differ, the question of what is reasonable time is for the jury. A delay of eight days for a seller in Kansas City to investigate curb market price of stock in New York, not regularly listed, before rescinding a contract to sell because of fraud in stating market price, was not as a matter of law unreasonable.—*Dawson v. Flintom*, 190 S. W. (Ala.) 323.

Violation of the Anti-Drug Act by giving an order for opium, and, after acceptance, failing to preserve a duplicate so as to be readily accessible, is an offense in nature but a misdemeanor, failure to obey an administrative regulation, a mere statutory infraction, and not a true crime, though made a felony by Penal Code (Act March 4, 1909, c. 321), §335, 35 Stat. 1152 (Comp. St. 1913, §10509).—*United States v. Gaag*, 237 F. (U. S.), 728.

Where a stock of paints was consigned by the seller to a dealer, to be insured by him, title to remain in the seller, who was to inventory at regular intervals of sixty days the stock unsold, and charge to the dealer at a price agreed on such as had been sold, and if at a future time either party desired to terminate the arrangement, the dealer to pay for the stock on hand, the goods were held on consignment, not on conditional sale, and on bankruptcy of the dealer could be recovered by the seller.—*In re Wright & Barron Drug Company*, 237 F. (U. S.), 411.

PATENTS & TRADEMARKS

PATENTS

Granted April 24, 1917

- 1,223,351—Bertha S. Alsop, New York, N. Y. Bottle.
 1,223,490—Otis A. Hollis, assignor to Hollis Sterilizing Equipment Co., Pittsburg, Pa. Sterilizing cabinet.
 1,223,720—Edward C. Murray, Oklahoma, Okla. Non-refillable bottle.
 1,223,867—Harry M. Gray, assignor of one-half to Crescenzia Allors, Pittsburg, Pa. Bottle closure.
 1,223,953—Arvid Frisak, Woodbury, N. J. Carbonic acid indicator.
 1,224,013—Charles L. Parsons, Durham, N. H. Process for preparing oxides of uranium

Granted May 1, 1917

- 1,224,231—Simun Sumich, Roseburg, Oreg. Non-refillable bottle.
 1,224,393—Annah E. Longabaugh, Metz, Mo. Poison bottle indicator.
 1,224,454—Carleton Ellis, Montclair, N. J., assignor to Ellis-Foster Co. Process of making white hydraulic cement and potash salts.
 1,224,477—John F. McMann, Rochester, N. Y. Siphon.
 1,224,649—Joseph Moses Ward Kitchen, East Orange, N. J. Bottle closure.
 1,224,696—John D. Wise, Jackson, Tenn. Antiseptic tooth brush holder and sterilizer.
 1,224,740—John C. Green, Burwell, Nebr. Rotary tooth brush.
 1,224,768—Francis Meisel, Boston, Mass., assignor to Meisel Press & Manufacturing Co., Boston, Mass. Machine for coating bottle caps.
 1,224,860—John Reichel and Henry Werner, assignors to H. K. Mulford Company, Philadelphia, Pa. Process of treating bog-cholera antitoxin.

Granted May 8, 1917

- 1,225,037—Martin L. Kinsey, Dos Palos, Cal. Cork extractor.
 1,225,052—Alfred Piguot, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Process for treating organic compounds by electrolysis.
 1,225,069—Arthur M. Snyder, Fairfield, Iowa. Bottle carrier.
 1,225,226—Henry L. Doherty, New York, N. Y. Distillation process.
 1,225,230—George N. Elwin, Victoria, British Columbia, Canada. Rotary tooth brush.
 1,225,237—William H. Gartley, assignor to The United Gas Improvement Company, Philadelphia, Pa. Manufacture of toluol.
 1,225,321—Bernhard Flurscheim, Fleet, England, assignor to Aetna Explosives Co., Inc., New York, N. Y. Process of nitrating toluols containing paraffins.
 1,225,347—John R. Mardick, New York, N. Y. Nitro aromatic compound and process of making same.
 1,225,348—Irving S. Merrell, assignor to Merrell-Soule Co., Syracuse, N. Y. Process for changing the consistency of liquids containing solids.
 1,225,349—John C. Miller, assignor to the Miller Pasteurizing Machine Co., Canton, Ohio. Apparatus for filling and capping bottles.
 1,225,362—William M. Ruthrauff, Chicago, Ill. Dentifrice.
 1,225,374—Kebe Toabe, Winchester, Mass. Process for manufacturing metallic chromates.
 1,225,610—Asa B. Garner, Kitzmiller, Md. Powder container.
 1,225,653—Tadeusz J. Lampe, Warsaw, Russia. Bottle washing machine.
 1,225,722—Alois Schaidhauf, Frankfurt-on-the-Main, Germany, assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. Process of manufacturing alkali metal percarbonate.

Granted May 15, 1917

- 1,225,748—Wallace A. Beatty, assignor, by direct and means assignments, to George W. Beadle, New York, N. Y. Condensation product and process of making same.
 1,225,749—Wallace A. Beatty, New York, N. Y. Synthetic gum.
 1,225,750—Wallace A. Beatty, New York, N. Y. Artificial gum and process of producing same.
 1,225,755—Carl Bosch and Alwin Mittasch, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Catalytic production of ammonia.
 1,225,832—Otto Liebknecht, Frankfurt-on-the-Main, Germany, assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. Process of manufacturing alkali percarbonates.
 1,225,955—John Hickman, Tangleilag, Saskatchewan, Canada. Rotary tooth brush.
 1,225,993—John F. Mullaney, Colorado Springs, Colo. Strainer for fluids.
 1,226,304—Howard V. Brumley, assignor to Whitall Tatum Co., New York, N. Y. Water-bag stopper.
 1,226,482—William J. Dossey, Glasgow, Ky. Rotary tooth brush.
 1,226,498—Willard E. Frederick, Pasadena, Cal. Dispensing device.

There has been plenty of speculation as to what the future price of aspirin will be on account of the expired patent, and in this connection a recent announcement of the Antikamnia Chemical Company is interesting. They state that their Antikamnia tablets now contain 70 per cent of acetphenetidin and that the price of their tablets is "more than 200 per cent less" than the price of acetphenetidin, but this statement can hardly be taken literally. As we interpret it, they intend to say that acetphenetidin costs 200 per cent more than Antikamnia tablets—in other words, the tablets cost only 1-3 as much as an equal amount of acetphenetidin.

NEW IDEA IN DRUG CATALOGS

Under the title "1917 Stearns' Catalog and Reference Book," Frederick Stearns & Co., Detroit, Mich., have recently issued what they call a "new idea in drug catalogs." It contains not only a complete and handy price list of their pharmaceuticals, specialties, toilet requisites, etc., but also much conveniently arranged information of practical value to the busy pharmacist. This information covers such subjects as prescription incompatibilities, practical scheme of urinalysis, invoice and selling price tables, window display calendar, distribution of plants yielding official drugs, metric equivalents, poisons and antidotes, and many other pertinent facts needed for reference purposes in daily drug store work. All items are indexed and cross-indexed, and net prices only are given on all goods listed, thereby saving the time of the user of the catalog, as there are no discounts to figure. No admonition is needed for the druggist to hang the catalog up in a handy place; he will do so as soon as he gets a copy, for its various features will meet many of his daily wants.

C. R. D. A. PREPARING FOR DRUG SHOW

President Caldwell of the Chicago Retail Druggists' Association and Julius Riemenschneider and Isam M. Light, who comprise the committee of the association in charge of the Drug Show, which will be held in the Coliseum from November 10 to 16, have selected Harry Moyer, one of the most popular and prominent members of the association to head the exhibitors' committee this year.

Chairman Moyer is busy getting out his floor plans and diagrams and will be ready for subscriptions for space shortly. The last year's exhibitors will be given the preference in their choice for locations providing they exercise their right for subscription within a reasonable time after the first announcement.

NEW REMEDIES AFLOAT AND ASHORE

Chlorazene (Abbott), Dakin's new antiseptic, and Parresine (Abbott), an improved hot-wax dressing for burns, are new products which are attracting attention both here and abroad, and which have been passed by the Council of Pharmacy and Chemistry of the American Medical Association to appear in "New and Nonofficial Remedies." They have been ordered to be placed on every battleship in the United States Navy. The wide publicity given to these products in the medical press, and the satisfactory results obtained from their use by surgeons and hospitals, have created an unusual demand for them. It is important therefore that retail druggists should know more about these products.

An attractive booklet, "Greater Profits for the Retail Druggist," has just been issued by The Abbott Laboratories, Chicago, Ill., and is well worth reading, especially in these days of increasing costs. Any suggestion that will help to keep the red figures out of the "profit and loss" column is of especial value. It will pay you to send for a copy, and also to learn more about the above named new remedies.

NO ALCOHOL IN ECKMAN'S ALTERATIVE

Formal announcement is made to the drug trade by the Eckman Manufacturing Company of Philadelphia that since the latter part of 1915 the use of alcohol in the manufacture of Eckman's Alterative has been eliminated. Formerly a small content of alcohol was used in the preparation solely as a solvent. Since December, 1915, every shipment of this product from the laboratory has been non-alcoholic. The company announces that it will exchange any of the old product for the non-alcoholic wherever requested.

DAGGETT & RAMSDELL IN NEW HOME

On May 1 Daggett & Ramsdell, manufacturers of a line of well known toilet preparations, moved into their new building recently completed at 214-216 West Fourteenth street, New York. The new structure, built on modern lines, provides ample floor space, abundant light and increased facilities that have long been needed, and also makes provision for the continuation of their growing business. Many new conveniences have also been installed by the firm to enable it to give superior service to the trade.

THE DRUG MARKETS

PROPOSED REVENUE BILL AFFECTS MARKET

Anticipation of Increased Duties Causes Prices to Advance—Saccharin and Essential Oils Score Higher Levels—Stocks of Botanicals Depleted.

NEW YORK, May 24—One of the dominating features of the market during the last ten days has been the discussion of the proposed war revenue bill, which has already passed the lower body of Congress and now awaits the action of the Senate. Many dealers, anticipating the retention of the proposed ten per cent ad valorem duty on imports, have already marked up their prices accordingly, while the proposed retroactive tax on alcohol for 1916 has tended to produce unsettled conditions in some quarters. Another phase of the situation is reflected in the belief of many that no excessive profits will be permitted by the Government on drug and chemical contracts, and as a result the trade is awaiting developments. As a rule all prices are tending upward, this tendency being accelerated by the fact that stocks of many articles are reduced to a minimum. All of these influences have affected such commodities as saccharin, essential oils, coumarin and many botanical drugs. As a matter of fact, peppermint oil is about the only domestic essential oil which is not scarce at the present time.

The number of advances in price is large and extends quite generally through the entire list. Among the more important upward changes are those for acetone, salicylic acid, alcohol, antipyrine, bromides, Oregon balsam of fir, cacao butter, caffeine, calendula flowers, cocaine, glycerin, grains of paradise, white hellebore, hexamethylenamine, insect powder, ipecac root, kola nuts, London purple, Paris green, lycopodium, most essential oils, saccharin, various sodium salts, tin chloride and distilled extract of witch hazel. Declines are noted in the prices of benzoic acid from toluol, star anise seed, balsam of Peru, resublimed betanaphthol, Russian cantharides, caramel, collodion, digitalis leaves, mercury, potassium chlorate, yellow potassium prussiate and spirits of turpentine.

OPIMUM—There has been no great change in market conditions, although stocks continue to be firmly held at the prices quoted last month, viz., natural, \$30@\$31 per pound, and granulated and U. S. P. powdered each at \$33.25@\$34 per pound. In London, according to recent advices, opium has marked another advance.

MORPHINE—This alkaloid and its salts are offered only in limited quantity, manufacturers being sellers in a small way only. Jobbers continue to quote sulphate at \$11.30@\$13 in 1-ounce bottles, and \$11.60@\$13.50 per ounce in eighths. Other salts of morphine are unchanged.

QUININE—Jobbing prices are unchanged at 80c@81c per ounce in 100-ounce cans, 83c@85c in 5-ounce cans, and 88c@90c in ounces. Arrivals of Java bark here have been reported as about to arrive and in a general way the market reflects an easier tone, but the statement that England is commandeering all but nominal stocks in that country is expected to have a strengthening influence on the situation.

CAFFEINE—Still continues on an upward trend, with offerings small and the market firm. Jobbers quote \$17@\$17.60 for the basic substance and \$9.50@\$10 per pound for citrated.

COCAINE—The growing scarcity of coca leaves, together with the reported inability of manufacturers to make deliveries, has caused quotations to be marked up for alkaloid to \$11.45@\$11.65 per ounce in 1/8-ounce bottles and \$9.10@\$9.15 for hydrochloride in 1-ounce bottles; in eighths 20c higher.

GLYCERIN—An active demand for C. P. and dynamite grades is reported for both export and home consumption. The prospect of a 10 per cent tax on imported crude glycerin as proposed in the new tariff bill, and the shrinkage in visible supply, are other features which have figured in the strong position this article occupies. Jobbers have advanced their prices several times during the last fort-

night and are now quoting 60c@62c per pound for bulk, drums and barrels added, and 64c@65c per pound in cans. For less, 68c@72c is asked.

COD LIVER OIL—Although the quotations for Norwegian of \$132@\$135 per barrel still obtain some interest is maintained in this article, owing to the small catch of fish reported in Norway, the yield thus far this season being 28,320 barrels as against 43,955 barrels for the corresponding period last year. Great Britain is said to have bought up the great bulk of this year's output, and many factors abroad refrain from quoting prices at all.

PARIS GREEN—The season's demand has been heavy and stocks have been sold well ahead. The higher price for arsenic has also influenced the manufacturing cost, and prices have been advanced to 55c@58c per pound. London purple is also higher at 20c@30c per pound.

SACCHARIN—The sale of 1,000 pounds to Russian buyers and other demands have cleaned up spot supplies, causing advance in prices, and jobbers are now quoting \$2.60 per ounce. Large buyers are experiencing considerable difficulty in locating supplies, while foreign goods are practically unobtainable.

ANTIPYRINE—Manufacturers are well sold out and prices rule firm in a large way. Jobbers are quoting \$1.50@\$1.60 per ounce.

COUMARIN—There is an acute scarcity and manufacturers' stocks are depleted. Quotations have been advanced to \$1.55@\$1.65 per ounce.

HEXAMETHYLENAMINE—Owing to the higher cost of formaldehyde used in manufacturing this article has been advanced to 95c@\$1 per pound.

ACETANILID—This compound is also higher, owing to the rising prices for anilin oil and acetic acid used in manufacturing. Jobbers quote 55c@60c per pound.

CELERY SEED—Cables from Marseilles report that the French Government has declared an embargo on celery seed, which has caused an advance in prices here to 45c@48c. France prohibited exports once before, but permitted shipments under special license, an arrangement which it is believed can not be modified, at least for the present.

CACAO BUTTER—All grades show an upward trend, although prices in a large way have been somewhat irregular, owing to the unsettled position of cacao beans. Jobbers quote as follows: Bulk, 44c@45c per pound; Baker's A and white, 48c@55c; Dutch, 48c@55c; Huyler's (in 12-pound boxes), 48c@55c per pound.

CAMPHOR—Refined is unchanged at 90c@95c per pound in bulk; 1/4-lb. squares, 92c@96c, and powdered, 90c@\$1 per pound. Reports of the Japanese Monopoly Bureau estimates place the output of camphor in Formosa this year at 11,616,000 pounds and receipts therefrom at \$3,165,475. The shipments to the United States last year amounted to 528,000 pounds each month, and it is stated that under the new contract recently effected between the Japanese authorities and American merchants, the monthly shipments would be increased to 1,056,000 pounds.

CANTHARIDES—The demand for Russian has been light and quotations are relatively lower than those of last month, sifted being held at \$4.25@\$4.50 per pound, and powdered at \$5@\$5.25 per pound. Chinese flies are quoted at \$1.50@\$1.60 for whole, and powdered, \$1.70@\$1.80.

POTASSIUM SALTS—There is a good inquiry for permanganate, which has been advanced to \$4.80@\$5.25 per pound; bicarbonate is also higher at \$1.55@\$1.75 per pound; chlorate is in a somewhat unsettled position, with prices tending lower, 56c@70c being asked for crystals, 78c@85c for granulated, and 57c@72c for powdered. Chlorate, of Japanese make, has been reported in this market. Yellow prussiate is also lower, \$1.35@\$1.45 per pound being asked. White caustic potash in sticks is held at \$1.80@\$2.

BROMIDES—A firm undertone has pervaded the market for all bromides, most of which show slight advances in price quotations. The revised schedule shows the following

changes: Ammonium, in 1-lb. bottles, 95c@\$.1.05; calcium, \$1.40@\$.1.50; lithium, \$3.25@\$.3.50; potassium, \$1.15@\$.1.35; sodium, 65c@75c, and strontium, 90c@\$.1.10. There is some inquiry for bromine, which in a large way is fractionally higher, but jobbers still continue to quote it at 10c@12c per ounce.

LYCOPIDIUM—Stocks are limited, and with reports of an unsettled condition in Russia, the country of production, the market is firm, with prices advanced to \$1.65@\$.1.75 per pound.

DIGITALIS LEAVES—Domestic is now in the market with prices somewhat lower than those prevailing last month, jobbers quoting 75c@90c for bulk, 80c@90c for powdered, and \$1@\$.1.20 for pressed in ounces. Supplies of imported leaves are scanty, English being held at \$1.25 per pound.

BAY RUM—The spot market is practically bare of round lots of Porto Rico, and a firmer feeling has developed in consequence of impending revenue legislation. Jobbers have advanced their prices to \$2.05 per gallon in barrels, and \$2.35@\$.2.60 for smaller quantities.

COPAIBA—All varieties are firmly held, South American being advanced to \$1.10@\$.1.20, and Para to \$1@\$.1.05 per pound.

BALSAM OF FIR—Canada has been advanced to \$1.20@\$.1.28 per pound.

BALSAM OF PERU—The market is firm, but a revision of prices shows a slightly lower range of \$4.75@\$.5.25 per pound.

CHAMOMILE FLOWERS—Roman or Belgian flowers are scarce and the market firm. Jobbers quote from \$1.70@\$.1.80 per pound.

FENNEL SEED—All varieties show a slight decline, large being quoted at 75c@80c and French and German at 35c.

HELLEBORE ROOT—Powdered white is in seasonable demand at higher prices, 31c@35c being asked.

NUTMEGS—Prices are irregular but tending upward with quotations at 35c@46c; large, 80 to the pound, 45c@50c.

ESSENTIAL OILS—All imported oils show a general advance in price quotations, as follows: Cajuput, \$1.20@\$.1.25; caraway, \$7@\$.7.50; cloves, \$2@\$.2.30; lavender flowers, \$5.50@\$.6; nutmeg, \$1.90@\$.2; rose (Kissanlik), \$26@\$.26.50 (per ounce). Synthetic wintergreen is quoted at \$1.40@\$.1.50 per pound.

IPECAC ROOT—Is \$2.70@\$.2.75 for whole Cartagena; powdered, \$2.80@\$.2.85. Rio is held at last month's quotations, \$3@\$.3.25.

MYRRH—Select gum resin is higher at 45c@50c a pound.

QUINCE SEED—Scarcity and some demand are responsible for the strong position of this article, which is held at 82c@\$.1 per pound.

WITCH HAZEL—The advance in the cost of alcohol and a seasonable demand have caused all manufacturers to mark up prices, and jobbers are quoting distilled extract at 68c@75c per gallon by the barrel and 76½c@94c for less.

SODIUM SALTS—Advances are noted for the following: Benzoate, \$8@\$.9 per pound; bicarbonate, 3c@7c per pound; cacodylate, \$2.80@\$.2.75 per ounce; cinnamate, 60c@70c per ounce; salicylate, \$1.35@\$.1.55 per pound.

JAPAN WAX—The market has shown a stronger feeling, owing to the proposed duty of 10 per cent on this article. Quotations have been advanced to 30c@35c per pound. The demand has been restricted, owing to the unsettled condition of the market.

SALICYLIC ACID—A firmer feeling is noted, and jobbers' quotations show an advance to \$1.45@\$.1.55 for 1-lb. cartons, and \$1.35 for bulk.

TANNIC ACID—Manufacturers have advanced their quotations for U. S. P. grade, with jobbers following at \$1.50@\$.1.80 for medicinal.

CALENDULA FLOWERS—Are now held at \$3.25@\$.3.50 per pound.

MERCURY—The demand has slackened and prices are easier, with jobbing quotations reduced to \$1.90@\$.2 per pound. Mercury cyanide is also lower at \$5.65 per pound.

ARRANGEMENTS FOR A. PH. A. CONVENTION

The Committee on Publicity for the forthcoming meeting of the American Pharmaceutical Association to be held in Indianapolis from August 27 to September 1 is calling upon every pharmacist to do his "bit" by making early arrangements to not only attend the meeting, but to join the association. The Government is asking the co-operation and support of all its citizens in all walks of life, and pharmacy needs the co-operation and support of all pharmacists. The A. Ph. A. convention this year promises to be one of the most important meetings in the history of the association.

The Claypool Hotel has been selected as headquarters, where rooms may be secured from \$1.50 to \$2 per day for one person; for two persons, \$3 to \$8 per day, while those who do not wish to stop at headquarters can secure rooms at the Savarin, the Washington and the Denison at the same rates. Other hotels within a short walk of headquarters are the Colonial, the English, the Grand, the Edward, the Linden and the Oneida, the rates being \$1 a day and upward.

ROBBERY EPIDEMIC IN OMAHA

Omaha, Neb., druggists are suffering from an epidemic of robberies which has recently been felt throughout the city. Almost every night one or more robberies have been reported, and they seem to go on in spite of all the police can do. The following thefts were reported in one night recently:

Jewelry and cigars, valued at \$25, were stolen from the Freytag drug store, 524 North Twenty-fourth street; Hill & Williams' drug store, Twenty-fourth and Cuming streets, was looted of \$12; the Johnson drug store, 3819 North Twenty-fourth street, was ransacked and perfumery and \$2.30 taken; drugs, cigars and a revolver comprised a burglar's haul from the Danielson Bros. pharmacy, Seventeenth and Cuming streets.

HUMPHREYS HOMEOPATHIC CO. WINS SUIT

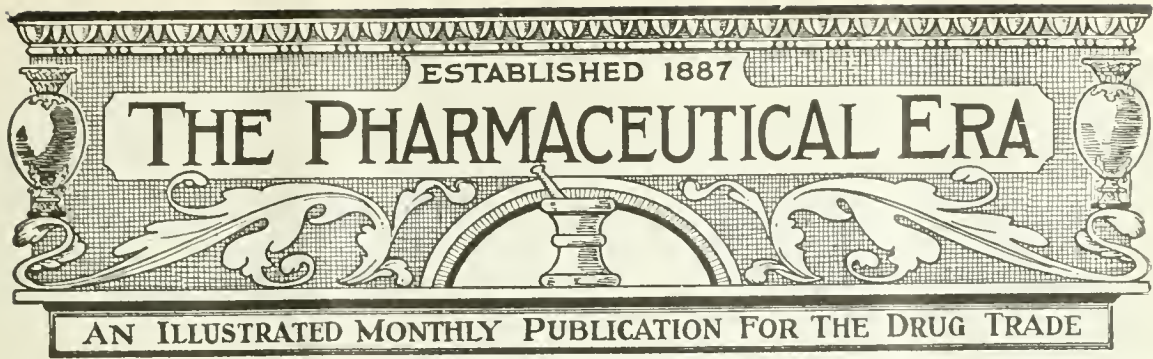
The Appellate Division of the Supreme Court, First Department, has unanimously decided that the judgment rendered by Judge Philbin on March 23, 1916, against Mrs. Helen Humphreys Jones and in favor of the defendants, in the suit brought by her against Humphreys Homeopathic Medicine Company, Frank Landon Humphreys, Frederic H. Humphreys and Herbert B. Harding, secretary and treasurer of the company, should be in all things affirmed with costs, and an order has been entered accordingly. This is a complete victory for the defendants. John F. Yawger of 55 Cedar street is the attorney for the Humphreys Homeopathic Medicine Company, Frederic H. Humphreys and Herbert B. Harding; and William H. Hamilton of Hamilton, Gregory & Freeman, 100 Broadway, is the attorney for Frank Landon Humphreys.

MAKING ALCOHOL FROM CALCIUM CARBIDE

The leading Swiss hydroelectric concerns as well as the Lonza (Ltd.) with its own big power stations at Gampel, Viege, Thusis, and Chevres have now finished their researches for the production of pure alcohol for industrial purposes out of calcium carbide through treatment with hydrogen and by the electrolytic decomposition of water. As the industrial production and sale of alcohol is under Government control in Switzerland the introduction of this new industry will be a joint work of the Confederation and the Lonza (Ltd.).

In spite of the abnormally high price of coal in Switzerland the Lonza will be able to sell the spirit of second quality at \$102.68 per metric ton of 2,204.6 pounds and the pure industrial spirit at \$108.04 per metric ton. That is far less than the Swiss Confederation pays now for imported spirit on the world market. Switzerland will thus become an exporter instead of an importer of alcohol.

The installations, with about 20,000 horsepower minimum and 30,000 horsepower maximum (summer time), will produce annually 7,500 tons of alcohol at minimum and 10,000 tons at maximum. The Confederation will take from this output about 2,500 tons minimum and 3,500 tons maximum. Further, the Lonza works will pay an indemnity of \$15.44 per ton for every sale made to Swiss manufacturers who up to now have imported foreign alcohol and paid import duties. The contract between the Lonza and the Government is for 20 years.



THE PHARMACEUTICAL ERA

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FOR AN ARMY PHARMACEUTICAL CORPS

In the mobilization of the country's resources, all industries, trades and professions have been called upon, inferentially, if not directly, to get in line and be ready to "do their bit." In answering this summons all citizens have shown their patriotism by enlisting for service, while others not liable for military duty have contributed their substance to uphold the doctrine that "the world must be made safe for democracy." The pharmacist in common with his fellow citizens has shown his interest in the contest in which we are now engaged, and he wants to know where he will best fit in and where his special training will be of most service to his country. Shall he shoulder a musket and take his chance at winning his promotion for a commission, or shall he go into the Hospital Corps of the Army where his education would be of some service, but where no professional recognition is given to his attainments?

These questions suggest the present outlook to many young pharmacists who have been considering their duty to their country and to themselves. If the Government were to create a "Pharmaceutical Corps in the Army" and in justice to the pharmacist such a corps should be created—the question would not be asked, for the pharmacist's duty and preference would be self-evident. The War Department has been opposed to the modification of existing lines of organization so as to include such a corps, largely because pharmacy as practiced in the Army has been very elementary. As a result, the pharmacist as a pharmacist has been ignored in the Army service.

That there has been a recent awakening in this direction becomes apparent to any one who has studied the situation. Only recently the *Journal of the American Medical Association* commented on the anomalous position of the pharmacist in the Army, and said that pharmacists should be given a rank commensurate with their importance, "first because it is but simple justice to themselves, secondly, because the usefulness of medical corps will be greatly augmented, and lastly, and most important, because the efficiency of our Army demands it."

There is an urgent need of pharmacists for this service and their status should be on a parity with that given to dentists, veterinarians, including physicians themselves and all those who have to do with the health and sanitary care of large bodies

of soldiers. The pharmacist of military age has a special fund of knowledge and training which will enable him to readily cooperate with medical officers, and in many cases, will relieve such officers of many duties altogether. As a student of chemistry and a compounder of drugs the pharmacist has a knowledge the physician cannot be expected to have, while in field or camp, hospital or laboratory, he has all the qualifications to render intelligent professional and patriotic service. Medical men are already awakening to the benefits which would accrue from such cooperative service, and pharmaceutical associations owe it to their profession to endorse the movement now under way for the establishment of a commissioned Pharmaceutical Corps in the Army.

LIQUORS IN THE DRUG STORE

The omission of whisky and brandy from the last revision of the Pharmacopoeia brought home the fact that these articles no longer occupy the place they once held in scientific medicine. To the revisers of the Pharmacopoeia, the question of suitable standards for these products was one thing; but to many the omission in result practically co-ordinated with the sentiment embodied in a resolution adopted at the recent meeting of the American Medical Association in this city which declared that it was the unanimous opinion of the council of health that alcohol has no drug value, either as a tonic or a stimulant, or in any other therapeutic way; that it has no value as a food or in the treatment of disease, and that its only legitimate use in medicine is as a preservative and in the preparation of pharmaceutical products.

Along with the growing conviction that spirituous liquors are no longer necessary as medicines, there has been advance in the progress of what has been somewhat irreverently called "bone dry" legislation, with the result that liquors for commercial purposes have been entirely eliminated from the drug stores in many States. Even their sale for medicinal, mechanical or sacramental purposes has been surrounded by so many details that many druggists would rather forego the profits that are to be made upon such sales than to attempt to carry out the laborious provisions necessary to legalize them. In South Dakota the druggists have been advised not to take out licenses even to keep liquors for they are permitted under the Internal Revenue law to carry in stock what they may need for the preparation of medicines, but which they are not to sell under any circumstances without being duly medicated.

Some druggists in various parts of the country who have always carried liquors in stock have been inclined to look upon such regulations as a hardship and as an infringement of personal liberty. But so far as we can judge, a large majority in the trade are really glad to rid themselves of the responsibilities of selling liquors. As a financial proposition, the returns have never justified the risks attending such sales, and the "taboo" that has been put on the business by the medical profession, or at least by the scientific investigators and progressive representatives of that calling, is looked upon as

a good excuse for ridding themselves of an unsatisfactory business. Further prohibitory legislation by Congress is to be expected but its effect on the drug trade will be in the direction of increased prices which the druggists will have to pay for the alcohol he uses in manufacturing, for alcohol is needed and will be needed in the arts and industries until some future savant shall find a solvent that will take its place. As a medicine *per se*, it appears, at least, for the present, to have passed its period of greatest use.

OWL DRUG CO.'S EASTWARD MARCH

The extension of the chain drug store system is again being exemplified in the record that has been made by the Owl Drug Company, which was started with one store in San Francisco in 1892. This was followed at various periods by the installation of stores in Los Angeles, Oakland, Seattle, Portland and various other towns until last year an aggregate of twenty-three stores in twelve cities on the Pacific Coast was reached. Casting its eyes eastward, the Rockies were crossed, and in June this year the company opened stores in Milwaukee and Chicago. It now announces that it expects to establish stores in St. Paul and Minneapolis in September, and will then continue its extension until the chain is completed in New York. The dominant personality behind this achievement is R. E. Miller, who, as president and general manager of the company, was present at the beginning of the business and now bids fair after twenty-five years to prove, at least in his case, the reversal of Berkeley's familiar line, "Westward the course of empire takes its way."

DISPOSITION OF GERMAN PATENTS

The introduction of several bills in Congress during the past month indicates that some legislation will be enacted relative to the disposition of German patent rights in this country during the continuance of the present war. That the subject presents many angles of approach is obvious from the character of the various bills presented, as also from the various expressions of opinion by those who have studied the subject. That there has been a grave need of a number of medical preparations in this country protected by German patents, is a matter of common knowledge, and to supply these preparations some have gone so far as declare that Congress should absolutely revoke all rights heretofore granted to alien enemies by patent, reasoning that the profits accruing therefrom benefit no one but the enemy owner or owners.

Two bills before Congress which have received some attention are those introduced by Senator Nelson, of Minnesota, which is designed to permit Government manufacture of salvarsan, and by Senator Pomerene of Ohio, which would give to the Secretaries of War and the Navy power to contract for the manufacture of drugs which are protected by patents, when such drugs are considered necessary for the health of the military service or the general public. Still another measure, introduced in the House by Representative Adamson, provides that any citizen of the United States or any corporation

desiring to manufacture under any patent owned by an enemy or an ally of an enemy may apply to the Federal Trade Commission for a license, provision also being made for a license fee and other details. It is believed that some legislation of this character is sure to pass, but as to what arrangement should be made to safeguard the best interests of the country is as yet unsettled.

From a broad view of the subject it is doubtful whether anything would be gained by abrogating all patents held by Germany. As is wellknown, many American citizens are the owners of mechanical and electrical patents used in Germany, and in financial returns, the earning power of these patents is much greater than that of the German patents in this country. It would seem, therefore, a proper move for the Government to provide some way by which the manufacture of the needed products could be undertaken by granting licenses for the purpose, and also by providing that such manufacturers should give a bond for the faithful performance of the contract, and that a certain percentage of the profit should be turned over to the Government to cover any settlement the Government might find necessary at the conclusion of the war.

Certain phases of the handling of patents owned by enemy aliens have been worked out by the British and French Governments, and in no case, so far as we know, has either of them gone so far as to completely abrogate the rights held by a citizen of an enemy country. On the contrary, Great Britain has granted certain manufacturing rights in products covered by German patents to her citizens, but this has been done in a manner that will insure an accounting at the cessation of hostilities, if such may be necessary, and in the meantime has made it possible for the country to get those articles which it badly needs. As we see it, the sentiment in the trade seems to favor the Government authorization of the use of patents owned by aliens, under such regulations as will protect our interests and at the same time, return to the owners a reasonable royalty after the war is over.

CO-OPERATIVE BUYING IN OTHER LINES

That the co-operative buying movement among merchants in other lines than drugs seems to be growing is manifest in the branching out of the United Jewelers, Inc., a corporation with headquarters in New York, but which was organized in January, 1914, in Chicago. The plan followed by the concern is similar to that of the United Drug Company, the stores of the Jewelers corporation being known as "Hallmark" stores, the members being retail jewelers only one in a town being admitted. From *Printer's Ink* we learn that the association will start next Fall its first national advertising campaign in which it hopes to make the public acquainted with Hallmark goods; divert much mail-order business to local Hallmark stores, and secure new members. It also hopes to increase the merchandizing efficiency of its members. Louis K. Liggett is chairman of the board of directors, but it is stated that the United Jewelers has no connection with the United Drug Co. Co-operative organizations in various lines of

trade are not new to the merchants of this country, and their history has not always spelled success. But not a few have carried on the work for which they were created to the satisfaction of those identified with them. In this class must be placed many of those buying clubs generally designated as "co-operative wholesale druggists."

JULIUS O. SCHLOTTERBECK

In the death of Dr. Julius O. Schlotterbeck, the College of Pharmacy of the University of Michigan not only loses its dean, but pharmacy loses one of its most distinguished workers and a scientist of repute. Following in the footsteps of the late Albert B. Prescott, first dean of the first university to provide a school of pharmacy, he upheld all of the best traditions of scientific instruction, at the same time possessing in high degree the executive ability which gained for him the honor and respect of students and fellow instructors. His work in the Scientific Section of the American Pharmaceutical Association, and in connection with the revision of the Pharmacopoeia, was inspired by the spirit of scientific research, while as a member and president of the American Conference of Pharmaceutical Faculties he did much to help raise the character of pharmaceutical instruction in the United States.

POISON GASES IN TRENCH WARFARE

The exact composition of the gases used in modern trench warfare is not known, but from the appearance, odor, and effects on the men it would seem that most commonly a mixture of chlorine and bromine is employed; possibly at times with the addition of sulphur fumes or formaldehyde gas. Chlorine and bromine are produced cheaply and in large amounts by the Germans as by-products of other industries. They are among the most active chemical agents known, attacking the eyes, and lining of the mouth, throat and nose. They first produce a hard cough, followed by the spitting of blood and finally asphyxiation, due to the destruction of the breathing apparatus. Only one part of chlorine or bromine in one thousand parts of air is necessary to produce almost instant death; one part in one hundred thousand, if endured for any great length of time, is very dangerous.

For use in the trenches the gases are usually liquified and stored in tanks from which the outflow is regulated by means of a valve. If the ground slopes a little towards the enemy and the wind is in the right directions, the gas, being heavier than air, flows over the ground, filling the hollows like so much water.

The most successful method for combating the gas attacks is by the use of a gas mask. The modification now employed is a hood, provided with a mica window, that fits down over the head like a bag, buttoning between the vest and shirt. When the first indications of an attack are evident the hood is moistened with a solution of sodium hyposulphite (the photographer's "hypo"), which combines with the gases, rendering them ineffective. Because of the large amount of gas required to poison the constantly changing air an attack is only of a few minutes' duration. In case one is overcome by the gas, inhalation of dilute ammonia vapors will give great relief, since the ammonia combines with the gas in the bronchial tubes and relieves the difficulty of breathing, although it does not undo the injury already done.

Because of the cruel suffering inflicted upon the enemy the use of poisonous gases in projectiles was foresworn by the signers of the Hague declaration of 1899. The first gas attacks of the Germans took the enemy by surprise and inflicted great losses and an untold amount of suffering. Since then the masks have been so perfected that the troops have lost most of their fear of this ruthless form of battle, thus again emphasizing the fact that this is a war fought by science.

The cork industry in the Barcelona consular district is chiefly associated with the towns of Patafrugell, San Feliu de Guixols, and Palamos. The cork bark is gathered from various parts of Spain and made into manufactured articles at the points mentioned. Under normal conditions 90 per cent of cork goods is exported, and the exports are valued at some \$8,000,000 annually.

Standard for Liquor Alumini Subacetatis

By Dr. JOSEPH L. MAYER

AN analysis of a commercial sample of Liquor Alumini Subacetatis N. F. IV., which I recently made yielded 2.93% Al_2O_3 . This result being so far in excess of the limits of the N. F. standard, which states that "each gramme of solution of aluminum subacetate corresponds to not less than 0.02363 Gm. nor more than 0.02521 Gm. of aluminum oxide (Al_2O_3)," I personally made up one-fifth the N. F. quantity of the solution and upon assaying it found 2.869% Al_2O_3 . This solution was made strictly according to the directions of the N. F., the solid constituents being weighed on an analytical balance and the liquids accurately measured. The mixture, after standing several days, was filtered and the specific gravity of the liquid, determined at 25° C. by a pycnometer with a thermometer stopper, was 1.0590. Water was then poured on the filter and the specific gravity of the liquid obtained was 1.0555. The proper quantities of both solutions were mixed, the finished preparation having the specific gravity of 1.04493 at 25° C. (N. F. specifies 1.045 at 25° C.).

The various materials employed in manufacturing the preparation were tested with the following results: The aluminum sulphate assayed 101.326% $\text{Al}_2(\text{SO}_4)_3 + 16\text{H}_2\text{O}$; the acetic acid assayed 36.797% CH_3COOH , and precipitated calcium carbonate assayed 98.528% CaCO_3 , the salt being previously dried at 200° C. These results and qualitative tests as applied indicated that the materials met the official requirements.

Knowing that the National Formulary formula was patterned after that of the German Pharmacopoeia, I then made up a sample of solution of aluminum-subacetate according to that authority, and upon assaying it found 2.841% Al_2O_3 . This result, which is practically identical with that obtained from the N. F. formula (2.869% Al_2O_3); was to be expected in view of the fact that both solutions are practically identical.

The Pharm. Germ. employs 120 parts of diluted acetic acid which contains 30% absolute acetic acid. The N. F. formula employs 100 parts of acetic acid, U. S. P., which is 36% and consequently the quantities of absolute acid employed are identical. The Pharm. Germ. aluminum sulphate contains 18 molecules of water, and the N. F. but 16, and in making the solution this fact was taken into consideration. The specific gravities of the Pharm. Germ. are directed to be taken at 15° C. and accordingly these specific gravities were determined at that temperature.

Since neither the N. F. nor the Pharm. Germ. make any mention of whether a porcelain or platinum crucible should be employed, or specifically state whether the oxide should be blasted, the following work was undertaken:

In all of the determinations 4 Cc. of solution of aluminum subacetate were accurately weighed, employing a glass stoppered weighing bottle; 1 gm. ammonium chloride added and enough distilled water to make 250 Cc. To this solution 2 drops of methyl red indicator were added, and the solution heated to boiling, sufficient freshly redistilled ammonia water being added to produce neutrality. In addition to employing Nonsol beakers the material, after being boiled about one minute, was immediately filtered to avoid any possible contamination with silica.

In one series of determinations the material was filtered by means of suction through a layer of asbestos in a porcelain Gooch crucible which, with its cover, had previously been heated three hours over a No. 2 Meker burner. The crucible containing the aluminum hydroxide was heated over an ordinary Bunsen burner at the start and then with the Meker burner for three hours, cooled in a sulphuric acid desiccator and weighed. A further heating of an hour showed no appreciable loss. The assay indicated the presence of 2.869% Al_2O_3 . In this determination the precipitate was washed with hot distilled water until free from chlorides.

In another determination the material was filtered through a Baker and Adamson hydrochloric and hydro-

fluoric acid washed 11 Cm. filter paper having an ash of 0.00005 gramme per paper, the moist paper containing the precipitate without washing with more water than necessary to transfer the precipitate being then placed in a Royal Berlin porcelain No. 00 crucible which with the cover had been previously heated over the Meker burner for three hours. The crucible with the precipitate was gently heated over the Meker burner. The weight was practically constant after three hours heating. The result indicated the presence of 2.88% Al_2O_3 .

In another determination the aluminum hydroxide with the Baker and Adamson filter paper through which it had been filtered, was transferred to a platinum crucible which with its cover was blasted for twenty minute periods. When the weight became constant, the result indicated the presence of 2.890% Al_2O_3 . Due to the fact that Al_2O_3 is very hygroscopic the crucibles were cooled and weighed with covers.

Hillebrand (U. S. Geol. Survey Bull. 422)-Dandt (J. Ind. Eng. Chem. 7,847) and Sidener & Pettijohn (J. Ind. Eng. Chem. 8,714) have shown that contrary to general belief, aluminum hydroxide need not be washed free from ammonium chloride for as there is no loss by volatilization upon ignition, washing free from chlorides is unnecessary. The above results obtained when the precipitated aluminum hydroxide had not been washed with more water than was necessary to transfer the precipitate from the beaker to the paper is further proof, if any be needed, to show that washing is unnecessary.

The National Formulary is a legal standard and consequently a defect in it is liable to subject pharmacists to legal prosecution. The N. F. Revision Committee should therefore give solution aluminum subacetate its attention and in the next edition make the necessary changes.

Summary

1.—The formulas of the National Formulary IV. and the Pharmacopoeia Germ. V. are practically identical and yield upon assay about the same amount of residue calculated as Al_2O_3 .

2.—In the assay the thorough washing of the precipitated aluminum hydroxide is unnecessary.

3.—Igniting the precipitated aluminum hydroxide in either platinum or porcelain crucibles yields the same results.

4.—Ignition over a Meker burner for three hours yields results identical with blasting the precipitate.

5.—The National Formulary IV. standard for solution of aluminum subacetate, if based upon the method of assay weighing as Al_2O_3 , is too low: in place of "Each gramme of solution aluminum subacetate corresponds to not less than 0.02363 Gm. nor more than 0.02521 Gm. of aluminum oxide (Al_2O_3)," the solution yields practically 0.0300 gramme (2.882%). The book being a legal standard the committee of revision should give this solution its attention.

Since writing the above paper I saw a short abstract in the Yearbook of the American Pharmaceutical Association (1912, Page 46) of an article on Liquor Alumini Acetici, G. P. V. by E. Woolschlaeger. Referring to the Pharm. Ztg., 1912, page 796, in which the original article appeared, I find a series of results for Al_2O_3 , where the Pharm. Germ. solution was tested, the results being about the same as those obtained by myself. Woolschlaeger's suspicion that the material weighed as Al_2O_3 was contaminated with CaO was proved by qualitative tests to be a fact. He then made a gravimetric determination of Calcium in the residue which, weighed as Al_2O_3 , amounted to 0.307 gramme per 10 grammes of solution and found that 0.045 gramme should be calculated as CaO which left 0.262 grammes to be reported as Al_2O_3 . He concluded that "If the aluminum content of the solution is to be calculated from the residue upon ignition it is necessary to deduct from the quantity of residue calculated as Al_2O_3 the CaO found."

* Read before the New York State Pharmaceutical Association.

Woolschlaeger's article, which is quite lengthy, gives methods for qualitative and quantitative determination of calcium in the residue weighed as Al_2O_3 , discusses the volumetric method of assay, the question of the presence of calcium acetate and sulphate, and of a test for determining whether the solution is properly made and really contains the subacetate.

PHARMACY IN THE WAR

By H. M. WHELPLEY, St. Louis, Mo.*

TWELVE months ago, we met here and expressed privately our opinions of the human slaughter then going on in the old world. Since then, the war cloud has extended until it is now easier to name the countries that are at peace than it is to enumerate the ones engaged in the greatest and gravest of all human conflicts. One year ago, we congratulated ourselves that the United States was not in the struggle. Now, we are preparing to enact the most important part in "making the world safe for Democracy." These are, indeed, momentous days. The entire Western World will likely be a participant in the contest before our next Mo. Ph. A. convention. The six weeks' war which was started in 1914 may continue far past that number of years. These are thought-provoking times for every citizen. The words "citizen" and "alien" have assumed a new and grave significance. It is not difficult to recognize



H. M. WHELPLEY

our duty to our country and to the human race in our determination of "setting the world free." But we are pharmacists by training and occupation. The retailer has long practised serving the public. How can pharmacists now serve their country? What more have they to offer than physical fitness and eligible age? Will the pharmacists of the United States, as the years of war go on, be found digging trenches "somewhere in Europe" or will they contribute service dependent on pharmaceutical skill and knowledge?

Unfortunately, our own government does not give pharmacists the recognition in a war that they receive in France, Italy, Japan and Germany. But that recognition may come before this long drawn out war is over. To-day, the pharmacist has the best opportunity for service in the navy. He also has a place in the army and one in the Public Health and Marine Hospital Service. All young men now in pharmacy, and particularly those just entering as apprentices should make certain of having sufficient preliminary education. They should push their studies in pharmacy at college or at home, as the case may be. Those who cannot enlist will find plenty to do without going to war. The cry for drug clerks is already loud and will become more insistent as the drafts follow each other. The Medical Section of the Council of National Defence is pleading with physicians to enlist. We do not hear a government cry for more pharmacists but this country is just approaching participation in the war.

We are equally concerned with problems affecting the pharmacists who remain at home to follow their calling. It is needless to say that they will be affected by all general taxes, food regulations and other conditions imposed on the public at large. The special taxes on the business and high cost of drugs the druggist should be able to pass on to the consumer, where they belong. I regret that some retail druggists continue even at this late date to sell drugs at figures based on original cost instead of market value. One druggist disposed of his entire stock of potassium permanganate at less per pound than he can replace the chemical per ounce. Similar cases occur daily in spite of drug price lists and market reviews. Pharmacists are quite as likely to make a success of a drug garden as they are to glut the market from a home truck garden, but that is not saying much. No one should attempt a drug garden

before consulting with the government Department of Agriculture, at Washington. In England, the British government reports quite as much success in harvesting wild drugs as in cultivating plants. It must be remembered that England has a much more restricted flora than is the case in the United States. We have a long list of indigenous drugs and climate, latitude, altitude, etc., for the growing of many exotic plants.

Now, to be more personal, I bring home to you the duty we owe the Mo. Ph. A. which secured our original pharmacy law of 1879 and for nearly forty years has had a hand in all pharmaceutical progress in Missouri. War or no war, we should continue to develop and expand the organization. Here we can solve practical questions in a practical way.

One form of recognition which our government has recently given pharmacy is to use the laboratories and faculties of certain colleges of pharmacy for testing medical supplies. This is done in lieu of establishing government testing laboratories.

Now, in conclusion, this horrible war is waged to make the world better and mankind secure from molestation. At the same time, let us gain for pharmacy a just position and recognition. We bewail the fact that our government is far behind Japan in using in war the talents of pharmacists. I quite agree with Hugh Craig, when he says, "The pharmacist has been so careless of his position in the social economy as to leave the public ignorant of his deserts."

PROPOSED RULINGS ON BOTANICALS

The officials in charge of the enforcement of the Federal Food and Drugs Act have found certain impurities in unicorn root, dandelion root, and cramp bark. In order that the trade may know what the United States Department of Agriculture regards as adulterants of these products it is proposed that service and regulatory announcements be issued outlining the opinion of the department. Before issuing the service and regulatory announcements the department desires to obtain the views of the trade or other interested parties as to the fairness of the rulings. Communications should be addressed promptly to the Bureau of Chemistry, Department of Agriculture, Washington, D. C. All criticisms will receive careful consideration. The proposed announcements follow:

Unicorn Root

Samples of true unicorn root, *Aletris farinosa*, obtainable in interstate trade, have been examined. As a result of this study it was found that excessive amounts of total ash and acid insoluble ash (sand) were present. In a few instances the limit of 16 per cent given in the new National Formulary was exceeded. The bureau is of the opinion that material properly collected should contain not more than 10 per cent of total ash, and the amount of insoluble ash should be considerably below 5 per cent. Of special interest is the fact that one sample which contained about 3 per cent of true unicorn root consisted otherwise entirely of false unicorn root, *Chamaelirium luteum*. The department will regard as adulterated or misbranded under the Food and Drugs Act any unicorn root containing total ash in excess of 16 per cent or which contains material other than true unicorn root, *Aletris farinosa*.

Dandelion Root

Examination of samples from a recent importation of dandelion root disclosed the presence of about 40 per cent of roots the interior of which were badly discolored and did not show a porous, pale yellow wood, as required by the United States Pharmacopoeia, IX, 1916. The appearance suggested that the material had been improperly dried. This fact was confirmed by microscopic examinations showing swollen grownish yellow masses indicating that the inulin masses had been partially hydrolyzed and caramelized. The department will recommend the exclusion from the United States of any importation of dandelion root which, upon examination, is found to contain more than 10 per cent of discolored or improperly dried roots.

Use of the Term "Cramp Bark"

The bureau considers that the term "cramp bark" applies only to *Viburnum opulus*, now official in the National Formulary, and consequently should not be used for barks from other sources or their preparations.

* Read at the 1917 meeting of the Missouri Pharmaceutical Association.

N. A. D. C. CONVENTION

The National Association of Drug Clerks held its seventh annual convention in the Auditorium Hotel, Chicago, on June 7, 8, and 9. A drug exhibit was held, there being 87 exhibitors and an attendance of a little more than 8,000. At the banquet 228 persons sat down, speeches being made by Frank Butler of the Illinois Board of Pharmacy, Thom Potts, secretary of the N. A. R. D., John J. Conroy of the Illinois Board of Pharmacy; M. A. Stout, an ex-president of the N. A. R. D.; Dr. Brose Horn of Gas City, Ind.; Dean George Second of the Central States College of Pharmacy; Henry J. Steining, first vice-president of the N. A. D. C., and Paul J. Mandabach.

Among the resolutions passed during the three day convention was that commending the Stevens-Ashurst bill on pricing, and also commending the President for his speech urging that the American business man be safeguarded from unfair competition. The convention also adopted a resolution praying that Congress consider the elimination of the proposed taxes on cosmetics and patent medicines.

Another very interesting and important measure adopted was one to start a campaign to abolish the "saloon-drug-store" and the stamping out of the evil as far as possible. The association also rapped drug clerks who sell liquor under such conditions and asked the public to aid in the fight against such sellers. Still another resolution, important to the retail drug trade was one in which the clerks asked for higher wages. The association pledged its members to bend all their influence so that the commonly adopted scale of wages for registered clerks would be higher than it is now. Conspicuous display of certificates was urged, and the convention passed a resolution asking that every effort be made to have the states adopt prerequisite education laws.

The association passed a resolution calling upon its members to co-operate as far as it could in the Liberty Loan subscription, pledged itself to support the Universal Training bill, to do all in its power to help the country in the time of strife, and to aid the army that will be sent to France.

Officers for the coming term were elected. Those chosen and the standing committees chairmen appointed were: P. F. Coffey, president, Chicago; Henry J. Steining, first vice-president, Lafayette, Ind.; Frederick J. Killalee, second vice-president, St. Louis, Mo.; W. G. Goodyear, third vice-president, St. Petersburg, Fla.; P. A. Mandabach, secretary and treasurer, Chicago, Ill.; J. F. Miser, national organizer, Columbus, Ohio; Raymond A. Cavanagh, counsellor-at-law, Chicago, Ill.; Cline C. Brosius and Alexander C. Mabee, consulting attorneys, Chicago, Ill.; Paul J. Mandabach, editor-director of publicity, Chicago, Ill.

A. M. A. MEETING

THE place of medicine in the army, and the relation between the medical profession and the war was one of the chief as well as most interesting subjects discussed at the recent annual meeting of the American Medical Association in New York. The convention itself, in spite of the war, was one of the largest ever held, and the men and women who attended expressed themselves as greatly enthused over the work done last year and planned for the future.

Perhaps the most important event, which has a martial connection of interest to the pharmaceutical profession, that occurred, was the very nearly unanimous passage of a resolution in the section on pharmacology and therapeutics and later in the House of Delegates dealing with the pharmacist in the war. Dr. R. A. Hatcher of New York, introduced the resolution.

"It is a fact that the Medical Corps loses in efficiency," he said, "because there is no trained pharmacy corps. At present, trained pharmacists, who are certainly of great assistance to medical men in wartime, may not enlist in ranks suitable for them. They must sign the rolls as privates and hope for promotion to a rank that will permit them to exercise their ability and training. I do not believe that such a plan means the best and most efficient work in the corps."

He therefore offered the resolution which asked that the War Department organize a corps with Congressional enactment that will have definite army standing commensurate with the training and profession of pharmaceutical men. Several members of the section thought that an expression of opinion was not advisable in the resolution, but such amendments were defeated, and the resolution was finally passed almost unanimously.

Section Meeting Important

That section held some of the most interest and important meetings of the entire convention. Dr. Cary Eggleston of New York read an interesting paper on the use of digitalis, while another paper of interest was one entitled "Co-operation Between Pharmacology and Therapeutics" read by Dr. Albion W. Hewlett of San Francisco. Dr. Hewlett took the time, he explained, to urge a closer fellowship and relation between pharmacist and doctors and to a certain extent urge reciprocity. He pointed out that both professions covered, in a measure, the same fundamentals, and insisted that both could thrive with more success if the men and women who practise them could be brought closer together.

The following officers of the section were elected: Chairman, Dr. Arthur D. Hirschfelder of Minneapolis; vice-chairman, Dr. Walter A. Bastedo of New York; secretary, Dr. Cary Eggleston of New York; delegate, Dr. Albion W. Hewlett of San Francisco; alternate, Dr. Torald Sollman of Cleveland.

War Atmosphere Strong

Throughout the convention there was an air of conscientiousness and efficiency. It was plain to see that the thousands of medical men who were present felt the pressure of war, and a great many of them announced their intentions of "doing their bit" in France as soon as possible. One of the features of the general convention was the scientific exhibit held in the roof garden of the Astor Hotel. Here several hospitals were represented, and showed examples of new sanitary work, new healing work, new medical plans and new methods of procedure which were eagerly watched by the doctors.

The commercial exhibit also attracted a great deal of attention. Most of the large pharmaceutical companies of the country had exhibits in the main floor ball room of the Astor.

The following officers for the A. M. A. were elected: President, (1916-17), Rupert Blue, Washington, D. C.; president (1917-18), Charles H. Mayo, Rochester, Minn.; first vice-president, L. F. Barker, Baltimore; second vice-president, John Leeming, Chicago; third vice-president, J. Henry Carstens, Detroit, Mich.; fourth vice-president, George F. Keiper, Lafayette, Ind.; secretary, Alexander R. Craig, 535 N. Dearborn St., Chicago; treasurer, William Allen Pusey, Chicago. Chairman, House of Delegates, Hubert Work, Pueblo, Colo. Vice-chairman, House of Delegates, Dwight H. Murray, Syracuse, N. Y.

Board of Trustees: Philip Marvel, Atlantic City, 1917; W. T. Sarles, Sparta, Wis., 1917; M. L. Harris, Secretary, Chicago, 1918; W. T. Councilman, Chairman, Boston, 1918; Thomas McDavitt, St. Paul, 1918; A. R. Mitchell, Lincoln, Neb., 1919; E. J. McKnight, Hartford, Conn., 1919; Oscar Dowling, Shreveport, La., 1919. Editor and General Manager: George H. Simmons.

BOARD DEFINES TEMPORARY ABSENCE

Under the authority granted by the law to make by-laws and rules for the proper fulfilment of its duties, the New Jersey Board of Pharmacy recently ruled that the phrase "the temporary absence" provided for in section 4 of the New Jersey pharmacy law shall not be construed as permitting a registered assistant to be in charge of a pharmacy for a longer period than eight hours in any particular twenty-four hour period. As a result of the quarterly examination held in Trenton in April, twenty-nine applicants successfully passed as registered pharmacists, and seventeen as assistant pharmacists. The next examination will be held at the State Capitol, Trenton, on July 19, and 20. Applications must not only be presented to the secretary of the board, Edgar R. Sparks, Burlington, N. J., at least ten days previous to the date of examination, but must have been accepted by the board, otherwise applicants will not be admitted to examination.

A Really Progressive Store in Indiana

Courtesy and System Bring "Big Results"

INDIANA Harbor, Indiana, is the sort of a town known as a "boom town." It grew up in a hurry, and a retail drug business that grew up with it is assured of a bright future. B. C. Lukens, who owns the Central Drug Store in the city went there nine years ago. It was a very small town, and he had a remarkably small store. His progress has been rapid, but it has been successful because he kept just a little ahead of the town, and while growing with it, gave his trade something just a little better than they had a right to expect.



B. C. LUKENS

The Central Drug store has been making money for several years. Mr. Lukens is wholly responsible for this success because his attitude has been one of progress. He has advertised and he has helped the town. He has sold good goods and he has done everything for the comfort of his patrons. Even in the big cities one seldom finds a women's rest

room in a retail drug store, for instance, but in the Lukens store that is a feature. And while women are resting in the room, they may enjoy a phonograph concert, for Mr. Lukens has placed a machine apart to entertain the customers and others who may be in the store.

It is no new thing for a drug store man to go out of his way to make his trade comfortable. But Mr. Lukens goes further than that. He makes his visitors comfortable, for he has an idea that if a person comes in merely to see, and is entertained and greeted in a hearty and interested way, he'll come in, shortly, to buy in a hearty and interested way. How well his scheme has worked out may be seen

from the fact that the store does the largest prescription business in the state, and that it sells an average of 3,000 big city, out-of-town newspapers daily.

The store has a system in selling, as all good stores should have. "Courtesy and System" are the watchwords and Mr. Lukens has seen to it that everyone of the people employed about the store know those two words. He will go out of his way to help a customer but he will go further out of his way to see that a dissatisfied customer is made happy and pleased again. This theory of business has enabled him to have one of the most beautiful as well as busiest stores in the state.

All the wall cases—and those are all that are used except in the cigar counter—are electrically lighted and are built with white opaque glass. They are all built on specifications and are made to fit the particular department of the store for which they were designed. The S. S. Cox Company made them. Special methods of display form part of the features of the store. The stationery counter, for instance, is arranged so that no clerk, even on the darkest night, can confuse different lines. There is no possibility of mistake.

One of the real features of the business is the front of the store. Here is an especially equipped counter on which are displayed each day the daily papers from Indianapolis, Chicago, Cleveland and other large cities. Mr. Lukens early made it his business to get the sole agency for the papers in Indiana Harbor and that has increased his drug business proportionately. Then, too, there is a magazine stand which is supplied with every magazine for which any resident calls. A customer has only to suggest a magazine and if it is not on the counter, Mr. Lukens sees that the next issue gets there and gets a prominent place.

The theory that a satisfied customer is a happy customer is followed out in the back of the store where the new up to the minute soda fountain is situated. The bar is a beauty and none but the purest of pure drinks are ever sold over it. Here, too, Mr. Lukens has thought of the trade, for he has placed one of his phonographs in such a way that a customer has only to start the machine



THE B. C. LUKENS STORE

and will be entertained during his stay. Mr. Lukens makes it a point to keep a stock of good records always on hand and the customers are at liberty to use them whenever they see fit.

The rest room is one of the best features of the store. There are writing tables and paper, large comfortable chairs, wash rooms, and a telephone always at the service of the women customers. Then too, the rest room is near enough to the phonograph display to enable Mr. Lukens to use the concert as a further inducement for women to trade in his store.

All this means that he must keep a large force of help. He is always on the job as supervisor but he also has four registered pharmacists, two expert soda dispensers, one newspaper and magazine clerk, two cigar clerks, two floor men, two colored porters, a stenographer and a book-keeper. There is also a delivery man and an advertising man who handles the show cards and window trim.

The prescription department is one of the most efficient in the state. It has been brought forward until the doctors and patients alike use it with enthusiasm. It has been worked out with great system and the very greatest care is taken that every prescription shall be accurate and correct in every detail.

Mr. Lukens has been in the drug store business since 1885. He had his early training in Huntington with Bradley Brothers; Goshen with D. H. Hawks and South Bend with Otto C. Bastian. Nine years ago he went to Indiana Harbor and as he expresses it "grew up with the town."

PROPOSALS FOR MEDICAL SUPPLIES ARE SUBJECT TO STRICT CONDITIONS

Instructions to Manufacturers Issued by the Field Medical Supply Depot, U. S. Army, Explain Re- quirements Affecting Contracts—Right to Increase or Decrease Orders.

The Field Medical Supply Depot, United States Army, Washington, has issued a statement of the conditions under which bids for supplies will be received and contracts made for future delivery. In view of the great quantities of pharmaceutical products, that will be needed and the fact that proposals have just been requested for early shipment of items prepared under the advice and supervision of the Committee selected at the recent conference of pharmaceutical manufacturers to represent their interests, the instructions to bidders are here given in full:

1. Proposals will be received for one or more of the items specified.
2. The Government reserves the right to reject any or all bids or any part thereof; also, in accepting a bid, to order less quantities of any or all items than those specified, or, with the bidder's consent, greater quantities, not exceeding, however, in any one item, an increase of 50 per cent; in case of a contract, the Government reserves the right to increase or decrease, not exceeding 50 per cent, ten days before completion of delivery.
3. The NET price is to be stated, per bottle, pound, or other unit, as indicated after each item, after all deductions for cash or any discount.
4. The price is to include all necessary bottles, tins, cartons, boxes, packings, etc., and delivery at this depot free of all transportation charges. The containers and packings are to be new, and of uniform and appropriate make and size. All packing boxes and crates to be made from seven-eighth-inch material (finished size.) When articles are ordered from non-resident dealers, they should be shipped by the shortest route and be plainly addressed: FIELD MEDICAL SUPPLY DEPOT, U. S. ARMY, WASHINGTON, D. C., and a memorandum invoice showing the number and date of the purchase order, and the contents of the shipment, should be forwarded in time to reach this depot in advance of the goods. Each shipping package must be marked with the number of the purchase order, the name of the contractor, and a list showing the exact contents of the package; these marks are necessary for identification.

5. Articles bought on sample must be equal to it. The quality and character of preliminary samples will be ascertained by such tests as the Government may choose, conducted by its officers. The quality and character of all articles delivered under awards made on this circular will be ascertained by similar tests of samples taken by the Government at random from lots delivered. Drugs and medicines for which a standard is established by the latest edition of the U. S. Pharmacopoeia must be in accordance therewith. Other articles must conform to the specifications. All articles will be subject to rigid inspection before acceptance.

6. Preference will be given to articles of domestic production or manufacture, conditions of quality and price (including in the price of foreign production and manufactures the duty thereon) being equal.

7. Each proposal should give the place of business and post-office address of the bidder, with County, State, or Territory, and should be signed by the bidder with his usual signature in full.

8. A proposal by a person who affixes to his signature the word "president," "secretary," "agent," or other designation without disclosing his principal, is the proposal of the individual. That by a corporation should be signed with the name of the corporation, followed by the signature of the president, secretary, or other person authorized to bind it in the matter. That by a firm should be signed with the firm name by one of the members of the firm.

9. No erasures, alterations, or additions should be made in the specifications. Bidders may submit alternative proposals or make explanations by letter filed with their proposals or in the blank spaces on the latter. Prices quoted opposite the articles without qualification or remark will be understood as for the identical article listed.

10. Bidders must state the time when they propose to make deliveries on each and every item.

11. When the amount accepted under any bid exceeds \$500, and delivery thereunder is not to be immediate, the bidder will be required to enter into a formal contract, and in proper cases to give satisfactory bond, with good and sufficient sureties, to secure its performance.

12. Transfers of contracts, or of interests in contracts, are prohibited by law.

13. Proposals must be in the possession of the officer addressed before the hour appointed for the opening. No responsibility will attach to an officer for the premature opening of any proposal not so indorsed as to clearly show its character.

14. Proposals received prior to the time of opening will be securely kept. The officer whose duty is to open them will decide when that time has arrived, and no proposal received thereafter will be considered, except that when a proposal arrives by mail after the time fixed for the opening, but before the award is made, and it is clearly shown that the non-arrival on time was due solely to delay in the mails for which the bidder was not responsible, such proposal will be received and considered.

15. Bidders must, if called upon by the awarding officer, furnish satisfactory evidence, before the award is made, of their ability to carry their proposals into effect.

16. Before the time for opening bids any bidder may, without prejudice, withdraw from competition by giving written notice of his decision to the officer holding his bid, and when his bid is reached at the opening it will be returned to him or his authorized agent unread.

17. All tablets must conform to the following general specifications: Tablets must be well made, of uniform size and accurate as to quantity of active ingredients. They must be of medium friability, neither too fragile for rough handling in transportation nor so hard as to powder with difficulty, and equal to the standard in every respect. When furnished in bulk they must be well packed in suitable tin containers.

18. All instruments to be thinly coated with a neutral oil and wrapped in wax paper.

19. Articles advertised for "as per standard" can be examined at this depot.

20. Specifications will be furnished to bidder upon application.

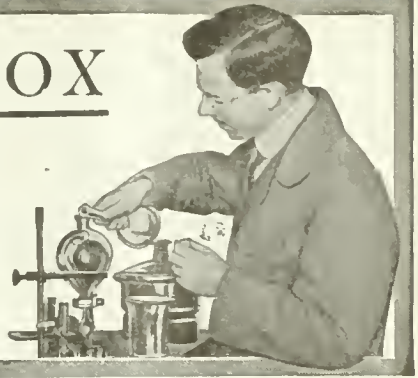
SAMPLES.—Samples, when required with bids or when voluntarily forwarded by the bidders when they propose to furnish articles other than advertised for, must be furnished free of all expense to the Government, and must be forwarded in time to reach this depot prior to the opening of the bids. A duplicate memorandum invoice will be prepared, one copy to be packed with the samples and the other to be inclosed with the proposal. This depot will not be responsible for

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Decomposition of Calomel

(S. L. B.)—Submits the following prescription for capsules, each capsule containing:

Calomel	2 grains
Sodium bicarbonate	2 grains
Powdered rhubarb	1 grain
Powdered pepsin	1 grain
Powdered aloin	1/6 grain
Resin of podophyllum	1/6 grain

He writes that the ingredients were mixed and filled into the capsules dry. After standing a short time, the contents of the capsules became a mass and small globules of metallic mercury appeared. He sends with his letter two of the capsules, each of which contains a small globule of mercury. What caused the calomel to change into mercury?

Pepsin would appear to be the principal trouble maker here. As is well known, calomel in the presence of moisture and organic matter, gradually changes with the formation of metallic mercury, the change not infrequently being accompanied by the production of some corrosive sublimate. Pepsin is almost always hygroscopic, especially the more soluble commercial varieties, and it absorbs enough moisture to start the changes here reported. The fact that the dry mixture placed in the capsules became a mass, as described, seems to prove this. The presence of moisture would also tend to develop a reaction between the sodium bicarbonate and the tannic acid of the rhubarb, with possible evolution of carbonic acid gas. Another criticism to be made is that of combining pepsin with sodium bicarbonate, which tends to render the digestive activity of the ferment inert. Primarily, the decomposition of the calomel is due to moisture in the presence of organic matter, while other changes along the line suggested are to be expected.

Tamarinds

(F. R. L.)—"Tamarind" was formerly official in the U. S. P., but in the last revision of that book, was dropped, and it is now given a place in the National Formulary, where it is defined as "the preserved pulp of the fruit of *Tamarindus indica* Linne (Fam. *Leguminosae*)." The mildly acid pulp finds its principal use in making confections, being one of the ingredients of confection of senna, now an N. F. preparation. A tamarind whey, so-called, is prepared by mixing with milk (1 in 40). The tamarind tree is indigenous to Africa, but is cultivated throughout India and the West Indies. Describing the two varieties, the B. P. C. states that the fruits, freed from their epicarpis, are preserved by pouring hot syrup on them, and then form the official (B. P.) drug, which is usually imported from the West Indies and known as West Indian Tamarinds. It forms a reddish-brown, moist, sugary mass, in which the fibres and the seeds enclosed in the the endocarp are conspicuous, Tamarind pulp is largely exported from India (East Indian Tamarinds); this variety consists of the shelled legumes pressed into a firm, black mass, without the addition of either sugar or salt as a preservative. The same authority also states that the pulp has a strongly acid taste and contains chiefly tartaric acid, (about 10 per cent.), acid potassium tartrate (about 8 per cent.), and invert sugar (from 25 to 40 per cent.). The total acidity varies from 11 to 16 per cent. Tamarind is official in nearly all of the pharmacopoeias.

Wanted: a Clear Asafetida Mixture

(G. F. L.)—"I have been called upon to compound the following prescription, but I cannot find the proper vehicle to make a clear preparation:

Asafetida	3 grams
Solution of potassium arsenite	6 mils
Soluble iron phosphate	6 grams
Vehicle (?), enough to make	120 mils

"Is there not some process whereby these drugs can be compounded so as to yield a clear preparation?"

None that we know of, owing to the insolubility of the asafetida in the solvents ordinarily employed as vehicles in the administration of medicines. The chief constituents of asafetida are about 62 per cent. of resin, 25 per cent. of gum, and 7 per cent. of volatile oil, the Pharmacopoeia requiring that the drug shall yield not less than 60 per cent. of alcohol-soluble constituents. When triturated with water it forms an emulsion, as in the U. S. P. "Emulum Asafetidae," the color of which is usually white, but may be yellowish, pink or even reddish, dependent upon the coloring matter unavoidably present in the gum resin. Simple elixir is the usual "vehicle" employed in the administration of soluble ferric phosphate, but it is not recommended in compounding this mixture. We submit the query to ERA readers.

Cimolite

(F. R. L.)—"Cimolite," according to the British Pharmaceutical Codex, is a trade name for a preparation of white fuller's earth, used as a dusting powder. We also find this term in the dictionary as synonymous with "Cimolian earth, a white, grayish or reddish hydrous silicate of aluminum, soft and claylike or chalklike in appearance." The name "Cimolian" is derived from the Latin "Cimolus," an island of the Cyclades, a group in the Aegean sea, belonging to Greece. Other reference works apply the name "Terra Cimolia" or "white fuller's earth" to a natural variety of steatite, composed chiefly of silicate of magnesium. Kaolin or China clay is chiefly aluminum silicate.

Coloring and Stiffening a Pomade

(J. W. C.)—Ordinarily the most satisfactory red coloring agent for pomades, ointments, oils and fats in general, is alkanet root, alkanin the coloring matter derived from the root being readily soluble in fats, and to which it imparts a bright red color. One may also use any suitable oil-soluble dye, such as "Sudan III," or "safranine," an azo dye, which imparts quite a permanent red to fatty mixtures and is also said to have the further advantage, as the color thus produced is not destroyed by borax or similar substances which are sometimes compounded in cold creams or cosmetics made with a fatty base. For most pomades, the color may be produced by dissolving one part of safranine in 20 parts of rectified spirit and 80 parts of water, enough of the solution being then worked into the pomade to produce the desired tint.

A "stiffer" pomade than that indicated in your formula may be made by using a harder petrolatum, as petrolatum having a melting point of about 54° or 55° C. Formerly such a petrolatum (hard) was named in the U. S. P., but in the last two revisions of the official guide, the definition under the single title "petrolatum" was extended

enough to apply to any petrolatum having a melting point between 38° and 54° C., the higher the melting point, of course, the harder the petrolatum. Petrolatum answering any of the melting points within the range of those named in the Pharmacopoeia is obtainable from manufacturers. Another suggestion for hardening your pomade is that of incorporating a suitable quantity of beeswax with the petrolatum, the proportions followed being similar to those employed in making a cerate, say about ½ ounce of beeswax to about 7½ ounces of petrolatum. Spermaceti or paraffin wax may be similarly employed, the spermaceti or wax being melted first, preferably on a waterbath, and the petrolatum then added, the mixture being stirred till cold. The proportion of beeswax, spermaceti or paraffin needed to produce the degree of stiffness desired in the finished pomade should be worked out by careful experiment.

Sale of Alcohol Without Payment of Special Tax

(G. D. Co.)—Under the regulations promulgated by the Internal Revenue Department, pharmacists may carry wines and distilled spirits in stock for the manufacture of U. S. P., N. F., and other preparations, and for compounding bona fide prescriptions, without payment of the "special tax," provided sufficient drugs are used in the alcohol before its sale to render it unfit for use as a beverage. The sale of the "so-called" "Bathing alcohol" is included in these provisions. In order to exempt the pharmacist from this special tax, the Internal Revenue Department has approved of the following combinations, by which the alcohol is so denatured that it may be used for bathing and general antiseptic purposes (T. D. 1969):

1. Alum, 10 grains, camphor, 3 grains, alcohol, 4 ounces.
2. Carbolic acid, 1 part, alcohol, 99 parts.
3. Formaldehyde, 1 part, alcohol, 250 parts.
4. Alum, 2 ounces, sulphate of zinc, 1 ounce; alcohol, 1 gallon.
5. Alum, 1 dram, camphor, 1 ounce, alcohol, 1 pint
6. Bichloride of mercury, 1 part, alcohol, 2,000 parts
7. Alum, 2 ounces, salicylic acid, 2 ounces, oil of gaultheria, 2 ounces, water, 1 pint, alcohol, q. s. 1 gallon
8. Carbolic acid, 2 drams, oil of gaultheria, 20 drops, alcohol, 1 gallon.
9. Bichloride of mercury, 0.8 gram, hydrochloric acid, 60 cc., alcohol, 640 cc., water, 300 cc.
10. Bichloride of mercury, 1½ grains, hydrochloric acid, 2 drams, alcohol, 4 ounces.
11. Bicarbonate of soda, 3 ounces, extract of hamamelis 16 ounces, water, 16 ounces, alcohol, 16 ounces.
12. Formaldehyde, 2 parts, glycerin, 2 parts, alcohol, 96 parts.
13. Oil cajuputi, 1 dram, alcohol, 1 pint.
14. Tannic acid, 12 parts, alcohol, 125 parts, water, 125 parts.
15. Carbolic acid, 1 dram, tannic acid, 1 dram, alcohol, 1 pint, water, 1 pint.
16. Alum, ½ ounce, formaldehyde, 2 drams, camphor, 1 ounce, alcohol and water, each 1 pint.
17. Lysol, 1 part, alcohol, 99 parts.
18. Liquor cresolis Comp. (U. S. P.), 10 cc., alcohol, 1,000 cc.

In a recent decision of the Treasury Department it is stated that it is the policy of the Internal Revenue Department not to multiply the number of formulas and, as it is believed that those above set forth will meet all requirements, no consideration will be given to other formulas with a view to their approval and publication.

Manufacture of Condensed Milk

(L. T.)—We have had no practical experience in the manufacture of condensed milk, but we believe the following description of the process used in making the various grades, taken from a contribution to the 1912 Yearbook of the U. S. Department of Agriculture, contains the information you desire:

"Plain condensed milk" is made from whole milk, from part whole and part skimmed milk, and from skimmed milk. To get the desired density it is necessary to condense

the whole milk 3 to 1 and the skimmed milk about 4 to 1. The milk to be condensed is put into hot wells and heated with steam to a temperature of 150° to 156°. It is then drawn into the vacuum pan and condensed, if whole milk, to 10° Baumé, and if skimmed milk, to 14° Baumé. As soon as the desired density is reached the milk is then superheated by blowing steam in the vacuum pan until the milk becomes thick. The temperatures used in this process vary from 175° to 200°.

As soon as the milk is sufficiently thick the steam is shut off and water run into the condenser to secure the proper consistency. The vacuum pump is then started slowly, and the vacuum drawn up to about 20 inches. The vacuum is then released, and the milk is drawn into 10-gallon cans and placed in the cooling tanks and cooled to 36° or 38° F. by first cooling as cold as possible with water and then shutting off the flow of water to the cooling tank and turning the brine of ammonia through the coils in the side of the cooling tank.

Sugared milk to be put up in cans is made from whole milk and is condensed 4 to 1, and 1 pound of sugar added to each 3 quarts of milk condensed. The milk is heated in the hot wells as hot as possible by steam blown into the milk through a heater head. It is then drawn into the vacuum pan and condensed. There are different methods used in adding the sugar to the milk. Some manufacturers have a separate tank, where the sugar is dissolved either in hot milk or hot distilled water, and the syrup so made drawn into the vacuum pan gradually with the fresh milk; others draw nearly all of the milk into the vacuum pan and dissolve the sugar in the hot wells in the milk left there for that purpose. It is then drawn into the vacuum pan after the milk is condensed. Sugared condensed milk to be sold in bulk is made from part or all skimmed milk in the same way as the canned goods, except that 1 pound of sugar is added for each 4 quarts of skimmed milk to be condensed. This class of goods is used by bakers and confectioners, and is made with any degree of butter fat from whole milk to full skimmed milk.

Evaporated milk is made from whole milk and is heated in the hot wells the same as for sugared condensed milk. This milk is condensed in the vacuum pan until it has the required percentage of solids and butter fat desired by the manufacturer. After the milk is condensed it is run over a pipe cooler and cooled to about 60° and is then put into small cans, and sealed. As soon as it is sealed it is put into the sterilizer and heated to about 240°. While in the sterilizer the milk is kept in motion, so that the contents of the can will be heated evenly. The time required depends upon the size of the cans and the condition of the milk, and varies from 18 to 45 minutes. As soon as the milk is sterilized it is immediately cooled in the sterilizer, and when cooled, is removed from the sterilizer and shaken in a shaker until it is smooth.

Drugs Employed in Proprietary Medicines

(H. W. Co.)—Such a wide variety of drugs and chemicals is employed in the manufacture of proprietary medicines that it can probably be said there is no particular class of dealers who aim to supply the wants of such manufacturers to the exclusion of any other kind of business. Both large and small manufacturers of proprietaries place their orders with concerns they may know which collect or deal in the particular drugs or chemicals they may want. A formula may call for several drugs, particularly if the preparation be made from a combination of drugs of botanical origin, each of which in turn may have originated from widely separated geographical centers and brought to market by as many dealers. Of course, there are many houses which make a specialty of handling botanical drugs, and individual manufacturers make use of them in obtaining their supplies. On the other hand, it would be very difficult to say what particular proprietary manufacturer is in the market for a particular drug or chemical.

Answering your other question, the Federal Food and Drugs Act does not require the disclosure of formulas of proprietary medicines, nor that such formulas shall be printed upon the labels of the preparations. It does require, however, that if such preparations contain any alcohol, or any of the drugs enumerated in section 8 of the law, such facts must be stated on the labels as directed in the

regulations provided for the enforcement of the law. Most of the laws of the respective States follow this procedure. There have been various attempts to pass legislation which would require the publication on the labels of the formulas of all proprietary medicines or that the formulas of such preparations should be filed with some bureau or department of the Government, but so far, such attempts have not materialized to any extent. Some time ago the Health Department of New York City adopted an ordinance carrying a provision of this character, but its enforcement has been contested in the courts by several manufacturers, and the litigation still awaits a decision. If this ordinance should be declared constitutional it may have some effect upon the sale of proprietary medicines outside of the territory of New York, as in such an event proprietary remedies may not be legally sold here wherever they may be manufactured unless the formula be filed with the Department of Health.

Compound Elixir of Acetanilid

(B. T. W.)—According to most medical authorities, acetanilid is best administered in cachets, or it may be given in the form of powders or tablets. A combination sometimes employed and in which acetanilid is the dominant ingredient, is "compound acetanilid powder" of the National Formulary, the formula for which was formerly official in the U. S. P. VIII. According to Fenner's Formulary, the following formulas are typical of the preparations on the market under the title of "compound elixir of acetanilid."

(1)

Acetanilid	160 grains
Salol	64 grains
Phenacetin	128 grains
Citrated caffeine	64 grains
Tartaric acid	32 grains
Sodium bicarbonate	196 grains
Elixir, sufficient to make	1 pint

Mix, dissolve and filter.

(2)

Acetanilid	256 grains
Caffeine	32 grains
Sodium bromide	640 grains
Codeine sulphate	8 grains
Tincture of gelsemium384 minims

Mix, dissolve and filter. Dose, 1 to 2 fluidrams.

Facts About Dog Grass

(U. S. B. Co.)—The listing of "dog grass, herb, cut," in last year's ERA Price List is in error in that the entry should read "dog grass, root, cut," as the plant from which it is derived is not an "herb," but a perennial weedy "grass." No parts of the plant, except the roots, so far as we know, are ever used in medicine. The prices quoted in the reference cited were those obtained for cut root at the time the 1916 ERA Price List went to press.

Dog grass is official in the Pharmacopoeia under the Latin title *Triticum*, the English name being identical, with "dog grass" as a synonym. Other English synonyms are couch grass, quick grass, quack grass, twitch grass, etc. Practically all of the supply before the present war was obtained from Central Europe. According to the Pharmacopoeia, the parts of the plant employed are "the dried rhizome and roots, gathered in Spring." In preparing them for the market, the roots are carefully dried and are usually cut into pieces from 5 to 8 mm. long. At the present time, true imported dog grass roots are very scarce and command a very high price, quotations being practically nominal. Bermuda cut roots are quoted in this market at from 60c to 70c per pound. It is also reported that some domestic roots are in the market, but we are unable to state to what extent they have been supplied, nor how well they meet the requirements of the trade. Before the beginning of the present war, imported roots were offered by first hands as low as 6c or 7c per pound, while jobbing stocks were quoted around 10c.

Whatever the books may say as to the therapeutic value of dog grass, there seems to be a considerable demand for it. It is emollient, diuretic and antiphlogistic, and is somewhat popularly employed as a remedy in the treatment

of cystitis and irritable bladder. It is given in the form of an infusion, the average dose being two drams of drug. It is used chiefly as an ingredient in species or medicinal "teas," but a fluidextract is official in the U. S. P. and is used whenever a liquid preparation of the drug is desired. The average dose as stated by the Pharmacopoeia is 2½ fluidrams.

CORRESPONDENCE

MORE ON PRESCRIPTION PRICING

Editor The Pharmaceutical Era:

Under "correspondence" I notice a small paragraph in the June ERA (page 200) on "Prescription Pricing" by Mr. E. A. Sennewald, St. Louis, and note that he refers to all druggists who change prices on N. A. R. D. prescriptions as "scallawags." I have been guilty of this crime but a few times in my life as a druggist, and I have always felt as if I was right in the course I had taken. I don't like for him to call me a "scallawag," and I sincerely hope that he reads this. A gentleman came in with a prescription that had been originally filled in Mobile for 8 ozs. of Elixir I. Q. & S. S. & D. The N. A. R. D. mark on it stated that the customer had been charged \$2.50 for it. Now, I don't claim to have wings, neither do I claim to wear a mask. I could not rob the man so I changed the mark and charged him \$1.25. In a case like this, who is the "scallawag?" the \$2.50 man or the \$1.25 man?

Mr. Sennewald should have covered just a little more of the subject than he did, by saying that the N. A. R. D. mark is being abused both ways, and now if he still insists that all men who change the mark are "scallawags," why,—I will send him one of these good old southern water melons and call it square; but I will say that this part of the country seems to be the habitat for the animal he wrote about.

R. B. STANLEY,

Lockhart, Alabama.

[We do not think Mr. Sennewald's language in the correspondence merits the construction or criticism that Mr. Stanley's letter seems to convey. Mr. Sennewald in no manner conveyed the idea that the druggist who made an honest price on a prescription was a "scallawag," but he did say that the number of druggists who "abused" or "misused" the N. A. R. D. price mark are in the smallest minority. The use of such a mark, if it is to be of any value whatever, must be based on honesty of purpose and represent reasonable charges. Applied in any other manner, its use would defeat the very object for which it was adopted. Measured by this standard, the man who charged \$2.50 for the prescription that Mr. Stanley writes about, "abused" or "misused" the N. A. R. D. cost mark, if the medicine was only worth \$1.25. Mr. Sennewald's plea was for the continued use of the cost mark by druggists, "ninety-nine per cent." of whom he assumed would use it honestly.—Ed.]

NEW YORK TO MAKE WAR ANTITOXINS

While American troops are preparing to take an active part in the war, a scientific campaign to protect them against such ailments as tetanus, typhoid, and smallpox will be conducted by a corps of women bacteriologists in the laboratories of the New York Department of Health in the Willard Parker Hospital. Aside from the important work against contagious and infectious diseases at home, these laboratories will probably become one of the chief producing centers for antitoxins to be used in the inoculation of soldiers against disease in the trenches.

After making a tour of the Department of Health laboratories Commissioner Emerson said that the production of virus had been improved so remarkably that the city laboratories within twenty-four hours could furnish enough vaccine anti-toxin to supply the needs of 1,000,000 soldiers. Enough, he said, was actually on hand to supply from 300,000 to 400,000 men, and this quantity could be doubled or even trebled in a day through the system of co-ordination that the Health Department experts have developed.

SCHOOLS AND COLLEGES

FORDHAM'S PATRIOTIC COMMENCEMENT

In the presence of more than three thousand relatives and friends Fordham University held its annual graduation exercises on the Campus on June 13. The Right Reverend Patrick J. Hayes, D.D., auxiliary bishop of New York presided, while on the platform were the president of the University, Rev. Joseph A. Mulry, S.J., the deans of the various departments and a number of prominent men as guests of the institution.

A feature of the day was the presentation of the four ambulances donated to the Fordham University Ambulance Unit by the two brothers Arthur and Joseph McAleenan, both alumni of the University. This was followed by the presentation of the colors by the Bronx Chapter of the Red Cross Society. Degrees were conferred upon 262 graduates, many of them appearing in the uniform of the service to which they had volunteered. The College of Pharmacy graduates, thirty-four in all, received the degree of graduate in pharmacy.

Charles P. Grimm was awarded the prize offered by the Bronx Pharmaceutical Association to the student attaining the highest average in the subject of pharmacy during the two years of study, Peter J. Conroy received the prize offered by Fordham University College of Pharmacy Alumni Association for the best total average during the two years. The prizes were awarded by Dean Diner.

It was announced that the Ambulance Unit had been mobilized and was due to leave the Campus for active service on the following morning at nine o'clock. The College of Pharmacy is well represented in the unit, sixteen men having enlisted in the service. Father Mulry in an eloquent address bid them God speed and invoked the aid of Deity for their protection and deliverance. The commencement will live long in the memory of those present as one of the most enthusiastic and patriotic gatherings in the history of Fordham University.

WAR SECRETARY COMMENCEMENT ORATOR

The two hundred and twenty-second annual commencement, held at the University of North Carolina on June 6, was especially interesting this year because of the presence of Newton Diehl Baker, Secretary of War, and Josephus Daniels, Secretary of the Navy. The principal address was made by Secretary Baker, who reviewed the events and causes leading up to the war in Europe and our later entrance into it; gave a clear exposition of our aims and hopes, and prophesied a lasting peace for democracy. He emphasized the present and future need of educated men and charged the younger students with the responsibility of seeing that the educational lights were kept burning during the war. His address was delivered the morning following Registration Day when he, of course, had no official information of the results achieved throughout the country. Mr. Baker predicted nevertheless that it would amaze the world to learn how few "slackers" there would be in the United States. Secretary Baker was later given the honorary degree of Doctor of Laws, LL.D.

Secretary Josephus Daniels, a native of North Carolina and an alumnus of the University, made a short address which was in substance a plea for North Carolina to uphold her honorable traditions in war and give of her best to the present cause. Parenthetically it may be stated that the University has already furnished 25 per cent. of its students to training camps; one-tenth of all the men now training at Fort Oglethorpe being Carolina men. Mr. Daniels presented the diplomas to the graduates in pharmacy, a majority of whom, however, were absent, having gone to Raleigh to stand the examinations of the State Board of Pharmacy, which unfortunately were held on the same date as Commencement.

President Graham announced the promotion of J. G. Beard from assistant professor to associate professor of pharmacy. Also that A. C. Cecil, of High Point, and A. R. Moore, of Walstonburg, had been elected senior and junior assistants in pharmacy.

GRADUATES READY TO SERVE NATION

A readiness to devote his talents to the service of the country in the present emergency was reflected in the promise of every graduate of the Philadelphia College of Pharmacy who received a diploma at the 69th annual commencement exercises held in the Academy of Music, Philadelphia, on June 6. The graduates numbered 268, and more than 2,000 friends and relatives were present to greet the new pharmacists and to wish them success. Degrees were conferred as follows; Doctor in Pharmacy, 94; Pharmaceutical Chemist, 23; Graduate in Pharmacy, 151.

Howard B. French, president of the college, described the class as a band of patriots who are all ready and willing to enter the service of the nation in the capacity to which they are best adapted. Some time ago the class adopted resolutions upholding the country and pledging themselves to obey any call that may be issued by the President. These resolutions were read by Mr. French shortly before he presented the diplomas and certificates.

Louis Gurshenfeld, assistant professor in bacteriology, achieved the distinction of being the first man ever awarded the degree of Bachelor of Science by the college. Honorary degrees in pharmacy were conferred upon Julius W. Sturmer, William B. Day, Frederick J. Wulling and John K. Thum. The degree of master of pharmacy in course was awarded Charles E. Hoffman, P.D.

The address to the graduates was delivered by E. J. Cattell, city statistician of Philadelphia. He told of the great part druggists and chemists will play in the war and said the members of the class who enter the service will find the training they received at the college to be their most valuable asset. The invocation was offered by Rev. Frederick L. Sigmund. Owing to illness, Dean Joseph P. Remington was unable to attend the exercises.

The prize winners announced were as follows: Materia medica prize, \$25, to Amanda E. Clapham; Microscopical research prize, compound microscope, to Martin H. Gold; Dispensing prize, \$20, to Earl G. Nace; Maisch botany prize, \$20, to Martin H. Gold; J. B. Moore memorial prize, agate prescription balance, to Rudolph W. Adler; commercial pharmacy prize, \$20, to Herbert L. Jones; Instructor's prize, \$20, to Amanda E. Clapham; pharmacy review prize, to Walding G. Rupp; Kappa Psi Fraternity prize, gold medal, to Lawrence K. Boehme; Webb memorial prize, gold medal, to William P. Weir; microscopical research prize, a microscope, to Rose F. Smith; operative pharmacy prize, \$20, to James G. Cotanch; Mahlon N. Kline pharmacy prize, to Rose F. Smith; commercial pharmacy prize, \$20, to John H. Mills; Instructor's prize, \$20, to Merle McCarney; pharmacy review prize, to Howard W. Griesing.

UNIVERSITY OF IOWA

The Student Pharmaceutical Association of the College of Pharmacy recently elected the following officers from the class of 1918 to serve for the first half of next year; President, A. G. Rollins, Iowa City; vice-president, Clarence Wierks, Hospers; secretary and treasurer, Lula Jameson, Clearfield; reporter, J. M. Severeid, Story City.

E. T. Bjornstad, '16, enlisted as a pharmacist in the regular army and is stationed temporarily at Ft. Logan, Colorado.

B. S. Potter, '16, Jefferson, Ia., before going to Ft. Logan where he will join the Hospital Corps, spent some days as a guest at the Phi Delta Chi chapter house.

H. B. Reid, ex '03, writes from Anchorage, Alaska, where he has been for nearly a year that he is doing a very good business there and incidentally calls attention to some prices that outdo the war prices of the states. For instance, Epsom salt sells for 50c per pound, cream of tartar \$2 per pound, boric acid 75c per pound, sulphur 50c per pound, alum 75c per pound, peroxide \$1 per pound, and other drugs in proportion. Supplies are shipped from Seattle, freight rates being \$15 per ton, with a ton estimated at forty cubic feet. During the season when mail

comes in by dog team from Seward it is carried at 25c per pound. Naturally merchants stock up before navigation closes. Mr. Reid sent a number of good photos of views around Anchorage.

BUFFALO GRADUATES ALSO PATRIOTIC

The thirtieth annual commencement of the Buffalo College of Pharmacy, held in the Teck Theatre, Buffalo, recently will long be remembered by those present for the display of patriotism exhibited by the students and every one present. The audience sang the "Star Spangled Banner," and the theatre was decorated with American flags, while the Hippocratic oath was administered, with the following addition:

"To the service of my Country, whate'er her need, and whene'er her call, I dedicate myself, and swear to aid her to the full extent of my ability. And I accept the degree about to be conferred upon me by the University of Buffalo with full recognition of the obligation it imposes on me to devote the benefits of the education I have received to the service of my Country and to the help of my fellow men; and this obligation I swear shall be faithfully kept by me."

The graduates numbered 65 and the degrees were conferred by Chancellor Charles P. Norton, two women having the honor of receiving the degrees of both analytical chemist and pharmaceutical chemist.

The William H. Peabody prize of \$50 for maintaining the highest standing, went to Louis J. Moskowitz of Rochester who also headed the honor roll of the senior class with a percentage of 96.08.

PITTSBURGH C. P. GRADUATES

In conjunction with the other departments of the University of Pittsburgh, the commencement exercises of the Pittsburgh College of Pharmacy were held at the Soldiers Memorial Hall, Pittsburgh, on June 13, the address being delivered by James Montgomery Beck, of New York. A feature of the program was the farewell service for members of the University of Pittsburgh volunteering for military service, nine of the graduating class in the pharmacy department having already enlisted for the base hospital and one in the hospital corps. The graduates numbered 81, 78 of whom received the degree of graduate in pharmacy and three, the degree of pharmaceutical chemist.

The James H. Beal prize scholarship was awarded to Mrs. Daisy Belzer Webber for the highest average in all branches in the senior year. Mrs. Webber was also the recipient of the Judd prize in materia medica and of the Willets prize consisting of nomination to membership in the Pennsylvania Pharmaceutical Association. The Saalbach prize in pharmacy was awarded to Leon Rovno; the Saalbach prize in pharmaceutical products to Andrew Zacovic, and the pharmacognosy prize to Mabel Foster Arney. Harry F. Easley received the prize for the highest general average in chemistry. Certificates of proficiency in botany, materia medica and chemistry were awarded to Bernice S. Burrier, Fred R. Clark, William B. Graham, and Stanley G. Kuklewicz. Hugh C. Dodd and Theodore F. Linn were given certificates for completion of third year work.

MASSACHUSETTS C. P. LAYS CORNERSTONE

Short but impressive ceremonies marked the laying of the cornerstone for the Boston home of the Massachusetts College of Pharmacy. The new building was given by George R. White, head of the Potter Drug and Chemical Corporation. Many New England druggists have contributed to its equipment. The foundation has been built, the first floor partly constructed, and the walls are going up.

A color guard from the Eighth Massachusetts Regiment took part in the unfurling of a flag at the opening of the exercises. About 200 men and women, many of them graduates, sang "The Star-Spangled Banner," with Miss Ethel E. Knowles as soloist. Dr. Frank Piper, first vice president, delivered a short address referring to the development of science and the need of progress at the college to keep up with the progress of the age and show full appreciation of Mr. White's gift, amounting approximately to \$500,000.

An original poem was recited by Francis J. Connolly, '01. Dean T. J. Bradley announced that the cornerstone box contained a brass plate with a description of the college, copy of the college charter, catalogues since 1867, an alumni directory, list of subscribers to the building fund, historical notes, copies of the invitation and program of the day, Boston newspapers and various coins. Then the box was deposited by John G. Godding, the treasurer of the college, and the trowel was presented by Frederick W. Archer of the building committee to President C. Herbert Packard, who sealed the stone. The exercises closed with the singing of "America."

In the afternoon came the 49th commencement. Diplomas were presented to three for completing the course in pharmaceutical chemistry and twenty-seven were given diplomas as graduates in pharmacy.

ILLINOIS UNIVERSITY COMMENCEMENT

The commencement exercises of the University of Illinois School of Pharmacy were held on June 9, in the Studebaker Theatre, Chicago, in conjunction with the graduation exercises of the colleges of medicine and dentistry. Besides the commencement address delivered by William Edward Quine, M.D., LL.D., the program included an address by Daniel Atkinson King Steele, M.D., LL.D., senior dean. The degree of pharmaceutical chemist was conferred upon seven candidates, and that of graduate in pharmacy upon fifty-three candidates, ten of whom had completed the requirements for graduation with previous classes. Certificates as regular students were awarded to nine candidates, and as special students to seven students.

NEW YORK COMMENCEMENT

The spirit of war predominated in the commencement exercises of the New York College of Pharmacy, affiliated with Columbia University. One hundred and seventy-five men and women received diplomas, and all were urged to do whatever they could as soon as possible for the government and the successful prosecution of the war.

Every one of the speakers pointed out the value of the work the graduates could do. One of them, Captain Arthur Newton Tasker, M. C. U. S. A., not only pointed out the value but also specifically urged the men who were receiving diplomas to join the Medical Corps as soon as they could. Professor H. V. Arny, who read the roll of honor and gave out the diplomas also urged the graduates to do their bit. Some had already joined a branch of the service and to these special honor was paid.

The exercises were held in Carnegie Hall in May and were more than well attended. Great interest was shown in the commencement because it was one of the earliest in New York and the spirit of war which has taken hold of the country was manifested clearly there.

Dr. Monroe H. Weil, President of the Alumni Association gave the Alumni Association prizes to John Varga (gold medal), Saul Goldfarb (silver medal), and Ira Isaac Schwartz (bronze medal). These three, with nineteen others, made up the roll of honor of the class. John Varga, who was the class leader, made 1,085 points out of a possible 1,200 in his course and finished with an average per cent. of 90.41.

The Trustees prizes went to John Varga (pharmacy), Attilio Graziani (Materia Medica); Ira Isaac Schwartz (chemistry). The prizes were brand new crisp \$100 bills. Professor George C. Diekmann gave out the prizes to the winners. Julius Smith read the valedictory which included a war plea.

NEW ORLEANS HONORS BRESLIN

At the commencement exercises of the New Orleans College of Pharmacy held on May 15 twenty-two graduates received diplomas, and M. T. Breslin, well known for his work in State and National pharmaceutical associations, was given the honorary degree of Doctor of Pharmacy. P. A. Capdau, who offered Mr. Breslin's name for the honorary degree, complimented Mr. Breslin for his fifty years of service to pharmacy. Dr. Oscar Dowling delivered the commencement address.

The following honors were awarded: Alumni medal to B. B. Martinez; State Pharmacy Association medal to W. Broussard; American pharmacy medal to F. J. Cladcr-

one; faculty medal for scholarly excellence among juniors, A. D. Delande; life membership in National Drug Clerks' Association, W. Broussard, H. J. Calderone and B. Martinez. Youel C. Smith gave the valedictory address and William Broussard the salutatory.

The total number of graduates who have received their diplomas from the New Orleans College of Pharmacy in the seventeen years of its existence is now 318.

LOUISVILLE GRADUATES EIGHTEEN

Degrees were conferred upon eighteen graduates at the 46th annual commencement of the Louisville College of Pharmacy by President Simon N. Jones, the class honors being awarded by Dean O. C. Dilly. The college medal for first honor was awarded to R. R. Perry of Russellville, Ky., and the Voight medal for second honor to A. M. Hill of Shelbyville, Ky. The degree for the three years' course of instruction was conferred on J. L. Guice of Millry, Ala., who was also awarded a membership in the American Pharmaceutical Association. The degree of Master of Pharmacy was conferred on Dean O. C. Dilly. Sidney B. Passamaneck of Louisville was awarded the Peter-Neat-Richardson medal for first honor in the junior class.

The speakers were Simon N. Jones, president of the college; the Rev. David Brunig and Robert S. Strader, the valedictorian of the class. The commencement was followed by the annual banquet of the Alumni Association, with the members of graduating class present as guests of honor.

CINCINNATI C. P.'S COMMENCEMENT

The forty-fifth annual commencement and dinner of the Cincinnati College of Pharmacy were held at the Hotel Gibson on the evening of May 31, with five pharmaceutical chemists and seventeen pharmacists graduating, as follows: Pharmaceutical chemists, Myrtle Marie Hobelman, William J. Munnoney, Morris Mark, Albert W. Ross and Clark Raymond Ward; bachelors of pharmacy, Adrian J. Bauman, Edw. L. Berg, Francis Bokman, Geo. M. Dangelmeier, Charles H. Donohoo, Arthur J. Fratz, Frank J. Guy, Maurice W. Higgins, Henry Kanter, Geo. W. Loos, Eldon W. Musgrave, Clare Marie Otis, Ezra W. Rhodes, Clarence W. Schroder, Edw. G. Seibel, Edwin P. Weik and Herman F. Wilfert.

Dr. John C. Otis, president of the college, conferred the degrees, Dr. Charles F. Harding awarding alumni certificates. Dr. Harding was also toastmaster at the dinner, at which the guests were addressed by Prof. John Uri Lloyd on "Pharmacy," by Dr. Rolla L. Thomas on "Medicine," by Dr. Edward Voss, president of the Ohio Board of Pharmacy, on "Pharmacy Law," and by Dr. Long, of the American Chemical Society, on "Chemistry in Pharmacy."

KANSAS CITY GRADUATES

Diplomas were granted to sixteen members of the graduating class of 1917 of the Kansas City College of Pharmacy, at a dinner given by the faculty at the Hotel Muehlebach, Kansas City, Mo. Dr. Harry C. Rogers of Linwood Presbyterian Church delivered the commencement address. The general college medal was awarded to Lawrence W. Hart of Kansas City, with honorable mention to Wilmer O. Wood, Philip Smolinsky and Rudolph J. Segelcke. Kinjori Hoshizaki received the chemistry medal, and R. J. Segelcke, the pharmacognosy medal. The junior medal was awarded to Dewey Raish. The regular commencement program was dispensed with, owing to the fact that many members of the class had enlisted in the army.

MARYLAND GRADUATES RECEIVE DIPLOMAS

The commencement exercises of the University of Maryland were held at the Lyric, Baltimore, on June 1, when graduates of the departments of medicine, law, pharmacy and dentistry received their diplomas from the hands of the provost, Dr. Thomas Fell. The graduates in pharmacy, twenty-seven in number, among them two young women, were presented by the dean of the faculty, Dr. Charles Caspari, Jr. There was an address to all of the graduates, with music and other exercises. Flowers in

abundance were received by all of the young men and women.

WISCONSIN UNIVERSITY

The Board of Regents of the University of Wisconsin, taking cognizance of the fact that with the withdrawal of the young men from the drug stores into the service, and that under the present existing conditions there is a demand for pharmacists in the army and navy and any technical training an apprentice may have had along these lines before serving will qualify him for quicker promotion, has decided that no entrance requirements will be exacted for the summer course in pharmacy conducted by the University. Women drug clerks will be in demand, and such training will be of great assistance and enable them to hold positions of greater responsibility and pay. The same conditions apply to nurses.

The Board of Regents believe that in waiving the entrance requirements to the summer school they are giving to drug store apprentices and nurses in that state facilities for the summer's study toward doing their "bit" when called upon, not omitting the possibilities of the women drug clerks of the future.

UNIVERSITY OF MONTANA

Because of the demand for pharmacists in the State exceeding the number of men available, the University of Montana at Missoula has decided to offer a special course for next year that will enable young men and women of the state to take up the study of pharmacy, although they may not have the necessary high school credits to admit them to the university as regular students.

BOOKS REVIEWED

POTTER'S COMPEND OF MATERIA MEDICA, Therapeutics and Prescription Writing; with especial reference to the physiological action of drugs. Based on the Ninth Revision of the U. S. Pharmacopoeia, including also many unofficial remedies. By A. D. Bush, B.S., M.D., professor of physiology and pharmacology, Medical Department, University of Southern California. 8th edition, revised. 12 mo., 274 pages, cl. \$1.25 (Blakiston's Quiz Compend). Philadelphia. P. Blakiston's Son & Co.

While primarily intended for medical students, this volume will be found serviceable to many pharmacy students, as it contains the essential facts set forth in standard works on the subjects described in the above title. The first part is largely devoted to definitions relating to drugs, pharmacology, pharmacy, materia medica, therapeutics, pharmacopoeias, dispensaries, preparations, administration and classification of medicines, etc., this introductory matter being followed by descriptions of the drugs and preparations themselves under a classification suggestive of physiological action or therapeutic uses. Thus, the descriptions appear under the headings, Restoratives, Agents Promoting Waste, Alteratives, Astringents, Cerebral Depressants, Cerebral Excitants, Motor Depressants and Excitants, Antizymotics and Antipyretics, Specifics, Evacuants and Topical Agents, these being followed by a section on Prescription Writing in which the subjects of incompatibility, Latinizing prescriptions, with tables of genitive case endings, precipitant solutions, abbreviations, etc., are briefly set forth.

In his discussion of pharmacopoeias the author apparently is not aware of the fact that the passage of the Food and Drugs Act in 1906 incorporated the standards of both the U. S. Pharmacopoeia and National Formulary into the law of the land and gave them an official standing they had never before attained. So far as we can discover no mention is made of the second of these important works, although quite a number of important drugs official in the N. F. are discussed in this "quiz compend." To this extent the work will be disappointing to the pharmacist and physician who may wish to post themselves on N. F. official drugs and preparations.

—MRS JOHN G. GODDING, the first president of the Women's Organization, B. A. R. D., was the principal speaker on "Conservation" at the annual meeting of the New Hampshire Daughters, at Boston. Mrs. Godding's address praised the work of the Traveling Forestry Library.

WOMEN IN PHARMACY

Making the Store Window Pull

By EMMA GARY WALLACE

THE space occupied by the drug store window is without question the most valuable of the entire establishment. It is accessible to the store staff and plainly visible to every one who passes by.

Many proprietors become careless in making the drug store window pull, getting calloused as it were, to the money making side of a properly dressed and supported window. Let me tell you what I mean by giving a well-dressed window ample moral support.

Once upon a time I was considerably attracted by some goods displayed in a certain window. They were attractively shown and the prices interesting. In fact the sale tickets said "Special Sale Prices." Although in somewhat of a hurry, I stopped to go inside the store to make special purchases. I asked the first person met:

"Where shall I find the sick room supplies on special sale?"

The clerk looked puzzled.

"Special sale?" he interrogated in a wondering voice. "Why I don't know, probably up there near the Circulating Library, or you can ask in the Sundry Department."

I saw a young woman near the Circulating Library and repeated my question.

"I didn't know there was a special sale," she said bluntly.

A third inquiry in what seemed to be a Sundry Department brought forth the information that those goods were located there and if I would wait a minute, the clerk said, he would go and look into the window and see what special prices had been made. By this time I was ready to assure him that I had no more time to spare.

This is not an unusual case. No Special Sale should be advertised in the window or anywhere else unless the entire store force is thoroughly notified and posted as to the goods and prices, otherwise the impression left is decidedly adverse to the general store management. Give moral support to your window display by having every person ready to sell the goods enthusiastically. It is a good plan too, to stimulate interest in the goods which are given window space to have each clerk keep track of the amount of such goods he sells and to post a comparative table, either of the day's sales, one clerk with another, or of the special sales one week and another week.

Dressing the Window

The dressing of the drug store window itself calls for three things—forethought, sound business sense, and artistic skill. None of these are beyond the reach of any ambitious person. It goes without saying that the window must be clean. It is impossible to put in a first class window on the impulse of the moment. Window displays should be laid out six weeks or two months in advance, the goods assembled, display cards made, and the type of arrangement decided upon, so that properties may be provided for. Sound business judgment will dictate that the window shall not be a hodge-podge of everything but rather a unit of perhaps several related items. The showings should be seasonable and frequently changed. It is a mistake to tie a window up a whole day to have it dressed. If everything is ready, only a short time will be needed.

When you dress your next window ask yourself these questions and don't pass on until you have answered them:

1. What is my leading point of interest in this window?
2. What one item is so compelling that it will attract the attention of three out of five passersby?
3. Will this window sell me goods?
4. Is my display commonplace?
5. Has the arrangement something of unique merit?
6. Are the goods practical or "faddy"?
7. Is the effect dignified and confidence inspiring, or the opposite?
8. Have I a leader or an interest-compeller in this window?

Concerning the matter of artistic merit a great deal might be said, but suffice it to remark that any one who is naturally orderly and has an eye for balance and pleasing colors

can, with a little application, learn to put in a good business window.

Most of us are interested in any unusual side line which offers a fair profit, does not call for too great an initial outlay of cash, and promises a satisfactory margin of profit in return. The advantages of such side lines are that our overhead expense is not increased thereby, nor our regular sales depleted in consequence. Many druggists are speaking with enthusiasm of a couple of unusual side lines which have a real point of contact with most businesses. One is a coffee percolator and should be a winner with any druggist who sells coffee.

An increasing number are stocking coffee either for their "2 for 1" or "Cent" sales, or as regular staple goods. One brand is usually featured at an attractive price, considering the quality. What could be more in line than an up-to-the-minute coffee percolator to go along with it, which will produce the finest kind of an infusion and save coffee? Such a percolator is an all-around-the-year seller.

Another side line which also enjoys a twelve months' sale, but the harvest season of which is the warm weather, is an automatic ice cream freezer which requires no cranking, nor even electric current to make it go. It does the work itself and is to frozen things, what the fireless cooker is to hot ones.

"NOT TO BE RENEWED"

When a customer brings his prescription bottle back to be re-filled and is told that the physician has directed on the original prescription that it shall not be re-filled without his direction, there is usually met a feeling of having been unjustly treated or of antagonism for the store.

A Philadelphia drug store which keeps five prescription men busy year in and year out, has adopted the practise of affixing the following gummed label to each prescription ordered not to be re-filled.

NOTICE—Your physician directs that this prescription IS NOT TO BE RENEWED without his consent.

The customer reads this label when he first receives his medicine and long before the question of re-filling has arisen. He knows that he cannot go back and have the prescription re-filled without the physician's order. If the doctor will not give such an order, the matter is dropped; if the order is obtained, then the pharmacist is relieved of all responsibility.

The particular handling of such prescriptions in the above mentioned store is interesting. If a customer comes back with an order for a re-fill, the entire facts are recorded upon the back of the prescription, together with the name of the compounder. The doctor's order is also clipped to the prescription.

Some stores prefer to make a copy of the original prescription with a reference mark to the original, filling the doctor's repeat order with the copied prescription. Whatever the system, it should permit of an instant tracing of the whole transaction.

SANITARY STAMP DEVICE

Druggists who are not operating post office sub-stations, will do well to investigate the sanitary stamp selling device which nets the Red Cross a small margin of profit. Not only is the cause worthy of help, but this will save a good deal of work and mark the store as up-to-date and patriotic.

It is worth something not to have to stop in the middle of a prescription, or to dry your hands when manufacturing, to "dispense" a single stamp.

SOME SUGGESTIONS

Why not use as a bulletin board a roll of honor of all those who enlist for military or naval duty from your town, county or city ward?

If the high school boys and girls from your community have gone out to render farm service or some of the boys have enlisted, stimulate the rest who are still at their studies to do something in their spare time also, by offering a prize or prizes for those who bring in the greatest number of brown tail moth nests. In one city this is being done and the girls are proving the best hunters. Thousands of bushels of fine fruit will be saved—a worthwhile conservation, surely.

This is the time to push first-aid kits for the automobilist. Point out that it is dangerous for motorists to drink at springs and running streams, as to the purity of which they are ignorant. Suggest a thermos bottle for the lunch basket, or even to take on a short drive.

This is the time of year to stimulate the sale of "canned heat." Mothers with babies, picnickers and others appreciate a means of quick heat at reasonable cost.

See that your awning is in good repair. Nothing gives a place a more hang-dog look than a squ-gee awning.

AROUND THE CIRCUIT

A notable donation has been made by Mrs. George W. Vanderbilt to the United States National Museum. This gift consists of 20,000 herb specimens. The Vanderbilt herbarium, located at Biltmore, N. C., at one time consisted of 100,000, but a large part of it was destroyed by a flood last year.

The Texas Pharmaceutical Association held its annual state meeting in San Antonio City in May. A reception and dance were tendered to the Ladies' Auxiliary at St. Anthony's Hotel. Mrs. W. H. Wentland of Texas is President of the Women's Organization. Mrs. E. B. Dwyer, one of the officers, has recently been appointed on the School Board of the city of Houston.

Among the women to win pharmacy registration certificates at the recent examinations or by reciprocal courtesy are Sister Anselma Betzen of Kansas; Mrs. Willie Clark Long, Hopkinsville, Ky.; Miss Deane Marie Kannapel, Louisville, Ky.; Sister M. D. Sprewenberg, Peoria, Ill.; Rose Z. Felsner, Chicago, Ill.; Miss Hattie A. Dyniewicz, Chicago, Ill.; Miss Lenora M. Truhn, Wisconsin; Assistant Pharmacist, Sister M. Beatrice Perk, Peoria, Ill.

Philadelphia Chapter, No. 6, W. O. N. A. R. D., held an enthusiastic May meeting at the Philadelphia College of Pharmacy. A Red Cross Auxiliary was formed which is already actively at work preparing supplies for national relief.

Mrs. H. C. Clapham of Gowen Ave., Mt. Airy, Philadelphia, recently entertained Mrs. L. O. Wallace of Auburn, Corresponding Secretary of the W. O., and Mrs. W. E. Lee, Financial Secretary, at her home.

Congratulations are extended to Mr. and Mrs. Gorman who were recently married in Detroit. Mrs. Gorman was Miss Beatrice M. Keeley, a graduate pharmacist. The couple will reside in Sault Ste. Marie, where Mr. Gorman is engaged in business.

The sympathy of the women folk of the drug trade is extended to A. F. Pierce, of Irving Park Boulevard, Chicago, upon the death of his wife. Mrs. Pierce leaves three children all under fifteen years of age.

Mrs. A. C. Colwell, wife of the President of the C. R. D. A., Mrs. H. C. McCracken, President of the Women's Club of the Allied Drug Trade, and Mrs. Goodman of the Goodman Ice Cream Company, were the guests of honor of Chicago Chapter, No. 2, at their May meeting. Mrs. W. W. Clore was in charge of the delightful luncheon given to the membership and their guests. An enjoyable musical and literary program was given. This meeting closes the season for the Chicago Chapter.

Chicago Chapter W. O. N. A. R. D., have established a Women's Loan Fund for pharmacists, by which they can loan to any deserving woman a certain sum of money to help her through school. The recipient will give her note of hand for the loan with interest at five per cent. but the interest does not begin until the student has left school.

Louisville Chapter, No. 11, held its annual meeting in May at the Main Library. The year has been a most active and successful one. Officers were elected as follows: President, Miss Emma Frick; First Vice-President, Mrs. S. E. May; Second Vice-President, Mrs. Fred Kranz; Secretary, Miss Eleanor Diehl; Treasurer, Mrs. Henry Cohn. The meeting was followed by a banquet at the Hotel Watterson.

Professor G. L. Curry, Dean of the Louisville College of Pharmacy, and Mrs. Curry, have the sympathy of all in the loss of Mrs. Curry's sister, Mrs. Anna Russell Garrett.

Cincinnati Chapter, No. 5, W. O. N. A. R. D., recently elected the following officers for the ensuing year: Mrs. Otto Katz, President; Mrs. Dr. Beaman, first Vice-President; Mrs. A. Fletcher, second Vice-President; Mrs. A. D. Wells, Secretary; Miss Addie Fallon, Corresponding Secretary; Mrs. L. A. Lutterman, Treasurer; Mrs. Charles Ehlers, Board of Control.

The Women's Organization B. A. R. D., held its May meeting at the Hotel Brunswick. The following officers were elected for the coming year: President, Mrs. Mary R. Green; Vice-Presidents, Mrs. Ella S. Twitchell and Mrs. Ethel T. Corner; Financial Secretary, Mrs. Gertrude M. Acheson; Corresponding Secretary, Mrs. Marie P. Cafarella; Treasurer, Mrs. Gertrude J. Ernst. Directors, Mrs. Lilla M. Connolly, Mrs. Frances L. Hayes, Mrs. Delia M. Tobin, Mrs. Bertha M. Morrison, Mrs. B. L. Janes, Mrs. Georgia S. Furbush; Chairman of Hospitality Committee, Mrs. Sarah F. Finneran.

WHY ATTEND THE A. P. H. A. MEETING?

Committee Outlines Opportunities Offered at Coming Indianapolis Convention—Business First but Lots of Entertainment.

Retail druggists will have an excellent opportunity to enroll for a short course in the University of Experience, August 27th, when the American Pharmaceutical Association holds its annual convention at Indianapolis.

Not only do such meetings turn pause and ponder into push and progress but they constitute a diversion that offers the best method of getting closer to the vital problems of your profession by getting away from it for a few days. Co-operation spells efficiency. And the benefits that come of rubbing elbows with those whose problems are your problems are not to be reckoned on a dollar and cents basis.

By giving what you know and adding to yourself the other man's knowledge, you can do more to assist in the progress of pharmacy than you can by any amount of individual effort.

Pharmacy needs legislation; pharmacy needs recognition. Prestige does not spring from the earth like mushrooms. The worthy name that pharmacy deserves, the honor that should be attached to such a calling can and will come only through the co-operative efforts of thinking leaders in pharmacy. The American Pharmaceutical Association offers the site and scope for a tremendous effort in the right direction, the members and their attendance at conventions; their voice as one in the affairs of the association are as the individual bricks in a thirty-story building. One is a small object affording neither shelter nor protection, but in numbers they result in mighty structures.

No business man is a real success until he studies other business. Druggists, being practically professional men, haven't the time or inclination to do that, with the result that they put up mighty good prescriptions but mighty few bank accounts. It is not impossible for the local druggist to learn something from the local butcher.

The Proper Display of Candy

Good or Bad Showing Affects Sales

ONE of the most important features of one of the most important side lines in a drug store is display. Most any store can sell a limited amount of candy, because this is a nation of candy eaters, but the drug stores are few and far between that can make what should be the very best paying side line into a rapid selling stock. Why? In most cases it's display.

During the month of May a trip was made around New York and Brooklyn to see candy displays. That was the sole object of the trip, and while the results of it were maddeningly disappointing they were enough to teach a lesson. In the first place, New York druggists, for the most part, that is, do not know how to display candy. A most unprofessional druggist, untrained in everything pertaining to the drug trade, criticised the stores, but he did it from the viewpoint of a man who buys from drug stores, a layman in every particular, and he decided he'd get his candy in a confectionery shop merely because it didn't look good in the drug store.

Unquestionably the professional druggist knows his business better than his critic does. But in this case the critic is an average American, with average taste, and he appreciated at once the lack of taste in the store displays. It may not be true that what is found in New York is found everywhere, but the same critic has noticed that in a great many stores outside the city there is the same tendency to display candy without individuality.

A case in point, perhaps, is the Thornton store in Ridgewood, N. J. Some years ago, in the old store, candy was displayed in such a way as to make it almost repulsive. It was thrown together in a great mass, and if any box was opened to show its contents it was kept open until the chocolate grew stale, and little pebbles of musty gray appeared all over it. And that with a clear field in candy. True, Ridgewood had confectionery stores. But at the time none of them were good. The result was that Ridgewood, a somewhat fastidious town, bought its goods in the city. Then Thornton moved to a bright new store across the street. The light in the store itself evidently brought some to Mr. Thornton, because now candy is displayed most invitingly, and not the least of his business is in candy.

The Appetite in the Eye

It is certainly true that the eye has as much appetite as the stomach. If it doesn't appeal to the eye it won't appeal to the stomach except, perhaps, in cases of starvation. And it is rare that candy is bought when the consumer is starving.

Since it is true that the appeal to the eye is important, why is it considered good drug store display form to take 25 or 30 closed boxes of candy, to dump them into a showcase, or to pile them a mile high on top of it and wait for customers? Loft's candy stores in New York certainly carry a large variety of candy. But did you ever see a Loft store that didn't look appetizing?

The process is certainly simple enough. If it is chocolate that is to be sold, why not take a box of the goods, open it, proving to yourself and to your trade that it is fresh by that means, and place it in the center of the case? Around it, not too close, place some closed boxes. Behind it, if you wish, pile more. But in every bit of work in the case center on the opened box. Show your trade what you have to offer.

There is a store in New York—the name is withheld for very obvious reasons—in which the writer counted 21 varieties of candies displayed in a showcase that was perhaps 4 feet long and 3 feet high. That in itself might not have been so bad, but the candy had been thrown in, not placed in. For instance, there were stick mints, selling at 10 cents a bottle, placed in among \$1.50 a pound bon bons and fancy boxes. Hershey's chocolate bars found a resting place with butterscotch at 20c a pound on one side and 60c chocolates on the other. And then down in front, where it never could be reached, was a box of mints, selling at 5c a roll. Those things were supposed to

sell fast. It would have discouraged a purchaser who went into the store seeking a roll of the mints. The proprietor of the store complained that he couldn't sell candy. He said that it was going stale on his hands every week.

A Candy Display Trick

Now, if that druggist had used his brains in a practical way he could have shown all his stock, and shown it well. Of course it is true that he was too heavily loaded. It was quite certain that he was one of the druggists who buys sundry and side line stock with the same professional brains he used in mixing a difficult prescription, but he could have displayed the goods just the same, since he had them on hand.

He could have placed the varieties together, in the first place, the cheaper and fastest moving stock nearest the doors to the case. Then he could have graduated them until he reached the higher priced candies. But the trick he should have used, his unprofessional critic would most certainly have used it, would have been to build tiers in the case. He should have displayed that candy as an audience in a theater is displayed, one row a bit higher than the other.

Then, too, he should have bought him a swinging shelf and would have used that. He'd have made a system to the display. A system that would speak for itself. And undoubtedly right in the center of the case he should have put one or two opened boxes.

It is because of bad display in candies that stock doesn't move. The successful soda and candy shop moves its candy because it studies the display of it. Because it appeals to the eye and so to the stomach and taste. Why shouldn't the druggist? Principally because in a great many instances the word display to a druggist is a foreign name. It's something he doesn't seem to understand. Haven't you been in any number of drug stores in which the general display, speaking now of the entire store, is crude, thrown together and without a system that attracts to any single thing? The writer has been all over a store searching for the display of talc powder only to find it hidden behind hot water bags and near some patent medicine.

There is one other secret of candy. That is buying. But that secret is a secret to every other line of stock. Candy, however, should be purchased when it is alive. The buyer should be absolutely sure that in every way it is fresh when he gets it. Not only that it is fresh but that it will not be anything else for at least a week. It is easy to "stick" a buyer of candy. But it wouldn't be easy if the druggist would buy it with his eyes and brains open and ready for business.

Candy is a good moving stock. The chain stores sell lots of it. They know how to display it, of course, but they sell it. The druggist who is going it for himself would also sell lots of candy if he would buy it well, display it well, and then feature it. You feature your drugs, your powders, your supplies, do you feature your candy?

CALIFORNIA PH. A. BUYS WAR BOND

After adopting resolutions commending President Wilson for his stand in the war against Germany, the California Pharmaceutical Association at the closing session of its recent annual meeting held in Oakland, authorized the purchase of a Liberty Bond, and elected the following officers:

President, W. Bruce Philip, Oakland; first vice-president, Frank Gardner, Riverside; second vice-president, P. T. Hahman, Santa Rosa; secretary and treasurer, E. A. Henderson, Los Angeles. Executive committee—O. V. McCracken, Berkeley; K. B. Bowerman, San Francisco; W. R. Dickinson, Los Angeles; F. B. Taylor, Oakland; J. A. Sanford, Stockton; E. G. Binz, Los Angeles, and D. R. Rees, San Francisco.

San Diego was chosen as the next meeting place.

HOW TO GROW A DRUG BUSINESS

1. Be enthusiastic over the dignity and privilege of your profession.
2. Don't be content to be barely equipped. Be an expert in your line.
3. If you are choosing a location, see that the soil is good—that is, that the prospects are first class for steady community improvement. Then be prepared to keep step yourself. If you are already located, cater to the best class of people within your reach and serve well all who come to you.
4. Buy as much as you have a ready outlet for, but don't tie up every cent of the store income in stock.
5. Keep watch of your overhead expenses, for these and the cost of the goods must be met before you can figure profits.
6. Keep a little advertising of the right kind, which is adapted to your business, going constantly.
7. Remember that courtesy, right service, and right prices will bring and hold customers.

8. Don't be wedded to any one jobber. Keep posted on prices.
9. Never drift. Establish a cash and inventory system which will keep you informed of your business status at all times.
10. Obey the law so that no man can make you afraid.
11. Take a personal interest in your customers. Where possible call them by name.
12. Examine new propositions carefully before investing your money.
13. Beware of the hasty signing of contracts.
14. Establish friendly relations with your physicians.
15. Prove yourself public-spirited where you can consistently do so.
16. Subscribe to the best drug journals and read them.
17. Attend the meetings of your fellow pharmacists and keep in touch with proposed legislation.
18. Get your bills out on time.
19. Don't neglect your collections.
20. Plan your recreation and your work and know what your competitor is doing.
21. Have the courage to be a leader.

THE MILWAUKEE OWL STORE



The new Owl Drug Company store in Milwaukee is one of the best arranged stores in the country. Not only that, but it is a tastefully decorated shop, in which it should be a pleasure for a customer to shop. Although all Owl stores are alike in design and management, the new store is the largest and most elaborate and one of the "show-shops" of the chain.

In the first place, the decorations are in the characteristic orange and gold finish of the chain. In location, the new store is superior because it has entrances opening to the new Plankinton concentrated shopping district and arcade, to the business section of Second street and to Grand avenue, the busiest street in Milwaukee.

The new store marked the silver anniversary for the Owl company. Twenty-five years ago the chain stores

were started by R. E. Miller in Los Angeles and during the interim have spread all over the West. The central offices are continued in Los Angeles, where a great silver anniversary celebration was held recently and Mr. Miller continues to be president of the concern. The opening of the Milwaukee store therefore was opportune.

At the Grand avenue entrance of the new store is the toilet department, exceedingly well arranged. In the center, near the entrance is the French Ivory department as well as the photography department. Attractive electric signs set off these departments as well as the others in the store. A ladies' rest room is a feature together with a modern well equipped prescription department in charge of registered and trained pharmacists and clerks.

Forty people are employed in the store under G. R. Bent, the manager and Maurice Comb, his assistant.

BUYING AND SELLING

DRUG MERCHANDISE

Brushing Up On Profits

A good brush depends upon its bristles as much as a good neighborhood depends upon its drug store. If, in the case of the brush, the bristles are soft or weak, the brush is unhealthy. If the neighborhood can't get a good drug store to give it service, it is unhealthy, at least for the store.

At first glance, one would not believe that the construction of a brush is either very difficult or very severe. One would be tempted to imagine that a bunch of bristles, a few properly drilled holes in a piece of wood shaped as desired, a little glue and a little dry weather would be all that is necessary. But it isn't. Brush making is something of a science. It is perfectly possible to make a brush with the formula and ingredients presented, but it is not perfectly possible to use the brush after it has been made. And since the brushes which can be used are the ones which affect the market price, this story is written to consider the manufacture of brushes and relation they bear to the drug stores.

LeW C. Hill, president of the John. L. Whiting-J. J. Adams Company, brushes makers of Boston, says that the very first thing the brush maker thinks of is bristles. They create the brush. If they are poor the brush is poor—and hogs in most countries do not produce bristles that can be made into good brushes. Russia and China supply nearly all the bristles used, and at present the Russian market is somewhat cut off both because of the position of Russia in the war and because the German invasion two summers ago destroyed most of the brush making centers.

"Tampico" no Great Success

Substitutes have been tried, of course. One of the most used is a vegetable fibre from Mexico which is called tampico, taking its name from the territory in which it is made. Its character is not as strong and sturdy as that of the pure big bristle. It very rarely deceives the man who knows something about brushes and the best use that can be made of it is in combination with bristles. It costs very little used that way, and, because of the war, has assumed a greater importance than, perhaps, it really deserves.

There are other things which can be used, of course. Horse hair is one, and it has a deceptive appearance. Brushes can be made from horse hair, for certain purposes, which will deceive many real experts, but its presence is soon felt. It weakens the brush more than it cheapens the price, and is not altogether the best substitute that can be used.

Russian bristles come in white, yellow, gray or black, with the white the most expensive. That is not because there is more actual stiffness in the white than in the others, but because it is more difficult to get. Chinese bristle producers send only black bristles but they are not equipped with the wearing qualities of the Russian. They have the elasticity, sometimes even more than the Russian, but put into a brush, they will not stand up under the strain for anywhere near the time that the Russian will.

The wear on a brush is not in the handle. Most wood will last any length of time. Most glue is good enough to hold together what it is meant to hold for a considerable length of time. In the bristle comes the most wear, then. It comes in contact with the surface to be brushed, it receives all the tension and it is continually being pushed and pulled into and out of place.

Bristles Must Be Strong

In handling brushes then, it is essential that the druggist see to it that the bristles of the brand he has are strong. He must know whether they are joined securely and in such a way as to stand the strain that is placed on them. For the druggist who sells a poor brush which will not do its work for the purchaser, and which weakens rapidly under the strain, is going to get into trouble. Of course, the druggist is more interested in toilet and household brushes than in paint brushes and the mercantile varieties. In making the toilet and household brushes, a radical difference from the making of other kinds exists.

Bristles are fastened in blocks in multiple tufts instead of a solid mass. This system gives the soft fluffy feeling to the brush and makes it possible to use it easier and with much better results. Blocks are bored with holes and the ends of bristles fastened by different mechanical holding devices. Some are made by forcing in bridge shaped pieces of metal, while others are held with thick pitch or shellac in the holes. Ingenious machines for picking up the bristles to exactly fill the holes and for rigidly fastening them have been devised. It is with this kind of brush that the artist of the factory is most interested. From the very nature of the thing, it can be ornamented. It sells better in that way, in most cases, and it has been found by brush makers that their output for toilet and household can be made very expensive and costly by the use of a little careful and beautiful artistry.

A brush in which the druggist is very much interested is the shaving brush. This is an age of smooth faces, and it is the fashion not to wear a beard. Mustaches are all right, but a beard rarely ever "gets by." That means lots of shaving. It means good profit for the druggist both ways. It means he can make money selling shaving articles, can get a return profit on his soap and another on his shaving brush. These brushes have to be carefully made. The manufacturers have learned that the shaving man does not want a few unattached bristles left on his face after he has finished his lathering. He would much prefer shaving over a smooth face than to have his razor run into a bristle, slip, perhaps, and cut him. So shaving brushes are carefully made.

There are probably as many different ways of making shaving brushes as there are different safety razors. Perhaps the most popular are the Vulcan or Rubber-set, both of which are made by a special and important process. The Rubber-set is what its name implies, while the Vulcan is also set into a rubber firmly and by a patented device. The Vulcan is a guaranteed brush, and is one of the most popular among shavers.

Tooth Brushes

Tooth brushes, which are good sellers, are made with watchful care. Here it is absolutely necessary to have bristles that will not come out. A dentist told the writer not long ago that more than a third of all the "sudden" cases—the kind in which a toothache is suddenly developed in a tooth supposed to be absolutely perfect—come from tooth brushes. He said that a bristle, breaking loose, while the brush is being used on the teeth is pushed here and there against the teeth and more often than not runs into a cavity. Hence the sudden toothache. That same dentist also said that one of the most difficult surgical cases he had ever had was the result of a bristle that had cut through a cavity, as the woman shined her teeth, and had been pushed directly into a nerve. It broke off, and the result was that three operations had to be made on the patient's mouth.

These incidents are only by way of diversity. The idea is that in handling tooth brushes it is the foolish druggist who does not make sure that he is selling a brush that *won't shed bristles*. It is easy to imagine what will happen to him if he does. You can get brushes to sell at 10 cents. But there is better business wisdom in selling tooth brushes at 25 cents and 35 cents or even more, and refusing to handle the cheaper ones, if you know the bristles will not stay in.

Bristles Diminishing in Supply

There is a great deal more to making brushes besides sticking the bristles on to the handles. The beginning of making perfect brushes is buying proper kinds of bristles, which must be prepared by experts, and all the processes carried along by experts. The better kinds of bristles are not plenty, and they are now sought after at their sources of supply. Obtaining good quality bristles at fair prices is getting to be in the same class as hunting animals which produce valuable scarce furs. Civilization must have good brushes; society would not be a success without them. No matter what one's

condition is, he demands brushes, for the numerous everyday purposes of his life. With this demand continually increasing and supply decreasing, the game of "hunt the bristle" will, as the years go by, become more active even than at present.

Every year large brush manufacturers are becoming more and more necessary to the trade, as only they can make selection by their experts, of quality of bristles best adapted to making brushes.

There was a time in the past when bristles were put on the market at auction, to dispose of surplus stocks and bristle sellers were hunting for buyers. It is quite a good many years since there have been European bristles sold by auction methods, and there is no probability that it will occur again. From being an article of abundance, bristles have become one of scarcity of desirable grades. Under such conditions, manufacture of good quality staple brushes and high grade brushes of all kinds is now practically confined to large brush manufacturers. This is due to the law of trade that the small maker has not the facilities of obtaining readily that which is difficult to get.

WAR GIVES IMPETUS TO DRUG GARDENS

The continuation of the European war has given an impetus to the growing of medicinal plants in this country, especially in connection with colleges of pharmacy. Recently the college of pharmacy and the department of botany of the University of Iowa have combined their efforts and established a station where intensive cultivation on the experimental scale will be attempted, the idea being to train botany and pharmacy students so that when they go out to their respective homes they may teach the people of the State the proper methods of growing drug plants that can be profitably produced in that part of the country. Other institutions have already developed departments of this character with such success that the time must soon come when no college of pharmacy will be considered as thoroughly equipped unless it maintains a medicinal plant garden.

SUIT OVER "ASPIRIN" TRADE MARK

Suit has been begun in the United States District Court for the Southern District of New York by The Bayer Company, Inc., against the United Drug Company for infringement of the trade mark "Aspirin." Early this year The Bayer Company warned the trade that while the patent on acetyl salicylic acid had expired on February 27, 1917, the trade mark "Aspirin" remained the exclusive property of The Bayer Company, Inc. The warning stated that the company would prosecute any violations of its trade mark rights.

The Bayer Company recited the granting of the patent and its expiration and the registration of the trade mark "Aspirin" on May 2, 1899, and then referred to the opinion of Livingston Gifford, of Gifford & Bull, New York, to the effect that the right of The Bayer Company to the exclusive use of the trade mark "Aspirin" did not expire with the Hoffman patent.

Shortly prior to the expiration of the Hoffman patent Lehn and Fink notified The Bayer Company that counsel had advised them that owing to the expiration of the patent the public became entitled not only to the free use of the Hoffman process, but to the mark "Aspirin," on the ground that "the name Aspirin had become generic within the principles laid down by the Supreme Court in Singer Manufacturing Company v. June Manufacturing Company."

Several concerns manufacturing drugs began the manufacture of acetyl salicylic acid in accordance with the Hoffman formula, but all of these manufacturers, with the exception of four, accepted the reasoning of the counsel for The Bayer Company and respected the rights of The Bayer Company in the trade mark "Aspirin," and labelled their packages "Acetyl Salicylic Acid." The four concerns mentioned include Lehn and Fink, New York, and The United Drug Company, Boston, Mass.

The United Drug Company accepted service through its New York attorneys, and it is required to file answer to the suit on or before the 19th day of June.

The United Drug Company filed a petition for cancellation of the "Aspirin" registration. The attorneys for The Bayer Company, however, filed a motion to dismiss the petition, and in this motion presented six grounds for the dismissal of the petition. At the request of the attorneys for The United Drug Company the motion to

dismiss has been deferred for the present, and in all probability the proceedings for cancellation of the registration will be held in abatement pending the outcome of the suit.

STRAIGHT TALK

There is no excuse for the druggist who fails to take advantage of the present times to gain the confidence of his trade. The nation is at war; as the days go by events will prove that it is very much at war, but the business of the nation is flourishing. When the drive on the Liberty Loan was at its height, several New York druggists saw the light and sold bonds over their counters. They did not make money from the sale themselves but they taught the trade that the store was alive as well as patriotic. It was one way of capitalizing patriotism that was not offensive.

No druggist can afford to overlook his opportunities. Just now, for instance, the Red Cross is driving forward for contributions. Can you suggest a business more closely related to the Red Cross and one which has a better right to take up the propaganda work for that organization?

But it is not alone in the matter of boosting something that is patriotic that the druggist has an opening. He has it almost everywhere. The big thing today is confidence. The buying public must have confidence that everything is going to be all right; the selling public must have confidence that the buyers will trade. It is reciprocal, but the druggist who does not make his every point towards maintaining the confidence of his customers at a high pitch is the druggist who has no right to success. These are not the times for faulty and weak experiments. They are times for good sane business, that couples with solidarity the grasping of every opportunity that is safe and sane.

The Old Drug Store

From the New York Sun.

When we were small we swung its green baize door
If ever a stray penny came our way
For peppermints or gumdrops, or a gay,
Striped "all day sucker." Tiptoe, we'd explore
The dusty shelves whose tubes and phials wore
Strange mystic names in magical array,
And how we yearned to own the queer display
Of motley wares the crowded counter bore!

And oh, the lure of those glass jars that shone
With taunting gleams of green and red and white
In each wide window. Troy nor Avalon
Could offer of enchantment or delight
No fuller measure than our fancy spanned
In that old drug store's musty wonderland!

What Counts

From the Philadelphia Evening Ledger.

There may not be much in the things that you say—it's the way that you say them;
The kind of the games that you play doesn't count, it's the way that you play them.

In palace or cottage, in office or ditch or wherever you're working,
The test of your manhood is answering this, Are you striving or shirking?

And Life at the best only gives back again to you that which you give it;
So high life or low life means nothing at all—it's the way that you live it.

"Closed for the War" is a sign that is becoming noticeable on several drug stores in the country. It does not mean that the proprietor has lost heart and has gone out of business; it means that he has taken heart and has gone to the front. One might suggest, in this connection, a way that the older druggists can do "their bit." When the younger competitor shoulders his rifle and goes to France, he leaves behind him the seed which means his future success, well planted, perhaps, but with no one to tend it. Couldn't the older man who can't go to war, make an offer of reciprocity to his younger colleague? Couldn't he handle the fighter's business and divide the profits? Doctors are doing it. Think it over.

The leading pharmacists of the country, and the leading drug associations are trying to get the Army department to form a regular Pharmaceutical Corps, in which trained men will serve in the capacity they are best fitted for. If it goes through, it will be the opening many druggists are looking for—it will rather take away the excuse, won't it?

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

PROF. DAY'S TWENTY-FIFTH ANNIVERSARY

Twenty-five years ago William B. Day graduated from the Chicago College of Pharmacy and immediately associated himself with his alma mater. That he has rendered a good account of himself, everybody connected with the college knows, for as a member of the faculty and as acting dean he has done much to bring the institution to a high standing in pharmaceutical and educational activities. In 1911 he was appointed acting dean in the absence of Prof. F. M. Goodman, who was forced to give up teaching on account of illness, and since that time, Prof. Day has left no stone unturned to put the University of Illinois College of Pharmacy on the map. Outside of the college he has served as secretary to the Illinois Pharmaceutical Association since 1906, and in 1912 he served as president of the American Pharmaceutical Association. Since 1916, he has been secretary of the A. Ph. A. His work speaks for itself.



WILLIAM B. DAY

In recognition of these activities, the Alumni Association and his many friends in the various branches of the trade celebrated Prof. Day's twenty-fifth anniversary by a testimonial dinner, which was held on June 6, at the Hotel Sherman, Chicago, in conjunction with the 35th annual reception and banquet of the Alumni Association. Representative men from nearly every branch of the calling were present, Dr. H. M. Whelpley, of St. Louis, acting as toastmaster. Among those responding to toasts were W. L. Abbott, "The Board of Trustees;" Dr. F. J. Wulling, "The American Pharmaceutical Association;" Dr. Edward Kremers, "The University of Wisconsin;" H. M. Moffett, "The Chicago Drug Club;" J. W. Morrisson, "The National Wholesale Druggists Association;" H. C. Christensen, "The National Association of Boards of Pharmacy;" Richard Voge, "The Chicago Veteran Druggists' Association;" and Thomas Potts, "The National Retail Druggists Association." Julius Riemenschneider, Mrs. J. F. Forbrich, F. J. Butler, Hugh Craig, A. C. Caldwell, Prof. C. M. Snow, O. H. Whittington and L. R. Mrazek also responded for various State and local associations, Prof. W. B. Day appreciatively replying to all of the good things that had been said about him.

The celebration was arranged by the Alumni Association, and the successful manner in which the program was carried out, together with the large number of prominent pharmacists present, was sufficient to mark the event as a red letter day in Chicago pharmacy. Presentation of prizes to members of the graduating class of the college of pharmacy concluded the exercises.

CELEBRATE LAMPA'S 40TH ANNIVERSARY

Robert R. Lampa was given a dinner at the Drug and Chemical Club, New York, one evening recently by the directors and staff of Lehn & Fink, Inc., in celebration of his forty years' connection with that house. Edward Plaut, vice president of the corporation, acted as chairman and toastmaster. The exercises began with singing the National anthem, and then F. W. Fink, the only surviving member of the original directorate, presented Mr. Lampa with a copper cast of the guest. Mr. Fink said that he could not help becoming sentimental as he recalled the early days of the firm. Mr. Lampa he regarded as one of the old guard; a faithful henchman who had stood just as valiantly at his side in vicissitude as in success. He also touchingly referred to the late Albert Plaut, whose presence was sadly missed and to whose memory he proposed a silent toast.

Edward Plaut, in replying to the touching reference to his father, announced that there is now another Albert Plaut, and although only weighing eleven and one-half pounds, he is already giving promise of writing his name large on the roll of success. Joseph Plaut, president of Lehn & Fink, Inc., who had covered a journey of 3,000 miles to be present, paid a tribute to Mr. Lampa as an old associate and co-worker, and said that it was due to Mr. Lampa's great knowledge of trade conditions relating to drugs and chemicals that the house had called him from the field of selling to become head of the sales force, which covered the entire United States. At the conclusion of his remarks he presented Mr. Lampa with a beautiful loving cup. C. A. Snedaker, in behalf of the sales force, presented Mr. Lampa with a huge basket of roses for Mrs. Lampa, and the staff, as a tribute to his leadership, presented him with a handsomely engraved walking stick.

Mr. Lampa, in replying, thanked the speakers for the kind tributes they had paid to him and which he said were not all deserved, because he had merely done his duty as a man. He recalled the hard-working days, when in company with Secretary Wm. J. Gesell, it was necessary to work long nights, and even Sundays, to meet the demands of the growing business. While he always worked untiringly, he felt that much of his enthusiasm and energy had been inspired by the stimulating influence of the late Albert Plaut. It was his present aim to pass this inspiration along to the promising beginners in the business and he wanted to help them equip themselves thoroughly for success. He aimed to work for the best interests of all associated with him and wanted to be remembered as "entirely and sentimentally human."

Among those present were Joseph Plaut, president; Edward Plaut, vice president; William J. Gesell, secretary; Robert Plaut, treasurer; George J. McEwen, president of the Hudson County Bar; F. Ehrmann, T. D. Wilson, William Strauss, J. H. Middendorf, T. Benedict Furniss, R. Siller, C. Ryan, M. Gerbing, R. Schwarz, C. A. Snedaker, E. D. Tremper, P. B. Tarleton, F. H. Herman and H. Bartels.

SUBSCRIBES \$50,000 FOR LIBERTY BONDS

Ernesto Sarra, prominent wholesale druggist of Havana, Cuba, on June 11 cabled the H. K. Mulford Company, of Philadelphia, to subscribe \$50,000 worth of Liberty Bonds for his account. In acknowledging the order Mr. Mulford entered the subscription and wrote Mr. Sarra as follows: "I want to express my sincere admiration of your high spirit of friendship to the United States as shown by your subscription. Although you are a citizen of Cuba, I appreciate the high regard in which you hold the United States and your loyalty to the cause for which we are fighting. Such sentiment as you manifest offsets some of the horrors of war, because it is an evidence of your appreciation of the aims of our country at this time."

Mr. Mulford immediately informed Secretary McAdoo of Mr. Sarra's subscription and expression of friendship for the United States.

CELEBRATE THEIR GOLDEN WEDDING

Mr. and Mrs. J. S. Moore of West Stockbridge, Mass., celebrated their golden wedding anniversary on June 6, the affair being attended by many friends who were invited, the invitations being accompanied with a request that no presents be given. Mr. Moore retired as an active druggist in 1909, after 43 years of successful business life. Many druggists learned the business under Mr. Moore one of the conditions being that when he engaged his clerks he always stipulated that they should not use tobacco in any form.

Mr. Moore was born in 1842 and learned the drug business at Westport, on Lake Champlain. He is a veteran of the Civil war, serving with Co. B, 49th regiment, Massachusetts volunteers. He has held about every office in

the town of West Stockbridge, his first being that of field driver, which in olden days was filled by the most recently married man in the town. In 1899 he was a representative in the State legislature. He formerly owned the pharmacy now conducted by M. G. Troy at West Stockbridge, and at the time of his retirement, was probably the oldest druggist in Berkshire county. Mrs. Moore is five years younger than her husband and is a sister of Edgar G. Nicholson, in the drug business at Brockton, Mass.

PERSONAL BREVITIES

—MISS WILLETTE MCKEEVER, one of the four women members of the graduating class of the Massachusetts College of Pharmacy, and also the youngest graduate, received the degree of Doctor of Pharmacy at the recent commencement. She is a resident of Lynn, and graduated from the Classical High school in 1913. Besides her knowledge of pharmacy, she has had a remarkable success as a dancing instructor of children and adults. She expects to continue her studies in advanced chemistry and bacteriology during the coming year.

—LOUIS K. LIGGETT, head of the United Drug Co., turned over to the government, June 3, a 100-foot cruising power boat, *Marold*, which he purchased a month previously from C. Harold Wills of Detroit, for use in the patrol fleet of the 1st Naval District. The *Marold* was brought from the Lakes by Mr. Liggett, passing through the Erie Canal, down the Hudson River to New York, and then up the coast to Boston. She was built at Port Clinton, O., in 1914. Her four 12-cylinder engines give her a speed of 25 miles an hour.

—ADOLPH F. MARQUIER, druggist for 22 years at 1041 South Orange ave., Newark, and recently elected president of the New Jersey Pharmaceutical Association, has been prominently identified with organized pharmacy for many years. He has been a member of the faculty of the New Jersey College of Pharmacy for more than a decade, and president of the alumni association of that institution for fifteen years. In the Vailsburg section of Newark, he is looked upon as one of its most prominent citizens.

—CHESTER A. HULL, Belmont, Mass., has closed his pharmacy for six months, and, with his clerk, Harold E. Whidden, has gone to France to serve six months at the front in the American Ambulance Corps. Mr. Hull was given a public reception by Belmont people, followed by a banquet. Just previously to his departure he had led a successful campaign to buy an ambulance, getting subscriptions at the rate of \$3 a minute, besides collecting \$1,689 for 100 Red Cross beds.

—GREGORY NALPANT, clerk with L. O. Esperance & Co., druggists of Fitchburg, Mass., possesses an unusual familiarity with foreign languages, and this ability has enabled him to bring considerable trade to his employers that would have gone elsewhere. Fitchburg has a large foreign population, and Mr. Nalpant speaks seven languages fluently. He is registered as a pharmacist in the United States, England, France and Egypt.

—SENATOR KELLY E. BENNETT, father of the bill passed by the last North Carolina legislature designed to eliminate the sale and advertisement of proprietary or patent remedies proposing to cure incurable diseases, is a pharmacist of Bryson City, N. C., and a graduate of the University of North Carolina School of Pharmacy, class of 1912. He was recently elected a trustee of his alma mater to serve until 1925.

—THE B. & J. PHARMACY, 135 Main street, Brockton, Mass., is credited with being the narrowest drug store in New England, and is for this reason attracting much attention among the public. Special fixtures built to meet the peculiar shape of the store have made it most attractive. The pharmacy was recently opened by Arnold J. Bergstrom and Gustavus Jones, Brockton drug clerks for several years.

—MISS ALICE JOSEPHINE FINCH stood at the head of a class of sixty-nine students who graduated from Creighton University College of Pharmacy on June 2, being the only student having an average of more than ninety per cent. She will be presented with a set of pharmaceutical

reference books by the Nebraska Pharmaceutical Association. She is the daughter of Mr. and Mrs. H. J. Finch of Omaha.

—FRED BAEBENROTH, JR., proprietor of the pharmacy at 2631 Wells st., Milwaukee, Wis., has enlisted in the Federal service and is awaiting the formal call to go to France as a pharmacist and chemist in the Milwaukee division of the base hospital. The position carries with it the rank of second lieutenant. During the absence of Mr. Baebenroth, the pharmacy will be in charge of Ray Miess, one of the clerks.

—F. C. GROOVER, president of the Groover-Stewart Drug Co., wholesale druggists, Jacksonville, Fla., was re-elected president of the Jacksonville Chamber of Commerce at a recent meeting of the board of governors of that body. Mr. Groover has been greatly interested in pig and corn club work in his county, his company offering prizes to the competing boys in the effort to stimulate this important industry.

—FRED C. DODDS, secretary of the Illinois Board of Pharmacy for many years, was recently appointed superintendent of the new department of registration provided under the law passed at the last session of the Illinois legislature, which consolidated all of the boards heretofore in charge of trades and professions whose members are required to be registered into one general department.

—FRED G. LEITH, a graduate of the Rhode Island College of Pharmacy, and a chief pharmacist's mate in the United States Marine Corps, expects to go to Europe with an expeditionary force. He has recently been doing recruiting work. During his twelve years of service in the Marine Corps he has been stationed in China, the Philippines, Nicaragua, and at various points in the United States.

—A. C. OTTO, Grand Rapids, Wis., druggist, recently made good his promise to treat the Rexall bowling team of that city to a banquet should the members win the championship in the city tournament. At the banquet besides Mr. Otto, were the following druggists: M. C. Whitrock, Earl M. Hill, William Franson, Harry Little, Arthur Zimmerman and Dr. O. N. Mortenson.

—W. E. SHERRIFF, Ellsworth, Kansas, after twenty-four years of service as secretary of the State Board of Pharmacy, has been succeeded by Edward Dorsey, of the Dorsey Drug Co., Ottawa. Mr. Dorsey was appointed on the board over a year ago and was recently elected secretary. Ora C. Anderson of Oskaloosa will be chief clerk to the secretary.

—R. C. ROGERS, who formerly was a clerk in St. Joseph, Mo., recently returned from abroad where he had been serving as a pharmacist's apprentice on the U. S. S. North Carolina. He was one of the crew who first chaperoned the big shipment of gold sent to the Americans who were stranded in the warring nations when war broke out.

—HENRY HOWARD, of the Merrimac Chemical Co., Boston, has been appointed director of the campaign to recruit and train 10,000 men to officer the ships of the new American merchant marine by the Federal Shipping Board of the Department of Commerce. He has a wide acquaintance in the trade, and all are sure he will be successful.

—HARRY WENDELL, a drug clerk with the Beaton Drug Co., Omaha, Neb., has gone to Pensacola, Fla., where he will join the aviation corps of the Army. He volunteered for the Nebraska aviation corps, which was organized at the outbreak of the Mexican trouble and his name was placed on the reserve list.

FRED J. BAKER, a Jacksonville, Wis., pharmacist, with fifteen years of pharmaceutical experience and seven months of hospital service, recently received orders to report at Chicago to take an examination for entrance into the enlisted medical reserve corps as a master hospital surgeon.

—WENDELL ESMOND, a druggist of Waukegan, Ill., has joined the army after being twice turned down for physical unfitness. When the doctors refused to pass him the second time, he went to a hospital, paid \$100 for an operation and was then accepted and has gone to a training camp.

DEATHS IN THE DRUG TRADE

DEAN J. O. SCHLOTTERBECK

Dr. Julius O. Schlotterbeck, professor of pharmacognosy and botany and dean of the College of Pharmacy in the University of Michigan, died at his home in Ann Arbor on June 1, after a five months' illness. He was born in Ann Arbor and was 51 years of age. He was widely



J. O. SCHLOTTERBECK

known as a scientist and had repeatedly served as an expert in connection with the enforcement of the Food and Drugs Act. After attending the public schools of Ann Arbor he entered the university, graduating from the College of Pharmacy in 1887 with the degree of Ph. C. In 1891 he received the degree of B. S. in chemistry, serving in the meantime as an instructor in pharmacognosy and materia medica.

In 1895 he was granted a leave of absence to study in Germany and Switzerland, where he specialized in pharmacognosy, taking the work as a major study in the University of Bern under Prof. Tschirch and receiving the degree of Ph. D. with the grade of "summa cum laude" for his researches in the history and investigation of several official seeds. He returned to Ann Arbor in 1896 and became associate professor of pharmacy. On the death of the late Dr. Albert B. Prescott he was chosen dean of the College of Pharmacy, a position he continued to hold until his death. In 1912 he was granted a year's leave of absence to establish a drug and food laboratory at Rochester for the J. Hungerford Smith Co. He was a member of the American Pharmaceutical Association, the American Chemical Society, the American Association for the Advancement of Science, and had for years been active in the work of the American Conference of Pharmaceutical Faculties, serving as president of the organization for two years and as secretary for four years. He was also an active member of the Committee of Revision of the Pharmacopoeia and many other organizations. He is survived by his widow, two sons and one daughter.

PETER MacEWAN, F. C. S., Ph. C.

Word comes from London of the sudden death in that city of Peter MacEwan, F. C. S., Ph. C., editor of the *Chemist and Druggist*. He was seized with apoplexy on May 16, and passed away shortly afterward. He had suffered with congestion of the lungs earlier in the year, but was thought to have recovered his normal health. He was born at Lochee, Forfarshire, Scotland, in 1856, and after serving his apprenticeship he completed the course of the Pharmaceutical Society, passing his major examination in 1880. He joined the editorial staff of the *Chemist and Druggist* in 1885, becoming editor in 1899 on the retirement of the late A. C. Wootten from that position. Mr. MacEwan was a voluminous contributor on pharmaceutical and chemical subjects, his well known work on "The Art of Dispensing," now in its ninth edition, being a standard work among pharmacists wherever the English language is spoken. He had a wide acquaintance in the drug trade, and many American pharmacists still in business will recall his visit to this country in 1893 during the Columbian Exposition at Chicago. He leaves a widow, three sons and two daughters.

ROBERT K. SMITHER

Robert K. Smither, for years one of the most prominent druggists in Western New York, died recently at his home in Buffalo, aged 66. He was born in Winchester, England, and came to this country with his parents when he was seven years old. He went to Buffalo in 1869, where he entered the employ of W. H. Peabody, at that time a leading druggist of the city. In 1875 he opened a store of his own at Niagara and Jersey streets, and sometime later formed a partnership with George I. Thur-

stone, operating the Smither-Thurstone drug store at Bryant street and Elmwood avenue. He also owned the Parkside pharmacy.

Mr. Smither was known throughout the State for his activities in pharmacy and politics. As a representative of the Erie County and New York State Pharmaceutical Associations he had much to do with the moulding of legislation affecting the practice of pharmacy in the State and Nation. He was one of the organizers of the Erie County Board of Pharmacy and its president in 1884. He also served as president of the Erie County Pharmaceutical Association and as curator of the Buffalo College of Pharmacy. He was one of the founders of the New York State Pharmaceutical Association and served as its president in 1896 and 1897. He early took an interest in local politics as a Republican, and in 1879 was elected supervisor from the old Ninth Ward, being the youngest member of the board, and to which he was returned for three successive terms. From 1891 he served for three successive terms as a member of the Board of Aldermen, holding in the meantime the offices of president of the Common Council and president of the Board of Aldermen. Mr. Smither was a ready and incisive speaker, and his long political training and experience in organization work enabled him to obtain a hearing whenever he spoke on questions pertaining to pharmaceutical legislation in the State. He is survived by his widow, two sons and two daughters.

CHARLES S. ENGLAND

Charles S. England, senior member of the firm of England & McCaffrey, druggists, Utica, N. Y., died suddenly on June 14, following an illness with heart and kidney trouble which had kept him in bed for about a week. He was born in Utica in 1854, and early learned the drug business, first working in stores in New York City and Brooklyn, and later entering the employ of John H. Sheehan in Utica. He then became a member of the firm, but later sold out and went to Duluth and took part in the formation of the Sager Drug Co., where he remained two years. Returning to Utica he again associated himself with John H. Sheehan & Co., but in 1896 withdrew and went to Buffalo with Plympton, Cowan & Co., where he worked for two years. He then formed the firm of England & McCaffrey, with which he was connected until his death. He was a charter member of the Commercial Travelers' Mutual Accident Association of America, and a member of the Utica Chamber of Commerce, the New York State Ph. A., and various fraternal organizations. His widow and one daughter survive.

GEORGE A. PARCHER

George A. Parcher, for 53 years in the drug business at Ellsworth, Me., died on May 18, after a long and trying illness. He had served several terms as an alderman, and was the pioneer agent of the American Express Company in Ellsworth, a position he retained for 43 years. He was born at Randolph, Me., in 1844, and entered the drug business at Ellsworth with his uncle when but 16 years of age. A few years later he started the drug store which he conducted up to the time of his death. He was a member of the Congregationalist Church and also of Lygonia Lodge, Acadia Chapter and Blanquefort Commandery in the Masonic fraternity, and Lejok Lodge, I. O. O. F. He leaves a widow and two sons, Dr. George Parcher of the U. S. Marine Hospital Service, and Dr. Arthur H. Parcher, a physician of Ellsworth.

DR. SAMUEL SCHMIDT

Dr. Samuel Schmidt, who had conducted a drug specialty business for 32 years and for about twelve years was connected with the Dispensary of the Mercy Hospital, in Baltimore, died June 8 at the age of 54 years. He was a graduate of the College of Physicians and Surgeons, but preferred to follow pharmacy rather than medicine. Dr. Schmidt's will filed for probate in the Orphans' Court on June 13 shows an estate worth more than \$400,000. This sum is bequeathed to the Hebrew Hospital and Asylum Association for the

erection of a building in memory of his parents, Joseph and Mary Schmidt. There are some small legacies in the shape of life annuities to relatives, but the residue of these annuities goes in the end to the hospital.

HORACE GRAY SHAW

Horace Gray Shaw, for sixty years engaged in the wholesale drug business in New York, the last thirty-six of which he was associated with McKesson & Robbins, Inc., died at his home in Newark, N. J. on June 20. He was born in Little Compton, R. I., and was the eighth in direct descent from John Alden, who landed at Plymouth Rock in 1620. He was in his 78th year and had been ill for about four weeks. He was a member of the New Jersey Sunday School Association, and in 1907 went as a delegate of that organization to a conference in Rome. He is survived by his widow and two sons, Henry W. Shaw, a civil engineer of Brooklyn, and Prof. Charles Gray Shaw, of New York University.

RECENT DEATHS

—DAVID KELLOGG, who located in Seattle, Wash., in 1862, and later opened the first drug store in that city, died recently, aged 83. He had an adventurous life. He was born in New England, and in his 12th year removed with his family to Waukegan, Ill. When he reached his majority he went to Kansas during the Free State agitation and joined a company of free rangers. During years of adventurous roaming which followed he hunted in the Rockies, lived for brief periods in Memphis, New Orleans and Boston. From that city he shipped before the mast for California, where he spent several years. In 1862 David and Gardner Kellogg went to Seattle and opened Kellogg Brothers' drug store.

—GEORGE C. POTTERFIELD, one of the best known druggists in Baltimore and prominent in the Retail Druggists' Association not less than in the Calvert Drug Company, died in May. He was born at Harper's Ferry 47 years ago and became one of the number of young pharmacists who got their practical training in the employ of what was then the firm of Thomas & Thompson. Together with Mr. Warner, a fellow clerk, he started in business at 25th street and Greenmount avenue, Baltimore, and there became very successful. Some years ago Mr. Warner withdrew on account of ill health, and since then Mr. Potterfield had been sole proprietor. He was a 32d degree Mason.

—JOHN H. LYNCH, druggist of Lilly, Pa., died recently from injuries received during the pursuit of two of the men who robbed the First National Bank of Johnstown. He was riding in an automobile in pursuit of the robbers when the car overturned, a part of it striking the druggist across the abdomen and causing internal injuries. Mr. Lynch was the first man to challenge the bandits. He lived opposite the bank and was awakened by the explosion resulting from the attempt of the burglars to blow open the safe.

—DAVID JOHN GUE, a pharmacist, lawyer and artist of note, died at his home in Brooklyn, N. Y., in May. He was 82 years of age. He was born in New York State and went West with his parents in his youth. He was a lawyer in Fort Dodge, Ia., for a number of years and later became a pharmacist. When past fifty he became an artist, and painted portraits of Gen. U. S. Grant and of Henry Ward Beecher, which are regarded as his most famous works.

—GEORGE EDWARD MEGRATH, for many years a druggist of Montpelier, Vt., is dead after a two weeks' illness with pneumonia. He was 46 years of age, and a member of the Masonic order, Eastern Star, Elks, Eagles, and the Vermont Pharmaceutical Association. He was greatly interested in shooting and was president of the Montpelier Gun Club, and a member of the Vermont State Trap Shooters' organization. He is survived by his widow and two sons.

—ALOIS VON ISAKOVICS, proprietor of the Synfleur Chemical Co., Monticello, N. Y., and a well known member of the American Chemical Society and specialist on the chemistry of perfumes, died at his home in that city on June 5. He was a descendant of a distinguished Hungarian family, his father having been a general in the Hungarian Army. He leaves a widow and four young children.

—CHARLES E. HOLLISTER, 81, for sixty years a resident of Michigan and for thirty years engaged in the drug business in Detroit, died on May 13, after a lingering illness. He had conducted stores at Brighton and Pinckney before going to Detroit, the last store he operated being that in the Wayne Hotel. His widow and two daughters survive.

—DR. E. A. SHELTON, about 70 years of age and for 35 years a druggist and physician of Graysville, Tenn., died on May 20 after a few days' illness. He was a confederate soldier, a member of the Masonic fraternity and of the Eastern Star. His widow, two daughters and one son, Ralph Shelton, of Graysville, survive.

—J. P. KOEHLER, formerly identified with the wholesale drug business in San Francisco, and for twenty years proprietor of the Stockton Drug Co., died recently at San Jose, Cal., where he conducted a drug store for some time. He is survived by his widow, one daughter and a granddaughter.

—DR. JAMES H. SPRUANCE, 50, a former member of the Delaware State Board of Pharmacy, died recently in Wilmington from pneumonia. He had been a member of the State legislature, mayor of Wilmington, and a member of the Wilmington Board of Education.

—AUGUSTUS WARNER, a pioneer druggist of Akron, Ohio, was found dead in his automobile in a garage whither he had driven his machine for repairs. He had been ill for some time, although he had continued in business until a few months ago. He was 73 years of age.

—J. W. LAUTERBACH, 40, a druggist of Jacksonville, Texas, is dead, following an operation for appendicitis. He had been in the employ of the Jacksonville Drug Co. for about fourteen years. He received his early training from his uncle, J. J. Schott, a druggist of Galveston.

—RALPH H. SMITH, Chicago manager for Seabury & Johnson, manufacturers of plasters and surgical dressings, New York, died suddenly at San Diego, Cal., on May 25. He is survived by his widow, who was with him in California when he died. He was a Mason.

—EDWARD F. PARTRIDGE, who retired from the drug business in Newtonville, Mass., about four years ago, is dead. He was a native of Maine and 58 years of age. Besides his widow, one daughter and a son survive.

—JOHN WELLINGTON, formerly with Sharp & Dohme, but who retired from active work a few years ago, died at his home in New Orleans recently. He was about 60 years of age. His widow and two sons survive.

—CARL HARTWIG, 53, who for many years conducted a drug store at 4015 Butler st., Pittsburgh, Pa. is dead. He was born in Germany and went to Pittsburgh 32 years ago. His widow and two daughters survive.

—HENRY SCHWAKE, for many years a druggist in Nebraska City, Neb., and one of the pioneers of the State, died recently after an illness of a little more than a week. He is survived by his widow and two children.

—EDWARD W. WERLE, druggist of Charleroi, Pa., died at the Presbyterian Hospital on June 16 after a short illness. He formerly lived in Pittsburgh. His widow, mother and one son survive.

—EDWARD BOHRER, druggist of Boonville, Ind., died in St. Mary's Hospital, Evansville, following an operation for appendicitis. He is survived by his widow, his mother and one sister.

—JAMES HENRY CORWIN, for many years a druggist at Riverhead, L. I. and a director of the Suffolk County National Bank, died at his home in that place on June 1. He was 72 years of age.

—WILLIAM G. BUSCHMAN, for thirty years in the drug business at 1938 Orleans st., Baltimore, Md., died on June 13, aged 48. He leaves a widow and daughter.

—O. W. CUNNINGHAM, a pioneer resident and druggist of Goshen, Ind., died recently at the advanced age of 81.

The Meredith Drug Company, a North Dakota corporation, the office and place of business of which used to be Fargo, was recently dissolved by order of Judge A. T. Cole in the district court. This concern conducted a wholesale drug business in Fargo for several years but went out of business about five years ago.

The Right Sort of Window Display

How and Where to Use It

By ARTHUR PAUL

Every druggist should know the value of his windows—how they increase his sales. Manufacturers acknowledge the importance of the window as witness the expensive material distributed by them. Manufacturers realize this is one of the most important links in his merchandising chain as it forms initial connection between the customer and the dealer.

Many druggists overlook the use of their windows as a means to increase their general trade and not only on the particular articles which may be displayed. It is from the windows that those who are not now your customers judge; by the goods displayed, when and how they are displayed. If the window is not kept up to date, the prospect often passes by without even a glance. If it is inviting, he enters or at least gets a favorable mental impression which bears fruit later.

Always bear in mind that a window must do two things—first sell goods, and second, sell the customer on the fact that your store is the one with which he should do business.

Next to having a good window, such as location, size, shape, and so on, most important is the kind of articles displayed, and the timeliness of the display. Advertised goods should be given the preference for window display. Perhaps you disagree but I will try to show why preference should be given for such goods.

Every druggist knows that there is less profit "per article" on a widely advertised brand. The usual profit on advertised articles retailing at 10 cents is from 20 to 30 cents a dozen, but advertised products are sold much more quickly and in greater quantities than unadvertised products. At the end of a year the total profits from the investment on advertised products is considerably more than on unadvertised products.

Although profit per article plays an important part in your bank book balance, a bigger factor is "how rapidly do the goods move?" In other words, turnover is the most important factor with successful druggists today. This statement is being proven every day by chain stores in various lines of business.

To increase profits quickly get behind advertised goods. It takes less energy—less sales efforts to sell advertised products than unknown products, because a large number of your customers are already familiar with the advertised brands, which is due to the advertising.

Power of Advertising

A person, not now your customer, on looking over the favorite magazine, comes across the ad which makes one want to buy. Having seen the article displayed in your window naturally one goes first to your store. An advertised product is half sold—often completely sold before the buyer enters the store. Just let people know that you handle that article and nine times out of ten what one does is merely to wrap up the article and collect the money. This is easy selling—much better than talking one's head off trying to sell an "unknown."

Why should you, by displaying unknowns in your windows, make money for the unknown's manufacturers when by putting nationally advertised goods in your window you are increasing your own profits by getting on the manufacturer's bandwagon and taking advantage of a demand which he is creating? Aside from this, displaying advertised goods does another thing. It marks a druggist as the "progressive" druggist in his vicinity. Therefore capitalize on the advertising of the manufacturer and increase profits and prestige without expense to you. One reason why chain stores are so successful is that they always have on hand the article advertised no matter if it is only one bottle. They do not take any chance of driving away a customer, and if they have not a particular article in stock they are always anxious to secure it for you.

Let us turn to the average druggist. He doesn't stock an article until he has had several requests for it. He then stocks it but his demand is over, while his customers have become customers of a competitor or at least his customers have been introduced to his competitor. Once one has gone into a strange store it is much easier to go there a second time. The public has learned that if an article is wanted—particularly if it is advertised, they can always get it at the chain store and thus they conserve their time and much bother by going to the chain store first. The only way the druggist can make the public go to him first is to display the advertised brand in the window, especially during the period it is advertised, at the same time telling those who pass his store and also his customers that he has the goods in stock.

Whenever a product is advertised in large space in a magazine and particularly on the back cover, or in newspapers or on billboards, then is the time to display it. Many people on reading an ad decide to buy, but afterwards forget their decisions. Hence, if they see the goods displayed in your window it will act as a reminder and often they buy immediately.

Even though you put the products in the window while they are being heavily advertised you will find that there not enough advertised products to keep your windows full. Change your display every week to get the greatest benefit. It keeps the public watching the window—keeps you foremost in their minds. Under no circumstances permit the same window display to run over two weeks except in extremely large cities, on the busy corners where thousands of strangers pass every day. In the towns where in one or two weeks everybody worth while has seen the display, it pays to change often.

Timely Displays

During off weeks display timely articles. Say, for instance, it is winter. If I remember correctly the talcum powder manufacturers do not advertise during this season—talcum being a summer article. Should one have rather a large stock on hand from last summer, suggest in the window using talcum for chapped faces in order to move the stock and get back your money. Of course this rivals the other products for chapped skins, but pushing for only one week an article that would lay practically idle until summer, will not affect the sale of the other products. And again, take cameras and photographic supplies; these are usually sold during Christmas and spring and during vacation times. However, during winter, display making indoor photographs, featuring flash light powders, and so on.

Another point to bear in mind is that whenever a window display is made, say of sponges, show a full line of your bath specialties. Show bath soaps, bath powders or bath salts, hand brushes, rubber caps for the ladies, and so on. This type of display suggests to the prospective customer the things he may lack. The same is true of tooth powder. Along with it display tooth paste, tooth brushes, mouth washes—everything for the teeth, thus notifying the customer that a complete line is kept. This idea can be carried out with nearly every product.

During Easter, make arrangements with the local florist for flowers as a setting for perfume or highly perfumed soaps. Putting a card on the window stating the flowers were furnished by So-and-So is a good way to reimburse the florist for his kindness. Such display creates an atmosphere of being aristocratic, yet the perfume can be of the popular price variety, for nearly all successful stores are surrounded with an atmosphere of "high-class" trade, even with low or normal prices prevailing. People want to deal at a store that enjoys a good reputation.

Another suggestion: During graduation week of schools, decorate the window with the class colors and display

candies, with a card suggesting that the young chaps buy the graduate a box of candy as a remembrance. All young girls like candy. The same idea can be applied to football seasons, and so on. Contests can be held as to what will be the score at the next football game. Have the window decorated as suggested, pasting on the window a neat sign, offering to any one who comes the nearest to guessing the score, a five-pound box of candy. Have everyone vote by ballot, writing their name thereon. Everyone who comes in to vote will buy something, and this form of advertising is especially profitable if you have a soda fountain. Be sure to announce that immediately after the game, the ballots will be gone over, the winner announced and the prize given. Thus, you get people to come in twice.

If you are particularly proud of your prescription department, display the ingredients that go to make up popular articles, such as cough syrups, and so on. Put the ingredients in trays and have a card describing each, the name, where it comes from, and what it does.

The soda fountain offers a good opportunity for a window display. Everyone is always interested in what goes to make up a new beverage and this interest can be promoted to advantage by displaying the fruits, and so on.

Show everything neat and clean. In the smaller cities, an overlooked fact is the possibilities of the soda fountain during winter. Display in the window the hot drinks you serve. Many drug stores have made the soda fountain very profitable during winter by this method.

The above are a few ideas. Many more can be gleaned from the window trimming suggestions in this magazine. This department should be followed closely. Many of the articles tell how to make up the display. In conclusion, the window is like a bank. The advertising creates the demand, the window collects the deposits.

SCHRAMM-JOHNSON CO. GETS NEW BUILDING

The Schramm-Johnson Co., recently purchased the Lawrence Building, 61-65 S. West Temple St., Salt Lake City, which consists of three stories and a basement, and will convert it into the main offices, laboratory and manufacturing plant of the company. The new building will give the company 23,500 additional feet of floor space. Among other new features, modern classrooms for the employes of the company will be installed on the third floor of the building, where instruction in salesmanship and service will be taught.

The Schramm-Johnson Co., was organized in 1909 by F. C. Schramm and Joy H. Johnson, both of whom had successful stores in Salt Lake City. Beginning with these two stores, the business began to spread over the city and to nearby towns, store No. 10 being recently opened at Eureka, Utah. The company now has more than 135 employes on its payroll, while its mail order business extends over a number of States. The new building will be the headquarters for distribution of all supplies to the various branch stores operated by the company.

NEW COOPERATIVE CHEMICAL COMPANY

The American Chemical Products Company, organized by George B. McLeod, formerly of the American Druggists Syndicate, to manufacture basic and miscellaneous drugs and chemicals is building a concrete factory, 50 by 150 feet, at Bound Brook, N. J., where equipment is to be installed this summer for making resorcin, hydroquinone and acetanilid.

The company is a cooperative organization formed by several hundred druggists and physicians for the purpose of supplying the trade with chemicals at the prices paid by jobbers. The druggists who are stockholders are to share in the profits. The offices of the company are at 23 Liberty street, where an entire building of five stories is devoted to its business.

INSURANCE CO. REPORTS INCREASED BUSINESS

Reports presented to the executive committee of the American Druggists' Fire Insurance Co., which met at its home office in Cincinnati on May 18 and 19, showed a decided increase in the business of the company for the first quarter of the year. The fire losses for the first three months were exceedingly light. During the quarter the company wrote insurance amounting to \$5,559,430.33 at a premium of \$58,626.72, an increase over the corresponding period of 1916 amounting to \$647,264.33, at a premium of \$6,639.29. Insurance in force on April 1

amounted to \$19,710,298.33 at a premium of \$207,600.47. There were 10,634 policyholders; the fire losses for the quarter amounted to \$15,870.14, and the expense of conducting business as charged against the first quarter amounted to \$13,806.91. The company provides each of its policyholders with an inventory book so arranged as to serve for taking seven consecutive annual inventories, and many druggists are making use of the book who have never been accustomed to taking an inventory before.

The executive committee is composed of Chas. H. Avery, J. H. Beal, L. G. Heinritz, Geo. B. Kaufman, Walter Rothwell, A. O. Zwick and Frank H. Freericks, all of whom attended the meeting.

WANT GERMAN PATENTS ABROGATED American Association of Pharmaceutical Chemists Unanimous in Request—Seek Army Pharmacy Board—Against Use of Heroin in Medicinal Pre- parations—Association Buys Liberty Bond—New Officers Chosen.

The American Association of Pharmaceutical Chemists, in the annual convention at Atlantic City, unanimously passed a motion asking Congress to see to it that German patents held in this country were abrogated. It was pointed out that France and England have done that to those held by enemy countries and that success has been the result. The association members insisted that if they were permitted by Congress to make the drugs which are now made and sold under the German patents, they could make them cheaper and more effective. H. K. Mulford of Philadelphia was the man who introduced the resolution, and it was passed quickly and with enthusiasm.

Another subject taken up at the convention was the use of heroin in medicinal preparations. The association voted first to discourage such use wherever possible and later went on record against any use of the drug, if it is possible to avoid it. It was decided to make a careful scientific examination of the extent and condition of the use of heroin in medicines during the coming year with a view to ending it if possible or to lessening its use if it is found absolutely necessary to a preparation.

Further than that the convention recommended that the United States Public Health Service make an impartial and thorough examination of the situation. The association went on record as believing the problem of narcotics to be one of the most important facing the drug trade at the present time. It was pointed out that drug addiction might be expected to increase during the war, and it was said that everything which can be done should be done to lessen the probability of a steadily increasing body of addicts.

War Questions Considered

Taking up the war, and the part pharmacy will play in it, the Association discussed the call for drugs made from Washington and decided to do all in its power to aid the authorities who are trying to get medicines and drugs for the army use. One of the things particularly asked for was a pharmacy board in the United States Army such as controls the use of drugs of all kinds in the Navy. The association also suggested that the Army be equipped with a purely pharmaceutical corps, which will give trained men the opportunity to work in the army in the capacity for which they are best fitted.

It was unanimously voted that the association should do "its bit" in the war, and to that end \$1,000 of the \$1,800 surplus reported in the treasury was set aside to use in purchasing a Liberty Bond.

The convention directed the appointment of a special committee to take up with the proper national and State legislative bodies the question of legislation to permit the substitution of denatured for grain alcohol in many medicinal preparations with a view of decreasing the expense of manufacture and the cost of the same to the public.

French Lick Springs was selected for next year's convention. Officers were elected as follows:

President, Dr. W. C. Abbott, Chicago; first vice-president, Henry Noonan of the Drug Products Co., 45 West Fourth Street, New York; second vice-president, G. C. Pratt, Philadelphia; secretary-treasurer, Dr. C. H. Searle, Chicago; directors, J. W. Haynie, Columbus, O.; B. L. Maltbie, Newark; F. L. H. Nason, Boston, and E. S. Holt, Cedar Rapids, Ia.

NEWS OF THE ASSOCIATIONS

FAVOR PHARMACEUTICAL CORPS IN ARMY

The Fortieth Annual Convention of the Pennsylvania Pharmaceutical Association held at Hotel Schenley, Pittsburgh, June 19 to 21, went on record in favor of the organization of a Pharmaceutical Corps in the Army and passed a resolution offering the cooperation of the pharmacists of the state to the authorities who are charged with mobilizing the Nation's resources. While these were the outstanding features of the Convention, the routine business and committee reports were of more than usual interest. President Adolph Schmidt proved himself to be one of the most capable executive officers in the long roll of presidents of the Association, and the business of the Convention was therefore expedited.

The Convention was informally opened with greetings from other associations. The report of the executive committee indicated that 205 new members had been elected during the year and that two applications had been received for life membership. Secretary Robert P. Fischelis recommended in his annual report the Association have a complete set of its Proceedings bound as a permanent record, that badges and other things of historical interest belonging to the Association be turned over to the Historical Section of the A. Ph. A. The treasurer, F. H. E. Gleim, reported that the Association was in better financial condition than it had been for some time, there being over \$500 in the treasury. A set of resolutions advocating revision of the United States Patent and Trade Mark Laws, which were appended to the report of the Committee on Patents and Trade Marks, were unanimously adopted.

Recommends Propaganda be Discontinued

President Adolph Schmidt read his annual address, which included the following recommendations: That a quarterly publication be issued from the secretary's office so as to keep the membership posted on the happenings in pharmaceutical circles in Pennsylvania; that the executive committee as a whole be relieved of the duty of approving applications for membership and the matter be taken care of by the chairman; that the committee on U. S. P. and N. F. propaganda be discontinued; that the association become a subscribing member to the American Fair Trade League; that affiliation with the N. A. R. D. be continued; that Frederick J. Wulling be made an honorary member of the association; and that the photographs of certain deceased members be reproduced in the proceedings of the association.

All of these recommendations as well as those of the executive committee and secretary were approved later when the committee on president's address to which they had been referred reported.

A telegram from W. L. Cliffe was read, notifying the Association that a meeting was being held at the College of Physicians of Philadelphia, at which the status of the pharmacist in the Government service might be considered. The president and secretary were therefore appointed to prepare and telegraph resolutions from this meeting urging recognition for pharmacists in the Army in the form of a separate corps. The president and secretary were also instructed to send a telegram to Prof. Joseph P. Remington, expressing sincere wishes for his speedy recovery.

Samuel C. Henry reported that the State Pharmacy Bill had been passed and signed by the Governor and would become a law, July 1, 1917. He explained some of the provisions of the new Act and also called attention to the fact that the Narcotic Legislation which was in the process of enactment at the State Legislature was not entirely in conformity with the measure drafted by the State Pharmaceutical Association at its previous convention and presented early in the session of the law-making body of the State. "The Narcotic Bill which will very likely be passed," said Mr. Henry, "is not as stringent as the retail drug trade of the State desires it to be." Some discussion developed on the ownership of a prescription under the new Pharmacy Act, and it was explained that since the law required the pharmacist to keep the prescription on file for five years, it must certainly be considered as his property.

C. E. Brockmeyer, counsel of the N. A. R. D. at Washington, D. C., gave an immensely interesting resume of the working of the legislative machinery at the National Capital. He emphasized the importance of united action on the part of pharmaceutical bodies to secure adequate legislation. J. W. England read a paper entitled "Justice to the Pharmaceutical Service of the United States Army," in which he urged the establishment of a commissioned pharmaceutical corps and drew attention to the fact that the American Medical Association in the current issue of its Journal had published an editorial favoring proper recognition for pharmacists in the Government service. Louis Frank who had served in the Hospital Corps of the Army told of existing conditions in that branch of the service. He advocated giving the enlisted men in the Hospital Corps an opportunity to rise to commissioned rank in addition to organizing a Pharmaceutical Corps. After some discussion the following motion was passed:

Resolved, That the Pennsylvania Pharmaceutical Association go on record in favor of a separate pharmaceutical corps in the Army and also work for the general advancement of pharmacists in the service. Resolved also that greater recognition for pharmacists be sought in all branches of the Government service and that the formation of a pharmaceutical sector in the Council of National Defense be supported. Re-further that a committee be appointed to assist the constituted authorities of the United States Government in mobilizing the resources of the pharmacists of the State and otherwise aid in the Government's war preparations. This committee is to be known as the war defense committee of the Pennsylvania Pharmaceutical Association.

The president appointed the following committee: Dr. F. E. Stewart, chairman; John K. Thum, J. W. England, Louis Frank and Dr. J. A. Koch.

Emile Koos, inspector in the Internal Revenue Department under the Harrison Act for District 23, was introduced and addressed the members on the workings of the Harrison Law. At the conclusion of his remarks he offered to answer any questions which the members might wish to propound. An interesting discussion developed lasting for about an hour and a half. Mr. Koos was given the thanks of the Association.

Wulling Elected Honorary Member

Dean F. J. Wulling of the University of Minnesota was elected to honorary membership in accordance with the recommendation of the president. A resolution similar to that passed by the New York Branch of the American Pharmaceutical Association asking for the exemption of a registered pharmacist for each store and an additional registered man for each fifty prescriptions was voted down. Peter G. Walter, chairman of the Entertainment Committee, reported that the Committee would have over \$100.00 to turn over to the Association after all bills were paid.

The following officers were elected: President, W. H. Knoepfel, Scranton; first vice-president, Peter G. Walter, Pittsburgh; second vice-president, G. W. Shoemaker, Allentown; treasurer, F. H. E. Gleim, Lebanon; secretary, Robert P. Fischelis, Philadelphia; assistant secretary, Dr. A. F. Judd, Pittsburgh; local secretary, Louis Frank, Wilkes-Barre.

Wilkes-Barre was selected as the place, and June 25 to 27, 1918, as the time for the next meeting.

The final session of the Convention was held after the banquet on Thursday evening. J. Q. Rinehart, President of the Traveling Men's Auxiliary, made a short address on behalf of that organization. The prize for the best paper presented at the 39th Annual Convention was awarded to Joseph L. Lemberger for his paper on "The Cultivation of Castor Oil Plant as a Commercial Possibility"

Although the Convention transacted considerable business, entertainments were by no means neglected. Automobile sight-seeing trips, a reception to President and Mrs. Schmidt, a card party for ladies and an entertainment by the Traveling Men's Auxiliary were among the features. There were also a musicale and tea for the ladies, while the entire membership, delegates, ladies and members of the Traveling Men's Auxiliary were the guests of the Wholesale Druggists of Pittsburgh at a complimentary banquet at the Hotel Schenley.

JERSEY DRUGGISTS BUY LIBERTY BONDS

Prof. Frederick J. Wulling, dean of the College of Pharmacy, University of Minnesota, and president of the A. Ph. A. and Prof. H. V. Army, professor of chemistry, Columbia University College of Pharmacy, were elected honorary members of the New Jersey Pharmaceutical Association at its 47th annual meeting held on June 12 to 15 in the Hotel Breslin, Lake Hopatcong. In his annual address, President Byrnes of Maplewood recommended increased activity in organizing local associations, legislative work, increased membership and reaffiliation with the N. A. R. D., all of which were later approved by the association.

The secretary reported the election of 111 members, the total membership now being 1142. The treasurer's report showed total assets of \$2545.14, divided as follows: invested fund, \$1813.50; general fund, \$731.64. The association ordered the purchase of three \$100 Liberty bonds. The Legislative Committee reported that the governor had vetoed the prerequisite bill because he was opposed to per diem compensation for members of professional examining boards. Resolutions were adopted pledging and offering aid and support to the New Jersey Board of Health.

Papers were read as follows: "Some Pharmacopoeial English," George M. Beringer, Jr.; "The Physician and the Pharmacopoeia," Adolph F. Marquier; "The Relation of the State Board of Health and the Retail Pharmacist," William G. Tice, Chief of the Bureau of Foods and Drugs, State of New Jersey; "The War and Pharmacy," Professor Curt P. Wimmer; "Is the Pharmacist a Good Business man?" Harry E. Bischoff; "The Financial and Accounting Side of the Drug Store," Prof. E. Fullerton Cook; "What is your Time Worth?" Rolland H. French; "Tinctura Cinchonae Composita," Thos. DeA. McElhenie; "The Development of the Prescription Department," Professor E. Fullerton Cook; "Comments and Criticisms of the U. S. P. and N. F.," Philomen E. Hommell; "Does Street-car Advertising Pay?" H. E. Wrensch, Jr.; "Lead in Medicinal Zinc Oxide," Chas. H. LaWall; "An Answer to Opponents of Pre-requisite," Henry Schmidt; "Some of the Newer Preparations of the Fourth Edition of the National Formulary," George M. Beringer; "Suggestion for the Tenth Revision of the U. S. P.," Fred B. Kilmer; "Reasons for some of the Changes in Formulas of Galenicals Made in the IX Revision of the U. S. P.," George M. Beringer.

Samuel C. Henry, of Philadelphia, was present and explained the work done by the N. A. R. D., and Prof. Henry Kraemer also of Philadelphia, gave an illustrated lecture on the use of the microscope in the drug store laboratory. The entertainment features included an automobile ride to Morristown and stop at Washington's headquarters; a poverty party and dance and cards on Tuesday evening; a vaudeville show on Wednesday evening a big vaudeville show by the Travelling Men's Auxiliary on Thursday evening, pound boxes of candy being given to the ladies as souvenirs, and a boat ride around the lake. About twenty-five members of the German Apothecaries Society of New York attended the meeting on Thursday as guests of the association.

The following officers were elected: Adolph F. Marquier, Newark, president; George M. Beringer, Jr., Camden, 1st vice-president; Leon A. Taylor, Lakewood, 2nd vice-president; Jeannot Hostmann, Hoboken, secretary; Edgar R. Sparks, Burlington, treasurer. Board of Trustees—Chas. J. McCloskey, Jersey City; Frank H. Eckhart, West Hoboken; Charles W. Holzhauser, Newark; E. T. N. Stein, Montclair; Harry W. Crooks, Newark. Committee on Legislation—John C. Gallagher, Jersey City; George M. Beringer, Camden; Stephen D. Wooley, Ocean Grove; Harry W. Crooks, Newark.

The next annual meeting will be held at Spring Lake in June, 1918. Daniel H. Hills, of that place being elected local secretary.

FLORIDA PH. A. DISCUSSES STAMP TAX

The Florida Pharmaceutical Association held its annual meeting at Atlantic Beach, Jacksonville, on June 13 and 14, and while war conditions hindered as large an attendance as in former years, the proceedings were important and most interesting and those who were there felt amply repaid for their trip.

Many subjects of great interest to the drug trade were discussed, and the matter of the proposed stamp tax was thoroughly threshed out. Pharmacists believe that the tax should be paid by patent medicine manufacturers, as was the intention of the framers of the bill, while the medicine

men are threatening to add the tax to the invoice price, and thus force the burden upon the retailer, who claims that, even now, he has not margin enough to pay his overhead costs out of the retail price of this class of merchandise.

The association appointed a committee to visit the Florida University, at Gainesville, to investigate the feasibility of establishing a school of pharmacy there. Dr. Flint, of the chemical department, addressed the association and showed how the scheme might be worked out, which met hearty endorsement from all present, and authority will be asked from the next legislature to put it into effect.

The following officers were elected: President, W. A. Rawls, Pensacola; first vice-president, W. G. Perry, Miami; second vice-president, J. S. Jewett; third vice-president, J. R. Johnson, Monticello; secretary and treasurer, J. H. Haughton, Palatka.

The association also recommended to the governor for appointment on the board of pharmacy, H. H. D'Alemberte, of Pensacola, W. D. Jones of Jacksonville and Leon Hale of Tampa.

The next meeting of the association will be held in Tampa.

The social features of the meeting were a "Dutch supper" and banquet, followed by a ball, the contributions of the "Travelling Men's Auxiliary," which has done so much to help build up the association, and to provide for its entertainment at these conventions.

TEXAS DELEGATES MADE BRIGADIERS

Addresses by E. G. Eberle and Hugh Craig were among the features of the thirty-eighth annual meeting of the Texas Pharmaceutical Association held in San Antonio. Papers were read by Herman A. Nester on "Does My Prescription Department Pay?" J. A. Spinks, "The Itinerant Patent Medicine Vender," Sam P. Harben, "The Best Plan for Advertising a Drug Store," R. P. Daniels, "My Best Paying Side Line," Walter D. Adams "Commercial Pharmacy," M. C. Anderson, "Why I Believe High Priced Drug Clerks are Cheapest," F. A. Chapa, "Some Effects on the Drug Business that would Follow State-wide Prohibition," Geo. K. Butcher, "The Soda Fountain," and Zeb W. Rike, "Why I Consider the Jobber my Best Friend." Prof. C. A. Duncan presented arguments why Texas druggists should support and attend the Texas Ph. A. conventions.

The following officers were elected; President, C. E. Craycroft, Sherman; vice-president, Tom J. Snell, Cooper; Sam P. Harben, Richardson; W. C. Burns, San Antonio; and W. A. Wentland, Manor; secretary-treasurer, W. H. Cousins, Dallas; home secretary, J. W. Graham, Austin; historian, Mrs. E. B. Dwyer, Houston.

The Drug Travelers' Auxiliary elected the following officers: George T. Reynolds, Dallas, president; J. Linville, Fort Worth, first vice-president; L. E. Houston, San Antonio, second vice-president; H. H. Steel, Dallas, third vice-president; George K. Butcher, Dallas, secretary-treasurer.

The last session was enlivened by an unique feature introduced by F. A. Chapa of San Antonio, Authentic-looking documents, signed by "Pancho Villa" and members of his "staff" were distributed among the delegates. The documents were "commissions" in "Pancho army of highway bandits of Northern Mexico." Each "commission" stated that "this appointment is issued at the iodoform camp near the lake of bisulphide of carbon, in the state of decomposition of the republic of anarchy, this sixth anniversary of our freedom from the jails, penitentiaries and schools of correction." The "commissions" were awarded "in consideration of the many robberies, murders and acts of arson that Mr.— committed." Each delegate was made a "brigadier general."

ACONITE ASSAY METHOD CRITICIZED

At the May meeting of the Baltimore branch of the A. Ph. A., held in Harris Hall of the University of Maryland, Dr. H. Englehardt read a very interesting paper on "Aconite and its Preparations." In this paper the author stated that the assay processes for fluidextract of aconite and powdered extract of aconite give results that are far from being satisfactory; that no concordant results can be

obtained when cochineal is used as indicator when assays are made on the same sample by different operators; that the results obtained with methyl red as indicator are more concordant and satisfactory but that they are considerably lower than those obtained with cochineal; that therefore cochineal cannot indiscriminately be replaced with methyl red. This discrepancy seems to be due to the fact that the alkaloidal residue obtained in the assay process consists of various bases which act differently on the two indicators, because no difference in the results was found when pure aconitine was titrated either in the presence of methyl red or cochineal as indicators.

For the assay of the powdered extract four different methods were applied, the U. S. P. IX method, the U. S. P. VIII method and U. S. P. IX method for the fluidextract adapted for powdered extract, and a direct shaking out method. The results were not at all satisfactory. The same was the case with the assay of the fluidextract to which the U. S. P. VIII, U. S. P. IX methods, and the direct shaking out method were applied. Some of the results obtained were absolutely worthless.

The results of a great number of physiological experiments were given and it is pointed out that when taking the lethal dose for crystallized aconitine as 0.0000005 per gramme guinea pig, the alkaloidal residues can contain only 25 per cent. of the crystallized alkaloid when calculated from the requirements of the U. S. P. The physiological experiments further show that powdered extract of aconite is almost worthless and that the fluidextract deteriorates very rapidly.

It is strongly urged in the paper that the assay process for both the powdered extract and fluidextract of aconite be revised and that some further work be done in regard to the present assay methods.

A general discussion of the paper followed, after which a vote of thanks was tendered Dr. Englehardt for his very worthy contribution.

Previous to the reading of the paper, the Baltimore branch went on record as being opposed to any increase in dues, and recommended that a committee of three be appointed with power to act during the Summer when there would be no monthly meetings to consider the publications of the association, the member of the Council from the Baltimore branch to be an ex-officio member of the committee. President McKinney appointed Dr. E. F. Kelly, W. J. Lowry, Jr., and Miss B. Olive Cole as the committee to take charge of this work.

PHARMACY'S SHARE IN THE GREAT WAR

The discussion at the regular monthly meeting of the Chicago branch of the American Pharmaceutical Association held on May 25, centered about the report of the committee named at a previous meeting to formulate a plan by which the pharmacist can most effectively do his share in the great war. The report of this committee was summarized as follows:

Representation on the Advisory Commission of the National Council of Defense; Wider employment as pharmacists in the Army, the Navy and the Hospital Corps; Pharmaceutical service for the Red Cross units; Pharmaceutical service for soldiers' dependent families; Meeting the war taxes; Collection and cultivation of medicinal plants; Conservation of medicines.

The discussion which followed was most interesting, an outline of which is here presented:

1. The formation of a committee representing the pharmaceutical manufacturing houses to assist the Advisory Committee of the National Council of Defense in the buying of the pharmaceutical supplies as recently announced in the journals was heartily commended, and it was the opinion of the meeting that this committee would insure the supply of pharmaceuticals to the government with the least disturbance of regular conditions. The employment by the Council of Defense of the pharmaceutical pharmacologists in the government service at Washington for advice and assistance along scientific lines in their own professions, was also approved. The government should also give a fuller recognition to pharmacy by placing a representative of scientific pharmacy on the Advisory Commission. Such a man should be the leader in pharmaceutical research, the scientific advisor along pharmaceutical lines and the representative of the pharmacists of the Army and Navy in the war councils of the nation.

2. Pharmacy as such is certainly entitled to a definite position in the medical corps of the army and navy and the hospital service, and the American Pharmaceutical Association is urged to undertake the securing of this recognition of the pharmacy by the government. Trained pharmacists should be placed in charge of the preparation, standardization and distribution of all medicine intended for use of the army and navy. Such men must be given rank of officers and be organized into a definite corps known as the pharmaceutical corps, for such a corps is just as essential to the complete medical service as the ordnance corps is to the line.

3. Pharmacists should volunteer to render service in the Red Cross units even though the ability and service of the pharmacist is not fully recognized by the surgeons in charge of the unit.

4. Pharmaceutical service by the retail pharmacist for the dependent families of enlisted men should be freely offered. While it is true that the support of the dependent families of enlisted men must be undertaken by the national government, yet where opportunity offers for the pharmacist to do his bit along these lines as is now the case in Chicago, he should respond freely. The plan formulated by Dr. Jacob Frank, Surgeon General of Illinois, and the Chicago Retail Druggists Association to provide pharmaceutical service in connection with the medical service for the dependent families of soldiers, was heartily endorsed and commended at the meeting. The plan provides that any dependent family of an enlisted man shall be furnished with pharmaceutical service upon recommendation of the medical man in charge of the family. A portion of the cost of the medical and pharmaceutical service should be met either by the national government or from a fund raised by cities or states for the purpose.

5. The question of the proposed stamp taxes and other taxes directly affecting the retailer, received due discussion. The stamp tax was universally condemned. If a tax of any kind must be placed on patent medicines, toilet preparations and sundries, let it be a five per cent. tax imposed on the value of the goods at the place of manufacture or production. Mr. Storer presented a tabulation to show that under the proposed revenue law as framed by the House of Representatives, listerine would pay nineteen different taxes. Pharmacists should meet the war taxes in a truly patriotic manner, but members of the branch are not in favor of a discriminatory tax and believe that the retail pharmacist should not alone bear all the tax placed on medicines.

BROOKLYN RE-ELECTS OFFICERS

The Brooklyn Pharmaceutical Society met on June 12, and re-elected all the officers who served last year. President Henry B. Smith was presented with a gold chain and locket set with diamonds as a token of the appreciation the members felt for his work. Dr. William H. Bussenschutt made the presentation speech.

It was one of the largest and most enthusiastic meetings the society has ever held. The report of the Brooklyn College of Pharmacy, which the society controls was read and well received. It appeared that 438 were on the rolls of the society and that 387 attended classes in the college during the past year. Of that number 141 were graduated and awarded diplomas. The Junior class numbered 222, of whom 201 became eligible for the Senior class after taking the necessary examinations.

At the annual meeting, a special committee consisting of Dean William C. Anderson, of the college, Nelson S. Kirk and Clarence O. Douden made a most interesting report on the problem of caring for families of those serving the country during the war. It is evident that the society will be of great assistance to the other bodies of like nature in Brooklyn.

The officers for next year, all of whom were re-elected were:

President, Henry B. Smith; vice-presidents, George R. Christ and Charles L. Gessell; secretary, Charles E. Heimerzheim; treasurer, Adrian Paradis.

Trustees—William J. Hackett, Joseph J. Vetter, Thomas J. France, William H. Bussenschutt, Clarence O. Douden, Donald B. Sterritt, Charles A. Kunkel, John G. Wischert, Benjamin Rosenzweig, Maurice D. Cadman, Frederick E. Kalkbrenner, George N. Lawrence.

Committee of Supervision—Thomas J. France, chairman; William H. Bussenschutt, Clarence O. Douden, Charles L. Gessell, Charles E. Heimerzheim.

PATENTS & TRADEMARKS

PATENTS

Granted May 22, 1917

- 1,226,778—Norbert M. La Porte, assignor to The Crown Cork and Seal Co., Baltimore, Md. Capping machine.
 1,226,799—Harold G. Olena, Brooklyn, N. Y. Sanitary toothbrush holder.
 1,226,812—James H. Reid, Newark, N. J. Process of securing water-soluble potassium compounds from water-insoluble potassium containing mineral.
 1,226,822—Adeleide C. Smith, St. Mary's, Ontario, Canada. Non-refillable bottle.
 1,226,897—Auguste J. B. Laussedat, assignor to La Societe "La Cellophane," Paris, France. Labels for bottles and other receptacles.
 1,227,044—Carleton Ellis, Montclair, N. J., assignor to Ellis-Foster Co. Process of making sulfuric anhydrid.
 1,227,049—Walter N. Haworth and James C. Irvine, St. Andrews, Scotland. Manufacture of hypochlorous acid.
 1,227,148—Sumu Iwamoto, Higashi-Ku, Osaka, Japan. Process of making charcoal and apparatus therefor.
 1,227,158—Lester L. Ladd, Lockport, Ill. Labeling machine.
 1,227,252—Louis M. Dennis, Ithaca, N. Y. Method of separating benzenedisulphonic acid from sulphuric acid and of converting the benzenedisulphonic acid into a salt.
 1,227,412—Adam E. Fendrich, Weehawken, N. J. Tooth brush.
 1,227,424—Lawrence Glenn, Sparta, Ill. Cork extractor.
 1,227,430—Frederick W. Gries, Watervliet, N. Y. Collapsible tube.
 1,227,451—Henry Kennell, New York, N. Y. Bottle-holder.
 1,227,453—Herman B. Kipper, Solvay, N. Y. Process of making caustic soda.
 1,227,525—Auguste Boidin, Seclin, France, and Jean Effront, Brussels, Belgium. Process of manufacturing diastases and toxins by oxidizing ferments.

Granted May 29, 1917

- 1,227,594—John R. Dostal, Milwaukee, Wis. Bottle washer.
 1,227,638—John A. Maker, Duluth, Minn. Closure for dispensing paste tubes.
 1,227,648—Solomon Narunsky, Baltimore, Md. Non-refillable bottle.
 1,227,706—Mooshegh Vaygouny, Berkely, Cal., assignor to the Royal Baking Powder Company. Process of making glyoxylic acid or its compounds.
 1,227,781—Franklin C. Grimes, Idaho Falls, Idaho. Process for recovering potassium salts from organic carbonaceous materials.
 1,227,807—Frederick W. Letsch, assignor to the Crown Cork & Seal Company, Baltimore, Md. Filling machine.
 1,227,997—Harlon A. Clifford, Greenfield, Mass., assignor to one-half to James W. Cobb, Greenfield, Mass. Antiseptic dispenser.
 1,228,151—John H. Watson, Chicago, Ill. Liquid-holding vessel.
 1,228,252—Michael D. Schon, New York, N. Y. Effervescent compound.
 1,228,261—Joseph J. Taylor, Richmond, Va. Tooth brush holder.
 1,228,328—William L. Liggins, St. Louis, Mo. Alcohol lamp.
 1,228,348—Theodore M. Morgan, Minneapolis, Minn. Bottle-carrier.

Granted June 5, 1917

- 1,228,414—Louis M. Dennis, Ithaca, N. Y. Method of separating an aromatic sulfonic acid from sulfuric acid and of obtaining the sulfonic acid in solid form.
 1,228,516—Edwin O. Barstow and Joseph A. Cavanagh, assignor to Dow Chemical Co., Midland, Mich. Method of making lead arsenate.
 1,228,609—Karl Schmid, assignor to the Firm of "Lipsia" Chemische Fabrik, Actien-Gesellschaft, Muegeln, Leipzig, Germany. Process for making insulating material from basic magnesium carbonate and fibrous substances.
 1,228,622—Ernst Voetter, Krefeld, near Bockum, Germany. Preparing compounds of chromium oxid.
 1,228,758—Karl L. Dieterle, Los Angeles, Cal. Liquid dispensing device.
 1,228,926—Paul Hussy and Max Hartmann, assignor to Society of Chemical Industry in Basle, Switzerland. Cadmium compounds of the acridin series, and a process of making the same.

Granted June 12, 1917

- 1,229,316—Thomas C. Oliver, Charlotte, N. C. Process for production
 1,229,436—Alvan F. Foss, Montreal, Quebec, Canada. Bottle-closure, of sulfuric acid in lead chambers.
 1,229,509—Arnold H. Peter, assignor to the Royal Baking Powder Co., New York, N. Y. Process of manufacture of hydrochloric acid.
 1,229,525—David M. Ross, Youngstown, Fla. Dispensing cabinet.
 1,229,593—Louis M. Dennis, Ithaca, N. Y. Method of separating a sulfonic acid of a hydrocarbon of the aromatic series from sulfuric acid and of converting the sulfonic acid into a salt.
 1,229,681—Raymond Vidal, Paris, France. Emulsifiable liquid or solid solution and method of making it.
 1,229,895—Francisco O. Cuesta, Habana, Cuba. Non-refillable bottle.
 1,229,948—Lincoln Hall, Los Angeles, Cal. Label-holder.

Granted June 19, 1917

- 1,230,162—1,230,163—Isidore B. Hobsbawm, London, and James L. Grigioni, Richmond, England. Processes for separating and recovering sodium chlorid from liquors containing it and sodium nitrate in solution.
 1,230,177—Johan V. Lang, assignor to Greenfield Paper Bottle Company, New York, N. Y. Manufacture of paper bottles.
 1,230,178—Truman T. Laying, Banff, Alberta, Canada. Closure for containers.

- 1,230,185—Richard Lnders, assignor to Fabwerke vorm. Meister Lucius & Bruning, Hlochst-on-the-Main, Germany. 1—Iodo-2,3-Dihydroxypropane and process of making the same.
 1,230,189—Robert L. McCoy, Sergeants Bluff, Iowa. Funnel.
 1,230,279—Charles J. Coffey, Chicago, Ill. Tooth brush.
 1,230,343—Nobile C. Tommasi, assignor to the Firm of Elektrizitatswerk Lonza, Gampel and Basel, Switzerland. Apparatus for the manufacture of crude calcium cyanamid.
 1,230,453—Anna D. Adams, Chicago, Ill. Toilet receptacle.
 1,230,550—Frank O. Woodland, Worcester, Mass., Frances S. Woodland, Worcester, Mass., and Arthur F. Kelley, Grafton, Mass. Labeling machine.
 1,230,594—John Neumann, Chicago, Ill., assignor of one-half to H. N. Claussen, Chicago, Ill. Sealing disk for bottle stoppers.
 1,230,600—Fritz Pollak, Vienna, Austria. Process for the manufacture of crystalline polymerization products of formaldehyde.
 1,230,726—Elizabeth H. Krause, Portland, Oregon. Cork-puller.
 1,230,782—Peter C. Reilly, Indianapolis, Ind. Method of distilling coal-tar or coal-tar pitch and products derived therefrom.

H. A. METZ'S OFFER TO THE GOVERNMENT

In reply to the strictures made before the U. S. Senate, H. A. Metz in an interview announced his position in regards to salvarsan and neo-salvarsan as follows:

"Appreciating the need for a greater quantity of salvarsan than is now obtainable, I have built and opened a factory in Brooklyn for its manufacture and will be able to supply what is needed by the United States Government, the medical profession and hospitals. I have notified the Government that I will supply it at cost or turn over to it my Brooklyn factory, so that every man in the army and navy who needs it may be treated with salvarsan. I will sell the medicine to doctors and hospitals at cost plus a small profit, and I assert that no one would be able to manufacture it cheaper than I can."

When the hearing on the question of abrogating the patent on salvarsan was held on Monday, June 4, by the Senate Committee on Patents Dr. George Walker of Johns Hopkins University, Dr. H. H. Janeway, Dr. Victor C. Vaughan, Dean of the Medical Department of the University of Michigan, and Dr. J. M. T. Finney of Johns Hopkins University, told the committee that American representatives of the German patentee had advanced the price of salvarsan to a point where it was not available by the general public. They said American chemists could manufacture it at popular prices if existing patents were annulled. Immediate action was urged because of the vast number of troops soon to be put into the field.

Herman A. Metz, former representative from New York, who represents the German interests, approached Dr. Walker after the hearing in a manner which Dr. Walker resented. Mr. Metz struck Dr. Walker and a brief encounter followed, during which Dr. Walker landed an upper cut on Mr. Metz's chin. Friends stopped the fight and the combatants offered mutual apologies.

WAR INCREASES TALKING MACHINE SALES

New patriotic models of the Playerphone have taken their place as a paying side line in the drug trade. War has not detracted their sales at all, but on the contrary, it has increased the demand, the Playerphone Talking Machine Co. of Chicago, having recently shipped to one customer on a repeat order one carload of Playerphones worth \$12,000. The customer may select from ten sizes and models, running from \$60 to \$500, and use any of such catchy names as Colonial, Constitution, Liberty, Young America, Democracy, President, William & Mary, Chip-pendale or White House, the last model added to the line being a beautiful instrument and highly finished. Both Playerphone and Playerphone Records are worth investigation, and druggists should look into these lines and learn of their possibilities.

PINOTOL, A NEW DISINFECTANT

A new pine oil disinfectant and said to possess seven times the efficiency of carbolic acid is marketed under the name of "Pinotol," and manufactured by McKesson & Robbins, of New York. Besides serving as a disinfectant, it is recommended for keeping away mosquitos, flies and fleas from household pets. It is supplied in 3 sizes, viz.; 3-oz. bottles, 75c per doz.; 12-oz. bottles, \$2 per doz.; 1-gal. cans, \$18 per doz. With each order McKesson & Robbins will furnish a liberal supply of attractive two-colored, sales-stimulating folders and display cards. Write to the manufacturers for particulars.

THE DRUG MARKETS

ALCOHOL ON UPWARD TREND

Proposed Federal Taxation, Government Needs, and Freight Problems Factors Affecting Market—Quinine Sulphate Lower.

NEW YORK, June 25.—Business during the past month is somewhat difficult to describe, although there has been a prevailing firmness in prices which, in nearly all cases, is distinctly traceable to supply and demand conditions. The fact that many manufacturers have been holding off on domestic and export business until they could more intelligently grasp the needs of the Government and other war time conditions, has had a tendency to create some uncertainty, while another factor which has had some effect is that of the application of the proposed war revenue bill now under discussion in Congress. All of these considerations are somewhat disquieting, an example in point being that of alcohol which, in view of the proposed Federal legislation and taxation, has been advancing in price, while the pharmaceutical and other preparations made therefrom are also climbing to higher values. A less favorable freight situation is also disturbing to general conditions, no one can foretell just what regulations will apply to export trade.

Advances are noted for opium, acetanilid, alcohol, tannic acid, chloroform, formaldehyde, Carthagenia ipecac, kola nuts, menthol, naphthalene, various vegetable oils, oils of cloves, lavender, lemon and pimenta; potassium carbonate, chlorate and permanganate; saccharin, strophanthus seed, and sugar of milk. Benzoates, carbolic acid, lactic acid, belladonna leaves, cacao butter in bulk, medicinal catechu, lead acetate, quicksilver, croton oil, malaga oil, paraffin, resorcin, spirits turpentine, and santonin are lower. Quinine shows a downward revision since last month, although in a large way there is nothing to indicate a further depression.

OPIMUM—Following a scarcity of spot supplies quotations on all grades have been advanced, \$30@32 per pound being asked for natural, \$31@35 for granulated and \$31@35.50 for U. S. P. powdered. Imports for the nine months ending with March show that 39,373 pounds were received, as against 114,362 pounds for the corresponding period the year previous. Considerably more than half of this quantity came from the United Kingdom, 599 pounds being received from Turkey, as against 27,883 pounds in the corresponding period of the preceding year.

MORPHINE—The market has been quiet and prices nominally firm at last month's quotations of \$10.80@12 per ounce in 1-oz. vials, and \$10.85@12 per ounce in 1/8-oz. vials.

QUININE SULPHATE—Following the arrival of a shipment of sulphate from Java, jobbing quotations eased off, 100-oz. tins being held at 80@81c per ounce; 5-oz. tins at 85@88c, and 1-oz. cans at 90@95c. Treasury statistics show imports of quinine and salts for the nine months ending March 31 amounted to 961,968 ounces, as compared with 1,428,669 ounces for the corresponding period a year ago, and 1,753,189 ounces in 1915. For the nine months ending March 31, there were imported 2,479,391 pounds of cinchona bark, as against 3,031,250 pounds for the corresponding period a year ago, and 2,641,155 pounds in 1915. It is believed by many in the market that shipments from Java of both quinine and bark will soon become more frequent. In England, it is reported, the Government has commandeered all stocks of quinine sulphate in excess of 100 ounces, bisulphate, 25 ounces, and dihydrochloride, 25 ounces.

ALCOHOL—Has experienced several advances in price during the last fortnight, and the market has been in a more or less demoralized condition, owing to the possibility of manufacturers being unable to obtain raw materials, as also the uncertainty regarding the outcome of proposed Federal legislation. Then, too, there has been a firm demand for spirits for use in the various industries other than pharmaceutical manufacturing, and as a result, the future outlook for this article is far from reassuring. Jobbers quote as follows: Cologne spirit, 95 p. c., U. S. P. in barrels, \$3.40@3.42 per gallon; less, \$3.50@3.75; commercial, 95 p. c., U. S.

P., barrels, \$3.35@3.45 per gallon; less, \$3.40@3.55; denatured, barrels and 1/2-barrels, \$1@1.20 per gallon.

CHLOROFORM—Owing to the higher cost of bottles and corks, manufacturers announce higher prices for this article in such containers and jobbers have advanced their prices to 72@80c per pound.

GLYCERIN—There has been a good inquiry for shipment, while in some quarters freer offerings have been reported, owing, it is said, to an easier feeling in fats and oils. C. P. in bulk, drums and barrels added, is held at 63 1/2@64c, and cans at 65@66c. Less than cans is quoted at 71@73c per pound.

FORMALDEHYDE—Is in strong demand both for domestic consumption and export, and this, with the firm position of methyl alcohol, has caused an advance in prices, 20 1/2@35c being asked.

ACETANILID—Manufacturers recently announced an increase in their prices, caused, it is reported, by the strong situation of the market for the raw material, a larger demand and smaller production, and jobbers have marked up prices to 60@65c per pound.

BENZOATES—Increased facilities for the production of benzoic acid has tended to lower prices, and it is said that if makers continue their present rate of output until Fall, quotations are likely to be very much lower. Benzoic acid from toluol is now offered at \$7.50@7.75 per pound. Lithium benzoate, 80@95c per ounce.

LACTIC ACID—Is easier, \$5@5.50 per pound being asked.

TANNIC ACID—A revision of schedules shows higher prices for all grades, commercial in 1-lb. cartons being held at \$1.30@1.40 per pound; medicinal, \$1.40@1.45, and powdered, \$1.50@1.55.

BELLADONNA LEAVES—Scarcity and a strong demand feature in the quotations for this article, and prices have been advanced to \$1.90@2.10 per pound in 1-lb. bottles, and \$1.80@1.90 for bulk.

CATECHU—Medicinal is in better supply and easier at 25@30c per pound.

CHAMOMILE FLOWERS—Both Roman and Belgian are higher at \$1.80@1.85 per pound.

CINNAMON—In common with a number of articles from the Far East, which are subject to the delays of ocean shipment and high freight rates incident to war times, as also a seasonable demand, prices are higher and jobbers now quote 45@55c for Ceylon; powdered, 42@47c.

DIGITALIN—Is scarce and higher at \$20@21 per ounce; 15-grain vials, 75@85c each.

DRAGON'S BLOOD—Stocks are meager and in the control of a few holders. Quotations have been advanced to \$1.90@2 for reeds; \$2.15@2.25 for extra powdered, and \$1.40@1.45 for extra.

GAMBOGE—All grades are scarce and higher, jobbers quoting \$3@3.10 for blocky, \$3.15@3.20 for powdered, and \$3.05@3.15 for select bright pipe.

IPECAC—In sympathy with higher markets abroad, Carthagenia has been advanced to \$2.85@2.95 per pound for whole, and \$2.95@3.05 for powdered. Rio continues at \$3@3.25 per pound.

KOLA NUTS—Due to higher cost of importation prices have taken an upward turn, small and large nuts being held at 35@40c per pound, and powdered, 45@50c.

LEAD ACETATE—All grades are in good demand in this market and much activity in trading is reported. Jobbers have advanced their quotations to 23@28c per pound, according to quantity.

MALVA FLOWERS—Blue are in limited supply, with quotations at \$2.20@2.30 per pound.

MENTHOL—The market is quiet, with but little inquiry. A revision of quotations shows a wider range with the inside price lower at \$3.30@4.10 as to size of order.

NAPHTHALENE—There is a steady seasonable demand, with jobbers quoting 13@20c for both ball and flake.

VEGETABLE OILS—The market for all varieties of edible oils is reported firm, and prices have been advanced on imported benne (sesame) to \$3@3.25 per gallon by the barrel or less. Olive oil, Lucca, in ½ and 1 gallon cans is held at \$3.50@3.60 per gallon, while Malaga is slightly easier at \$1.75@1.85 per gallon. Croton oil is also lower at \$1.20@1.30 per pound.

NEATSFOOT OIL—Has been advanced to \$1.50@1.60 per gallon.

CADE OIL—Is in limited supply and higher at \$1.20@1.25 per pound.

ESSENTIAL OILS—A steady and increasing demand throughout the country for many of these oils and relatively prices are higher for many varieties. Recent statistics show that the total exports of oil of bergamot from Messina during 1916 amounted to 350,000 pounds, as against 232,000 pounds during 1915; in same period 211,000 pounds of oil of sweet orange were exported, as against 155,000 pounds in 1915, while the exports of oil of lemon, in 1916 amounted to 1,450,000 pounds as against 1,635,000 in 1915. Among the price advances noted are those for oil of celery, \$2@2.10 per ounce; cloves, \$2.50@2.60 per pound; lavender flowers, \$6@6.25 per pound; lemon, \$1.40@1.50 per pound; pimenta, \$3.30@3.40 per pound. Primary markets dealing in these oils are all reported very firm, while the shipping situation is anything but satisfactory.

COD LIVER OIL—The market is firm at recent quotations, \$132@135 per barrel being asked for Norwegian. The fishing season is practically closed, the production of oil being estimated at 29,000 barrels as against 48,600 barrels a year ago. Newfoundland oil continues firm at last month's quotations of \$3.10@3.20 per gallon.

POTASSIUM SALTS—Further advances are noted for carbonate, U. S. P., at \$1.60@1.75 per pound; chlorate, crystals, 58@72c, powdered, 59@73c; permanganate, \$5@5.50. Iodide shows a lower range, \$3@3.15 being asked.

RESORCIN—Following a reduction in price by manufacturers, jobbers have reduced their quotations to \$1.20@1.25 per ounce for pure white.

SANTONIN—Is lower at \$2.95@3.05 per ounce.

SACCHARIN—Notwithstanding reports that facilities for increased production in this country are in circulation, jobbers' prices show an advance to \$2.90 per ounce. A good demand is reported.

SPIRITS TURPENTINE—Is in better supply with prices reduced to 46@55c per gallon.

STROPHANTHUS SEED—Green is quotably higher at \$2.65@2.75 for whole, and \$2.80@2.85 for powdered. Brown is unchanged at \$1.50@1.75 per pound.

SUGAR OF MILK—Manufacturers report a scarcity of raw material, and this condition with a limited supply and strong demand has caused a sharp advance in price quotations, jobbers asking 52@54c for powdered in bulk, and 52@54c for powdered in 1-lb cartons.

STATE LIQUOR TAX ON PHARMACISTS.

The Excise Department of the State of New York has issued the following notice to pharmacists regarding the liquor license necessary under the law:

Albany, June 1, 1917.

Dear Sir: Your attention is called to the fact that the Liquor Tax Law of the State of New York imposes a tax upon the business of trafficking in liquors by a licensed pharmacist, which liquors can be sold only upon the written prescription of a regularly licensed physician, signed by such physician, which prescription shall state the date of the prescription, the name of the person for whom prescribed, and which shall be preserved by the pharmacist, pasted in a book kept for that purpose, and be but once filled, and which liquors shall not be drunk on the premises where sold or in any building or grounds connected therewith. The payment of such tax also gives the holder of the certificate issued upon such payment, the right to sell alcohol for medicinal or mechanical purposes without a prescription, except during prohibited hours.

This Department is informed that you are engaged in business as a pharmacist and have not taken out the neces-

sary certificate to entitle you to so traffic in liquors and have not paid the tax imposed by law.

Under an amendment to the Liquor Tax Law, which is effective from this date, the consents of property owners dition of such traffic in liquors.

Your attention is also called to the fact that the Liquor Tax Law prescribes severe penalties for selling liquors in any manner contrary to the provisions of the law, which include fine and imprisonment, and, in the case of a pharmacist, the revocation of his license as a pharmacist.

You can procure a liquor tax certificate from the County Treasurer of your county upon making a proper application upon blanks which will be furnished by him, and paying the moderate fee fixed by Law.

Your attention is called to this matter in order that, if the information we have is correct, you may have an opportunity to comply with the law, which all pharmacists selling liquor upon physicians' prescriptions, or alcohol for medicinal or mechanical purposes, are expected to do at once.

HERBERT S. SISSON,
State Commissioner of Excise.

ECONOMY DRUG CO.'S ANNUAL MEET

The first annual meeting of the retail druggists in Ohio Kentucky, Indiana, West Virginia and other States, who are members of the Cincinnati Economy Drug Co.'s cooperative organization, was recently held in Cincinnati, with an attendance of more than 300 visiting druggists. The business meetings of the organization were held at the company's offices at 919 Main street, with President R. H. Cox presiding. Problems of the trade incident to the war and its various factors were discussed broadly by various speakers. A dinner was tendered to the visitors, with O. B. Thuma as toastmaster, the speakers including President Cox, Dr. S. P. Marvin, Jos. Schneider, J. O. Arnold, E. H. Theising, John Morrow, Vernon Driscoll, White Jackson, Edward Hinkebein, William Gilbert, Charles Coffair, Dr. L. Stinger, C. A. Becker, W. H. Balsh and William Deprez. The visitors were also guests at a luncheon at the Hotel Gibson given by the W. S. Merrell Chemical Co.

DR. STOKES' CURE FOR THE DRUG HABIT

Dr. Charles F. Stokes, formerly surgeon general of the United States Navy and now supervising medical officer of the Municipal Board of Inebriety with sanitarium in Orange County, New York, has made a report on his method of treatment in which he says that after a thorough trial he became convinced of the remedial value of pilocarpine and eserine in doses far below the minimum medicinal doses in common use. The largest single dose of pilocarpine hydrochloride that Dr. Stokes has given was one-tenth of a grain, with the average dose somewhere between one-fifteenth and one-twentieth, repeated every two or three hours for the first forty-eight hours, when, as a rule, the medication is discontinued.

"All craving ceases," adds the report, "after the treatment is under way, and the patients cannot tell when the narcotics are discontinued."

Dr. Stokes adds: "Heroin should be abolished. We found that this drug was used in over 90 per cent of the cases seen by us. Heroin can be completely done away with without adding to the suffering of the sick or harming them. In fact, the United States Public Health Service, in view of the drug evil, has discarded heroin completely."

MILLIKEN PLANTS NEARING COMPLETION

Announcement is made that the new administration and pharmaceutical building of the John T. Milliken Co., at Third and Cedar streets, St. Louis, Mo., will be ready for occupancy on August 1. The new building will cover a space of 154 by 210 feet, six stories high, of fire-proof re-inforced concrete construction, and will cost \$259,000.

The building will be surmounted by a tower 300 feet high. Other structures, involving an outlay of approximately \$1,500,000, are also being constructed by the company. The capsule plant of the company, now located at Detroit, will be moved to St. Louis, and a plant for the manufacture of absorbent cotton and surgical dressings will be erected.

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PROPOSED TAX ON DISTILLED SPIRITS

Every effort should be made by the drug trade to secure the modification or elimination of the additional tax on distilled spirits as proposed in Section 304 of H. R. 4280, otherwise known as the War Revenue bill, now before Congress. This section provides for a tax of \$1.10 on each proof gallon of distilled spirits on hand, "whether in its original condition or mixed or combined with any other article," if it is intended for sale. It would apply to all pharmaceuticals, made with alcohol, perfumery, flavoring extracts, etc., and if enacted it would be necessary for every manufacturer, wholesaler and retailer in the country to go through his whole stock, compute the exact quantity of alcohol in his possession, and then to pay a tax of \$1.10 on each proof gallon in addition to the tax that has already been paid on such spirits.

The labor that would be required to figure out the alcohol represented in the average drug stock would be enormous, even if it could be fairly done, which is extremely improbable. Besides the impracticability of the proposal, it is unjust to impose upon pharmacists and any one at all familiar with conditions in the trade can easily see that the bill if enacted would mean bankruptcy for some manufacturers and be an imposition on all makers and dealers in legitimate pharmaceutical, proprietary and toilet preparations. Such a law would prove disastrous to all concerned. It has been asserted that the objectionable clause above quoted will most likely be eliminated in the final passage of the bill, but it remains for the drug trade to make every effort to bring the facts to the attention of their representatives in both branches of the Congress.

GOLDWATER ORDINANCE UNCONSTITUTIONAL

That the provisions of Sections 116 and 117 of the Sanitary Code requiring the manufacturer to print the formula on the labels of his proprietary preparations, otherwise known as the Goldwater Ordinance, adopted by the New York City Board of Health, are illegal and unconstitutional, was the decision of the Appellate Division of the New York Supreme Court in the suit brought by E. Fougere & Company, Inc., and two other plaintiffs against the New York Department of Health. In the controversy the company, while conceding that the Board of Health has power to enact a Sanitary Code, asserted that the particular sections of the Code com-

plained of had not been ratified by the Legislature and, therefore, were unconstitutional. The Court also agreed with the contention that the "Department of Health had not shown that the sections were adapted to meet any public demand or imminent danger, such as is essential to their validity under an alleged exercise of the police power of the State in the clear absence of any express legislative authority." On this point the Court ruled that the ordinance is "reasonably objectionable and is invalid."

Another point was the assumption that the enforcement of the ordinance would deprive the plaintiffs of their property by destroying the secrecy which alone gives value to their formulas. This is claimed to be forbidden by both Federal and State Constitutions. That such secrets are property, and are very often valuable property, and will in a proper case be protected by the Courts against unauthorized disclosure, was a contention of the plaintiffs, a principle which was upheld by the Court. Other objections were urged against the validity of the ordinance, the Court holding that the proposed regulation in its present form was legally objectionable and is invalid. It is stated that the Department of Health will appeal the case, but just how the City authorities will attempt to overcome the apparent logical conclusion that the sections of the ordinance as drawn are unconstitutional remains to be seen.

CURTAILING DELIVERY SYSTEMS

The fact that delivery systems have been greatly extended in most large cities during the past few years is not a new thing to retail dealers, nor is it new knowledge to any business man to be told that the demands for such service have been increasing, both absolutely and relatively to the value and number of the parcels delivered. The causes for this increase are due both to the exactions of patrons of the stores and to the competition that constrains the proprietors of stores to submit to this imposed service for fear they may lose custom should they refuse to furnish such delivery.

The present war, however, has caused efficiency experts and economists to review many of our standards of living, as well as our methods of doing business, with the idea, if possible, of eliminating all superfluous effort and expense which are not directly connected with the welfare of the people at large and the resources of the nation as a whole. The commercial economy board of the Council of National Defense states that in the present emergency it is absolutely necessary the country's resources be used to full advantage to aid in carrying on the war. All unnecessary services must be omitted, and the Defense authorities state that economies in delivery service will release a large number of men and vehicles for military or other service that is essential to the welfare of the country.

These investigations and conclusions are of direct interest to the average druggist. No retail dealer has been more often imposed upon by being required to maintain unnecessary delivery systems,

for the delivery of small parcels that might be carried without inconvenience by the purchaser is a common experience of nearly all druggists. Only recently the independent statements of two leading retail druggists of New Orleans were to the effect that three-quarters of the goods ordered in person in their respective stores and left for delivery could just as well have been taken away by the customer. And mind you, the deliveries included in this category were exclusive of medicines ordered by telephone, and of cases in which delivery boys called at residences or other places for prescriptions and returned with the remedies thus ordered.

We are aware of what has been said about service being the principal factor which contributes to business success, and this theorem is probably sound whether you measure service in terms of quality and novelty of goods, anticipation of customers' needs, deliveries of purchases, or other tangible effort, but when unnecessary deliveries are considered in the aggregate, especially at this time when a conservation and mobilization of energy, especially are wanted, it becomes apparent that druggists and other retail merchants who promote useless expenditure and favor the employment of individuals in useless work, are really weakening the potential energy of the country. Co-operation among druggists and local merchants may be necessary to effect the greatest economies in this direction. There is no question that many pharmacists will hail the opportunity to rid themselves of a phase of delivery service which has always proved vexatious and rarely profitable. The delivery of medicines and necessities for the sick must always be taken care of, for such service has a benevolent aspect that cannot always be measured by economic rules. But in these stirring times druggists should have but little sympathy for the customer who is too proud or too lazy to carry home a purchase that will cause him no inconvenience and comparatively no expenditure of effort.

RECOGNITION OF PHARMACISTS IN THE ARMY

Practically every pharmaceutical association in the country has gone on record and adopted resolutions asking the Government to provide a pharmaceutical corps in the army, or to give pharmacists that recognition in the service their scientific training would qualify them to hold. As it now is, the pharmacist has no place in the military program, for if he wishes to serve his country, he must either enlist or be drafted as a private, the highest position he can aspire to being that of a hospital steward, which carries with it no officer's commission or professional recognition of scientific ability, or of the peculiar service the pharmacist by reason of his past training can bring into the service of his country.

The existence of this condition of affairs has been strongly emphasised during the past few weeks, but what is more to the point, the fact of the co-ordination of the work of the physician and pharmacist is becoming better understood by the country than ever before. The physician is cognizant of his dependence on the professional services of the phar-

maeist, and that the American Medical Association has gone on record as favoring military recognition of pharmacists as a class, is the strongest kind of an argument for the establishment of a pharmaceutical corps in the army. At the present time, the Government is calling for physicians who will be needed in ever increasing numbers as our men get into action. Physicians cannot "do it all," and leading members of that profession are already asserting that they must have skilled and adequate assistance. That pharmacists are needed to aid the war surgeon and that from them the greatest assistance can be obtained, is the conclusion of J. Madison Taylor, M.D., of Philadelphia, who sets forth his views on the subject in the *New York Medical Journal*, as follows:

There are several ways through which this assistance can be given, by utilizing medical students, by utilizing nurses, and by utilizing pharmacists.

The first is economically unwise, because medical students are potential physicians and surgeons, and will be needed later on to take the places of the medical men now in the service. The second is objectionable by reason of the limitation of a nurse's training along medical lines, and also her sex. The third is the most promising, because it furnishes material that with but little intensive training, could be made most helpful to the physician and surgeon. He could cover more ground more thoroughly, more deliberately and more creditably to himself, to the service, to his country and to all of humanity.

The skilled pharmacist of today has had collegiate training and years of practical experience, with a manipulative skill in the handling of materials that eminently fits him for minor medical and surgical work. With a little training he could readily be qualified to extend this field of activities to an extent which would enormously aid and comfort the surgeon when pressed by urgent demands on his time and attention.

Justice to the medical men of the army and navy demands that they be given adequate assistance in the prosecution of their work, and the suggestion that skilled pharmacists be given a commissioned rank in the army and navy, and that they be made also medical and surgical assistants, will meet, we believe, not only with the unqualified approval of the medical profession generally but with that of the public whose interests are still further protected.

THE SCARCITY OF DRUG CLERKS

Reports from various sections of the country indicate a general scarcity of drug clerks, a condition that may continue for some time. The reason for this is based on the demand for labor which qualified clerks can perform in other lines and at better wages, and also by the drafting of many young men into the army. No class of pharmacists are more cognizant of these conditions than the drug clerks themselves, and at the recent annual meeting of the California Drug Clerks' Association such questions as the ten-hour law, minimum wages and representation on boards of pharmacy, all of them having a bearing on the relation of the drug clerk to the business in general, came up for discussion. Are drug clerks receiving the pay they should receive, considering the educational qualifications they must possess to become registered and the responsibilities they must assume in order to hold a situation in retail pharmacy?

It is difficult to answer such a question, as the factors upon which a reply should be based are widely variant in their character. The clerk adapted for a certain class of trade, say in a foreign section of any of our large cities, would likely on trial be found unfit to serve the patrons of a fashionable store in the same city. It is thus easy to see that the personal equation, outside of a definite quantity of absorbed pharmaceutical knowledge, is most important. But that all drug clerks irrespective of

their present positions should ask for increased wages at this particular time is not at all strange. The high cost of living has touched the pocket book of all individuals, and the drug clerk is no exception to the present era of increased demands. He should receive an adequate compensation for his labor, and this is an expense the proprietor must meet if he is to have competent help. There can be no question about this, and the proprietor who whines about the scarcity of help and high wages without endeavoring to put himself in harmony with present conditions has a poor grip on his business future.

As we see it, the demand for drug clerks is bound to continue and will be in excess of the supply. The large majority of clerks are within the range of the ages covered by the conscription law, and many clerks now employed in pharmacy are likely to be withdrawn from the retail business to fight, if need be, their country's battles. This withdrawal will materially reduce the supply of clerks, and adding to it the increasing cost of living and other conditions incident to war times, employing druggists may expect the salaries of drug clerks to go to higher levels than the average now reached. With these higher salaries may also come general shorter hours of employment and a better feeling of real co-operation between employer and employe.

AMERICA IN THE RUNNING

That necessity inspires invention and discovery is a truism as old as recorded time, and the fact has never been more discernible than at present. The world war has stimulated a multitude of human activities, and nowhere is this more observable than in our own country. Extensive industries are now being conducted on an "all-American" basis, as Thomas A. Edison, would say, and the thought behind the accomplishment is the belief of the average citizen "that each of us should work harder than he ever worked before and must produce more than he ever produced before in order to better discharge his share of the obligations which the nation has assumed."

That America is in the "running" is becoming more and more apparent. It is noted in Mr. Edison's own accomplishments, and his announcement made recently that he has found a means of making every element needed or an adequate substitute that will do the work, shows the trend of present day effort. It is also seen in the recent news announcement that the Internal Revenue Division laboratory had discovered a process for making glycerin from sugar, which, if the reported estimates be correct, will enable the manufacturer to make the product for less than half of the present cost, or at about 25 cents per pound.

This is most interesting, and great hopes are entertained that the announcement reflects a positive accomplishment. At the present time, at least in this country, glycerin is manufactured almost entirely from fats at a cost of several times the cost of production before the war. The demand for glycerin in the manufacture of explosives has created a world-wide shortage of the basic materials,

particularly in Germany, and as a result, prices have been advanced to the highest levels for all kinds of fat-producing animal and vegetable substances. The fact that Germany has long since been forced to discontinue the manufacture of soap in order to conserve the fats for munition purposes is evidence of the intensive demand for other sources or methods that would increase the supply of this much needed substance. We are aware that reports assert that German chemists have been producing glycerin from sugar for some time, but as yet no definite information has come to hand concerning the success of the undertaking. The announcement, therefore, that American chemists have solved this interesting problem not only appeals to our patriotic pride at this particular time, but it is an earnest that we are making progress in a field of endeavor in which German chemists heretofore would have us believe was all their own.

TENDENCY OF PHARMACEUTICAL EDUCATION

In the development of present day progress, as outlined in the daily record of news happenings, certain facts relating to pharmaceutical education stand out in bold relief, which in a way may be taken to indicate in no uncertain degree the tendency of modern institutions in the matter of professional training of pharmacists. That this tendency is in the direction of stronger and better schools is evident in the recent announcement of the consolidation of the school of pharmacy of Northwestern University with that of the college of pharmacy of the University of Illinois, and also in the announcement of a department of pharmacy to be opened this year in the University of Utah. Supplementing these accomplishments is the fact that Florida pharmacists through their association have taken active steps toward the establishment of a school of pharmacy in the University of Florida.

The reasons for this tendency are not obscure, for in common with educational training in other professional callings, pharmacists see that great assistance is to be derived from State appropriations, to say nothing of the incentives that are likely to accrue from association of pharmacy students with the broadening influence of university life. The considerable number of private institutions which have done good work in the past are likely to continue, for they have undoubtedly a distinct mission to perform. The present day historian, however, will scarcely look for the further extension of schools wholly controlled by pharmacists. The question is not of the ability of teachers in such schools to give a high grade of instruction, for this ability has been ably demonstrated, but it is one of finances pure and simple, for but few private corporations have the resources at command to supply the equipment demanded in modern scientific teaching.

The cost of teaching pharmacy has been greatly increased in recent years, as anyone may know who has taken the pains to investigate the subject. The modern school is required to possess a larger number of laboratories than was common in the past, to say nothing of the equipment of expensive technical

apparatus and other accessories employed in instructional work. Instructors, too, must possess scientific qualifications that demand adequate financial remuneration, and these with other considerations have added tremendously to the cost of conducting a modern pharmacy school. If research work is to be directed, and this seems to be one of the crying necessities of the time, if we are to believe efficiency experts, it must be done under the care of the institution which can both direct and furnish the facilities for the prosecution of such studies, and also help, if necessary to defray the expenses of such investigations. Intensive studies and advanced requirements are likely to be the rule in pharmaceutical education in the coming years, and to attain these objects will require a degree of mobilization of teaching forces and equipment heretofore unknown to American pharmacy.

The advice to "watch your step" has contributed much to the avoidance of accidents and the subsequent safety of many lives. If such advice suggests anything to druggists it should direct their attention to the necessity of watching market prices and utilizing the information thus obtained in their businesses. Are you posted on the present day values of drug stocks? Have you revised your prescription charges to conform with the higher prices of drugs and chemicals and the general advance in the cost of doing business? Any article irrespective of its former value is worth whatever it will cost to replace it, and if one is to follow a safe and sane business policy in these days of unusual demands and disappearing stocks, he must intelligently apply the best information he can get on price changes. Check up your purchases with the quotations in the ERA's "prices current."

Applied science looms large in the present-day visions of the future, and the chemist is now found urging food buying on the basis of calories. At a recent food conservation rally held at Lake Forest, Dr. Edward Lewis, professor of chemistry at Northwestern University, predicted that the time would come "when instead of highly lithographed pictures of our foods we shall have a scientific analysis of their properties on the containers. We shall order by calories. There's nothing terrifying about them. We can all learn about them, and we should, in order to plan a well-balanced, rational diet. The majority of people eat too much. Animals eat all they can see, but then they have to scratch for it. We do not all have to scratch."

At a recent meeting of the Ohio Pharmaceutical Association, the status of the Ninth Revision of the Pharmacopoeia as an official book of standards under the existing law of the Buckeye State was questioned by some of those present. The report of the inability of the State Board of Agriculture to bring prosecutions based upon the new revision came up for discussion, and some of the members were in favor of urging the Governor to include a demand for a correcting measure in his call for a special session of the Legislature.

Formulas of U. S. Pharmacopoeia Galenicals*

Reasons for Changes in Ninth Revision

By GEORGE M. BERINGER, Ph.M.

AT the meeting of the Philadelphia Branch of the American Pharmaceutical Association held in November, 1916, the writer presented a paper under the above title. As the program for that meeting was a symposium on the Pharmacopoeia and there was assigned to me the title, "Extracts, Fluidextracts and Tinctures," my communication was primarily restricted to the changes made in these classes of official galenicals. The favorable comments elicited by the publication of that paper appear to indicate that a continuation of the subject to the other galenicals of the pharmacopoeia would be an appropriate topic for presentation at this meeting.

The reasons for some of the changes made in the revision of the Pharmacopoeia are so easily understood as to be classified as "self-apparent," but for other changes it may be difficult to assign a tangible explanation.

Changes and Medical Practice

The decision whether an article or formula shall be admitted to, retained in, or deleted from the official list of titles is presumed to be based upon the medical practice of the time and the general or extended use of such medicament. The late Professor C. S. N. Hallberg assiduously gathered statistics from all over the United States to determine the facts regarding the use of hundreds of drugs and preparations with the expectation that the statistics so gathered would be available and accepted by the Committee of Revision as the basis for deciding the admission, retention or dismissal of articles on the official list. The decisions of the committee seem to indicate that these data were not given the consideration it had been expected they would receive and that the decisions on such matters were largely based on personal practice and preferences. Consequently, it is hard to reconcile as consistent the changes made by the additions and deletions. It is, for example, difficult to explain why *Acidum Camphoricum* was dismissed and *Acidum Phenylcinchoninum* has been admitted, and why *Apocynum* and *Fluidextract of Apocynum* were deleted and *Aspidospermum* and *Fluidextract of Aspidospermum* have been introduced.

Formulas Transferred to the N. F.

On the basis of American medical practice and use, it is even more difficult to explain the expulsion from the official list of such popular formulas as *Cataplasm of Kaolin*, *Antiseptic Solution*, *Goulard's Cerate*, *Compound Resin Cerate*, *Compound Acetanilid Powder*, *Mixture of Rhubarb and Soda*, *Compound Spirit of Ether*, *Compound Syrup of Hypophosphites*, and *Ointment of Red Mercuric Oxide*. How fortunate it is that we have in the National Formulary a second legal authority and that it has incorporated these formulas and so retained authoritative legal standards for these. It may be that the knowledge that the National Formulary would probably adopt these dismissed formulas may have influenced the decisions of the pharmacopoeia revision committee. Whatever may have been the cause, these actions demonstrate the necessity for the two legal standards and how fortunate it was that the National Formulary was systematically revised. The increased importance thus accorded to the National Formulary now makes it imperative that it be permanently maintained on a high scientific basis.

The improvements in the directions for the preparing and the proper storing of galenicals in order to insure permanency and efficiency of the products is in evidence throughout the U. S. P. IX. As examples, chloroform water, creosote water, orange flower water and rose water are directed to be prepared with recently boiled distilled water.

In *Aqua Hamamelidis*, the impractical and inaccurate formula of the U. S. P. VIII has been omitted. The

production of this preparation cannot be undertaken by the pharmacist and it can only be carried on as a commercial operation in favorable localities. The Pharmacopoeia has rightly eliminated the process and standardized the product so far as possible and supplied appropriate tests for adulterants.

Poison Tablets of Corrosive Sublimate

The readiness with which the public accepts and the drug trade adapts itself to the legal pronouncements of the pharmacopoeia has been shown by the universal acceptance of the official standard for *Poison Tablets of Corrosive Sublimate*. The prompt disappearance from the drug stores of the formerly extensively used white disk shape of sublimate tablets has minimized the danger of accidental poisoning from this source which was for a time so prolific of fatalities.

The number of *Cerates* has been reduced from six to three and the formulas for two of those retained are notably improved. The U. S. P. VIII directed 20 per cent of white petrolatum to be used in the formula for *Cerate*. Petrolatum in this mixture of wax and lard did not prove to be satisfactory or yield a uniform smooth product; hence, the return in the formula to white wax and benzoinated lard was decided upon.

Solvent for Cantharidin

In the U. S. P. VIII formula for *Cantharides Cerate*, the powdered cantharides was directed to be macerated "in a warm place for 48 hours with the liquid petrolatum." Liquid petrolatum is not a good solvent for cantharidin and no attempt was made by this formula to liberate the combined cantharidin or to obtain the maximum effect from the cantharides used. In the improved formula of the ninth revision glacial acetic acid is directed to liberate the cantharidin and likewise to aid in its solution in the turpentine. The formula is very satisfactory and with good cantharides will yield an efficient epispastic.

In *Cantharidal Collodion*, we note another improved formula based upon our knowledge of cantharides and the proper solvents for its constituents. In the U. S. P. VIII formula for this, the cantharides were directed to be exhausted with chloroform and the extract so obtained mixed with flexible collodion. The resulting product usually gelatinized or precipitated in a short time and became worthless. The extraction with a mixture of acetone and acetic acid now directed yields an active and permanent preparation.

In *Flexible Collodion of the Revision*, by the use of camphor and castor oil in appropriate proportions, a closely adhering stronger and more flexible film is produced than that yielded by the old formula with larger quantities of Canada turpentine and castor oil and does so at considerable saving in cost.

Elixir Glycyrrhiza is now the official title of *Elixir Adjuvans*, the slight increase in the amount of the fluid-extract of glycyrrhiza directed only rounding out the proportion of 1 to 7 of elixir.

In modern pharmaceutical practice, *Emplastra* do not play a very important role. The preparation of *Adhesive Plaster* and *Belladonna Plasters* now used can only be attempted on a large scale and with special machinery; hence, formulas for these are omitted.

Lead Plaster instead of being prepared by decomposing soap by lead acetate, as in the U. S. P. VIII, is now directed to be made by boiling with water equal weights of lead oxide, olive oil and lard. If ingredients of proper quality be used, the resulting product will no doubt be satisfactory.

Alcohol in Infusion of Digitalis

In *Infusion of Digitalis*, we note a change of doubtful propriety, namely, the omission of alcohol. The argument used in favor of this change was that the alcohol played no part in the extraction of the drug or the therapeutic

*Read before the New Jersey Pharmaceutical Association, Lake Hopatcong, 1917.

activity of this preparation and that it gave a false impression as to the stability so that the infusion probably would not be made and used as fresh as it should be. While it must be acknowledged that the alcohol is not necessary for the making of the infusion, it is nevertheless uncertain if it did not serve a useful purpose in the formula. Infusion of Digitalis is not administered while freshly made and warm and in large doses as are many of the common infusions. The physician usually directs a dose of from one to four fluid drachms* several times a day and prescribes sufficient for several days. The 10 percent of alcohol formerly directed was sufficient to preserve the infusion for this limited period and I am not convinced that it did not likewise exert some therapeutic action by stimulating the absorption of the digitalis. Complaint has already been made that the infusion made by the new formula, without the alcohol, very soon spoils. Our experience with the other digitalis galenicals proves that the glucosides of this drug are readily hydrolyzed even in a menstruum of diluted alcohol, and to avoid rapid deterioration in the tincture and fluidextract, the Pharmacopoeia has increased the alcoholic content of these preparations. Yet on theoretical grounds, not substantiated by either practical experiment or therapeutic testing, the alcohol was stricken from the infusion, one of the most important of diuretic and cardiac remedies.

Ammonia Liniment is directed to be made by agitating 1 volume of ammonia water with 3 volumes of sesame oil and this simple procedure yields a perfect preparation. The U. S. P. VIII patriotically endeavored to utilize in this formula an American product, cottonseed oil, and in order to saponify this added oleic acid and alcohol thus presenting a wasteful and ridiculous formula.

Lime Water Not Used in Mucilage

In Mucilage of Acacia, the Eighth Revision directed the use of 33 percent of lime water in order to overcome the natural acidity of acacia. The lime water content at times created incompatibility as, for example, when the mucilage of acacia was directed to be used to suspend calomel. The revision rightly omits the lime water and directs that this mucilage should be frequently made and not dispensed if it has deteriorated.

In Oleate of Mercury, the use of alcohol in place of water will shorten the time required and diminish the danger of reduction of the mercury.

The change made in the formula for Soft Soap, cottonseed oil being directed in place of linseed oil has, likewise, been dictated by economic reasons rather than by scientific. The new formula is defective and the product is deficient in that very necessary property of a soap, namely, detergency.

Color of Mint Essences

In the Mint Spirits, the respective peppermint or spearmint, used for coloring and clarifying, is first washed with water which removes the brown and yellow colorings as well as much extraneous dirt and the resulting spirit is more uniformly of a bright green color.

The acid content of Syrup of Hydriodic Acid was slightly increased so as to make the official syrup not below the strength claimed for some proprietary syrups.

In Syrup of Calcium Lactophosphate and in Syrup of Hypophosphites, the addition of 50 mils of glycerin to the liter adds materially to the stability of these.

In Syrup of Wild Cherry, we note a return to the method of adding the glycerin to the first portion of the menstruum instead of to the percolate. While this procedure may yield a deeper colored syrup that may be richer in tannin, it is doubted if this should be the proper aim and it is questioned whether the hydrocyanic acid content is not actually diminished.

Changes in Ointments

In the Ointments, a few changes are noteworthy. Such minor changes as those made in Belladonna Ointment and in Diluted Mercurial Ointment are readily understood and will cause little comment. In Diachylon Ointment, white petrolatum is substituted for olive oil which yielded an ointment of too fluid a consistence. Ointment of Phenol is reduced from 3 percent phenol to about 2 percent and ointment is directed as the base instead of white petrolatum. The changes made in this formula may cause some

trouble with customers to whom it may be difficult to explain the difference in the appearance of carbolic ointment.

The elimination of all Wines from the Pharmacopoeia was probably due to a misunderstanding of the requirement of the Brussels International Protocol. Physicians will continue to prescribe the Wines of Antimony, Colchicum, Ipecac, etc., and pharmacists will furnish these as heretofore. In the formula of Compound Mixture of Glycyrrhiza, the substitution of the equivalent amount of tartar emetic dissolved in water for the wine of antimony is directed and this was the only change in the official formulas necessitated by the deletion of the class of wines from the Pharmacopoeia.

POSSESSION OF ALCOHOL IN DRY TOWNS

Warren L. Bradt, secretary of the New York State Board of Pharmacy, Albany, N. Y., sends the ERA a copy of a letter he has received from H. D. Sanders, of the New York State Excise department, in reply to a query submitted by him in reference to the possession of alcohol by pharmacists in dry towns of the State. The letter is self-explanatory, and is as follows:

STATE OF NEW YORK
DEPARTMENT OF EXCISE

Albany, July 10, 1917.

Mr. Warren L. Bradt,
Secretary New York State Board of Pharmacy,
Education Building, Albany, N. Y.

Dear Sir:—

Your favor, under date of June 28th, 1917, to Hon. Merton E. Lewis, attorney-general, has been transmitted to this department for answer.

You quote in your letter a part of subdivision P. of section 30 of the Liquor Tax Law, which took effect May 22nd, 1917 and you refer to article 11 of the Public Health Law in relation to the preparation of medicines. You say that since the amendment to the Liquor Tax has become operative many pharmacists throughout the State have been informed that the possession of alcohol for manufacture of preparations, etc., is a violation of the meaning of the act and you ask for the opinion of the Attorney-General if it is not "the intent of the Legislature not to prohibit from proper possession of alcohol nor to the transportation companies carrying it but was intended as the act undoubtedly has for its basic principle the regulation of liquors when sold for consumption and not when used in medicinal preparations."

In answering your questions, we beg to say that after a very careful perusal of the amendments to the Liquor Tax Law and the law in this respect, as it now stands, it has been, and is, the opinion of this Department that the law, as worded, prohibits all persons, including druggists, from having liquors in their possession in a so-called dry town wherein the people have, by their vote, prohibited the business of trafficking in liquors under subdivisions 1, 2 and 3 of section 8 of the Liquor Tax Law. The law, as it now stands, may cause hardship in respect to the possession of alcohol by pharmacists in dry towns, but, in our opinion, the language of the statute is broad enough and positive enough to do exactly that which the Department says in this opinion, it does do. It is only fair for us to suggest that, in this particular respect, the subject could very well be taken into consideration by the next Legislature.

Respectfully yours,
H. D. SANDERS, Chief Counsel.

LAST CALL FOR THE A. PH. A. MEETING

On August 27th Indianapolis will welcome the annual convention of the American Pharmaceutical Association. It is reported that plans have been made to entertain a record-breaking number at this meeting and from the information regarding the important features of this wartime convention it seems likely that the committees have been planning both wisely and well.

The Claypool Hotel will be used as headquarters. This hostelry is amply provided with convention halls and committee rooms and is ideally located for such gatherings as the A. Ph. A. meeting. The rates are from \$1.50 to \$5 a day for one person. Other excellent hotels are all centrally located and within a few minutes' walk of headquarters.

The National Association of Boards of Pharmacy will open the first business of the convention on Monday, August 27th and the American Conference of Pharmaceutical Faculties will also have the first business meeting on that day.

The first general session will convene on Tuesday, and on the succeeding days the regular sessions of the scientific, commercial, and women's sections will be held. There will be an excursion to Indianapolis Industrial Plants on Tuesday afternoon, and on Wednesday a musical will be given for the ladies. The president's reception will be held on Wednesday evening.

* It is to be noted that in the U. S. P. VIII the average dose was given as 2 fluid drachms and the U. S. P. IX now states: Average dose 1 fluid drachm.

Value of Bacteriology to a Pharmacist*

By JOHN M. RODDY, M.D.

OF what value is a knowledge of bacteriology to a pharmacist?

This is a question that arose in my mind when the Philadelphia College of Pharmacy decided to teach this subject. It is a question I have frequently been asked by practicing pharmacists and students; a question the answer to which has been diligently sought for, a question definitely answered by physicians, pharmacists and the laity. The answer seems of such vital importance to pharmacy as to warrant the presentation of the facts for your consideration.

The application of bacteriological tests has become an indispensable aid in the diagnosis of many diseases. The number of cases in which such tests are desirable or necessary continually increases. The medical profession through technical knowledge and competition is keenly aware of it; the laity is rapidly learning to expect such tests as frequently an essential part of a proper medical examination.

Bacteriological Work to be Done

The majority of people first consult, or only consult, general practitioners; the greatest portion of medical and surgical service in America is rendered by general practitioners. The circumstances that govern physicians engaged in general practice are such that the vast majority of them cannot now, nor for a long time to come, make these tests themselves. State and municipal health departments have recognized this and attempted to alleviate this condition, but the nature of the problem makes it impossible for them to do so. By legitimate and illegitimate means many hospitals have unsuccessfully endeavored to do all the work of this character in their respective communities. Most improperly and with no better success, several firms manufacturing biological products have attacked the problem. A few county medical societies have established laboratories to do this work for their members. But most of the work remains undone.

Whoever solves this problem so that a physician or patient can obtain necessary laboratory tests under the same conditions and with the same ease that they can at present have a prescription filled, will enhance the public health and render a service to humanity and the medical profession as great as did Behring when he gave us diphtheria antitoxin; Wasserman, when he gave us the test for syphilis, and Ehrlich, when he gave us salvarsan.

The retail pharmacist is in a position to do this work with more satisfaction to physician and patient, for a much smaller fee than can anyone else—*provided*, he is competent to render such service—he can make a much larger profit from it than from many of his other activities and the work itself is more enjoyable and uplifting than many of his present occupations.

Kind of Knowledge Required

For the establishment of a successful diagnostic laboratory as a part of a retail drug store, one must possess:

First. A thorough, practical knowledge such as will enable him to accurately make the tests commonly required and to recognize the impropriety of attempting to make tests which he has not been trained and experienced in making.

Second. An ethical standard that entirely and constantly harmonizes with the ethical standard of the medical profession.

Third. Proper quarters and equipment for the execution of the work, and service that will minimize inconvenience of physician and patient.

Fourth. A fee list which is the minimum compatible with fair profit.

It is difficult for the graduate pharmacist conducting a business to obtain the first of these essentials. Few can ever hope to acquire it. An unmarried graduate, not conducting a business, and undergraduates, can procure it with comparative ease. By diligent application, the necessary training and knowledge can be gained in a year at any of the numerous medical schools and universities. There is

at least one college of pharmacy and a few private laboratories in which such instruction can be gained as well, and perhaps better, than in most medical schools and universities.

It is so easy to get such training and knowledge while one is an undergraduate and frequently so difficult afterward, that I believe it is the duty of every practicing pharmacist to urgently advise prospective students of pharmacy to also acquire a thorough training in bacteriology and diagnostic testing before terminating their scholastic career.

An Ethical Standard Essential

The second essential is probably the hardest to acquire and maintain. American pharmacists are primarily business men, and secondarily, if at all, scientists; they are imbued with the attitude of "when in doubt take a chance," which applied to laboratory work means if an opportunity presents itself to make a diagnostic test, make it, even though not familiar with the principles involved or experienced in the work. If a sterile solution for intravenous injection is ordered, attempt to make it and dispense the product, even though the proper mechanism of producing and maintaining sterility is not thoroughly understood. It is also exemplified in the willingness of some pharmacists to advise patients and the presumption to prescribe treatment. Aside from the immoral and illegal aspect of such conduct it soon establishes an impassible barrier between the pharmacist and the medical profession and forever cuts that pharmacist off from the possibility of engaging in diagnostic laboratory work.

Sanitary Quarters and Equipment

The third requirement is easily met by the possessor of a thriving store; it is the most difficult for the recent graduate. Any sanitary room having a floor space of at least 150 square feet and an equipment costing less than one thousand dollars will be sufficient to begin with.

There is a mass of evidence showing that very often the determining factor as to whether urine, feces, blood, pus, or sputum is examined or not, is the ease with which it can be done. If a physician can lay his hand on a proper receptacle for a sample, scribble a name or number on it, 'phone for a messenger who will promptly call for it and in a short time return with a reliable report, the test is made. If, on the other hand, the patient must be referred to another physician, or a hospital, or the attendant must prepare a suitable receptacle for the sample, or mail or deliver the sample to the laboratory himself, or fill out the inevitable questioner of a health department, the test is not made. This may not be complimentary to the medical profession but it is an undeniable condition.

Financial Remuneration

The fourth requirement presents a problem that long since should have been solved by the medical profession or professional economists, their failure to do so, I believe, has divorced them from any voice in the matter.

The economic position of the retail pharmacist peculiarly fits him to solve it; he is therefore the logical person to assume the work.

His position is such that by the institution of a correct routine and technique he can do this work at a fair profit for fees very much less than can others.

One of the many reasons why invaluable diagnostic tests are frequently omitted is prohibitive cost. The cost of making diagnostic tests is subject to greater variations than anything I know of. To minimize it requires experience and good training. Factors peculiar to the business of each retail pharmacist will necessitate variations in methods of procedure so as to conserve time and labor. Each individual eventually learns this, but it would be much the best policy when contemplating the establishment of a diagnostic laboratory in conjunction with a retail drug store to obtain the advice of an experienced bacteriologist.

* Read before the Pennsylvania Pharmaceutical Association.

In the course of the next few years the better schools of pharmacy will be graduating pharmacists, some of whom will be trained to competently make bacteriological and chemical diagnostic tests. It would be to the greatest advantage of all, were established successful retail pharmacists to search for such men, take them into partnership and institute, in conjunction with their store, diagnostic laboratories.

Opens a Promising Field

Great fields are opening up for pharmacists in other departments of bacteriology, especially industrial bacteriology, and to these we hope to attract your attention at another time, but the greatest and immediate opening is in medical diagnosis. If you enter this field properly, gentlemen, you can confer untold benefits upon the medical profession and the community, enhancing both public health and the prestige of pharmacy. In a business way, you will find ripe fruit waiting to be plucked.

BOOKS REVIEWED

RETAIL BUYING, Modern Principles and Practice. By Clifton C. Field, formerly with Marshall Field & Co., of Chicago, and James McCreery & Co., of New York; recently instructor in Merchandizing, University of Wisconsin. 12 mo., 220 pages, cloth, \$1.25 net. New York, Harper & Brothers.

The author tells us that he has built this volume around his own experience as a buyer and as a student and teacher of buyers, and that he has drawn upon the experience and the investigations of successful merchandizers in every line of retailing. One of the difficulties has been to adapt the methods of the larger stores, and particularly those in which it seems possible to install complete systems, to the needs of the average retailer. But in this respect the work has been well done. In the discussion but little experience furnished by the retail druggist is employed to push home a fact, but it will not take the wide-awake business druggist long to find many suggestions and methods that can be immediately applied to the commercial problems of pharmacists.

The book is divided into four parts, thus: Part I, The Merchant as a Buyer; Part II, Merchandise; Part III, Buying Practice; Part IV, Stock Systems. The drug merchant will find in each of the chapters of these divisions many hints that will prove suggestive and helpful, especially those relating to determining prices and profits, the turnover, inventory, stock-keeping and stock-recording, cooperation in advertising and displays, etc. As Mr. Field puts it, the real buyer must know how to sell goods, how to handle people, how to plan his merchandizing and how to buy, the whole discussion leading back to the original statement that the function of a buyer as a merchant is to buy merchandize according to a merchandizing plan, to sell so as to make a satisfactory profit, and to manipulate his purchases so as to secure the proper number of turnovers and leave his stock in good condition at the end of the season.

THE ANILINE COLOR, DYESTUFF AND CHEMICAL CONDITIONS from August 1, 1914, to April 1, 1917. A series of addresses and articles compiled by I. F. Stone. 8 vo., 224 pages, cloth.

The compiler has brought together in this volume addresses delivered by himself before the American Chemical Society and other national bodies, and addresses and articles by Dr. D. W. Jayne, J. F. Schoellkopf, Dr. W. Beckers, Dr. T. H. Norton and Dr. B. C. Hesse, on various subjects pertaining to the color and dyestuffs industries. Taken as a whole, this material, brought together by Mr. Stone at the request of his many friends in the chemical and other scientific societies, affords a very complete history of the development of these industries in the United States from the beginning of the European War to the present time. That these industries have made progress will be the verdict of every one who reads the book, and the information therein contained is sure to be appreciated, not only by the manufacturer, but by the student in technology and the economist who will have occasion to study the development of a great industry and one which is bound to have an important place in our future commercial progress.

ABSTRACT OF THE CENSUS OF MANUFACTURES, 1914. 8 vo., 722 pages, cloth, 65 cents Washington, Government Printing Office.

This abstract of the census of manufacturers, just issued by the Bureau of the Census, presents in convenient form with an alphabetical index, all the information that will be needed by the great majority of persons who have use for such statistics. It gives for 340 separate manufacturing industries, statistics relating to number, size and character of ownership of establishments, and states in which located; proprietors, officials, salaried employees and wage earners classified according to sex, salaries and wages paid, power used, value of products, quantities of principal products, etc. Statistics somewhat similar in scope but in less detail are given, with reference to all industries combined, for each state and geographic division and for each of the leading 130 cities.

The Chemistry of Bread-Making

Prof. Charles H. LaWall has prepared under the above title, an article which appears in the *Transactions of the Wagner Free Institute of Science of Philadelphia*, a copy of which we have received. In the article the author has brought together considerable information relating to the history, chemistry and technique of an art that dates back to the earliest records of uncivilized man. In the broadest sense, the term "bread" may be taken to mean all food-stuffs eaten by man, but in a more restricted sense it is held to mean a food of any kind of flour or meal, as wheat bread, corn bread, etc. The author takes up the types of bread, the potential chemical factors of flour, the three essential methods of leavening or by producing lightness of the dough, following with a discussion of the principal chemical changes which occur during baking.

"Pituitary Standardization," by H. C. Hamilton and L. W. Rowe, and "The Variability of Strophanthin with Particular Reference to Ouabin," by L. W. Rowe, are the titles of two bulletins of "Studies from the Research Laboratory" series we have received from Parke, Davis & Co. Another reprint is an article from the *Druggists Circular* by Oliver Atkins Farwell on the "Botanical Nomenclature of the U. S. P. IX." Mr. Atkins contends that "a careful examination of the botanical nomenclature of the new revision of the Pharmacopoeia discloses the fact that the authors did not invariably follow either the 'Vienna' code or the 'American'; but either one or the other as it suited their convenience, and in some instances neither."

Urges Uniform Schedule for Retailers

C. P. Van Schaack, vice-president and secretary of Peter Van Schaack & Sons, wholesale druggists of Chicago, has compiled the following schedule relating to selling prices retail druggists should charge, together with some of the reasons why such a schedule should be adopted:

These are war times and such exigences and watchfulness are never before are now required of the retail druggist.

Some of our salesmen report that either from ignorance or from lack of business judgment many of their trade continue to make sales at a less figure than they could replace the goods.

Most of the prominent manufacturers are readjusting their retail and jobbing prices and some, many in fact, are raising their prices to the retailer but eliminating in their consideration the ultimate consumer who should stand for the advance.

Others again are not disturbing their retail or jobbing prices, but reduce their discounts to the wholesaler. These we assume rather than to disturb the former rates. We suggest the uniform adoption by the retail trade of the following schedule:

With no exceptions

Goods Costing up to	Doz.	Should Sell for	Goods Costing up to	Doz.	Should Sell for
.40	.40	.05	8.50	8.50	1.00
.75	.75	.10	10.50	10.50	1.25
.75	1.25	.15	10.50	13.50	1.50
1.25	1.50	.20	13.50	15.00	1.75
1.50	2.00	.25	15.00	19.00	2.00
2.00	2.40	.30	19.00	21.00	2.25
2.40	3.00	.35	21.00	24.00	2.50
3.00	4.00	.50	24.00	27.00	3.00
4.00	4.50	.60	27.00	30.00	3.25
4.50	5.00	.65	30.00	33.00	3.50
5.00	6.75	.75	33.00	36.00	3.75

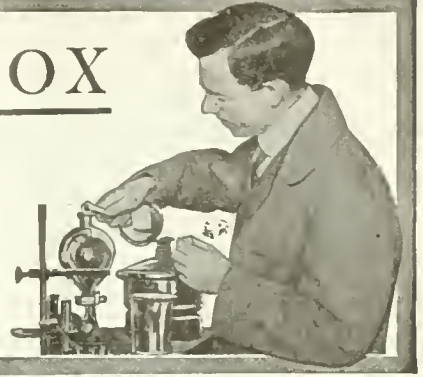
PETER VAN SCHAACK & SONS.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Saturated Solutions

(S. S. D.)—We know of no book that contains a table for making saturated solutions where the factors are given in grains of the medicinal substance, needed to make a fluid ounce. However, most solubility tables, like that in the Era Dose Book, give figures showing the weight of water necessary to dissolve 1 part (by weight) of medicinal substance at a standard temperature, and when so dissolved, the resulting solution is said to be "saturated." This is usually all the information the dispensing pharmacist or chemist wants, although in the new Pharmacopeia, nearly every soluble substance has its degree of solubility stated in numbers of milliliters or Cc. of water necessary to dissolve 1 gram of the substance. Of course, these relations are expressed in the metric system, which by means of the proper equivalents can be converted into grains and fluidounces. This range of solubility is based upon the standard of 25° C.

For practical work in dispensing, many compounders make up stock solutions, as "stock solution of potassium iodide 1 in 2," meaning 400 grains of potassium iodide in 2 fluidounces of the solution; or "stock solution of ammonium bromide 1 in 4," meaning 480 grains of ammonium bromide in 4 fluidounces of solution. Tables for the more common stock solutions to be used in dispensing are to be found in MacEwan's "Art of Dispensing," and similar works. It is probable that not many of such solutions are wanted, as most dispensers prefer to make most saturated solutions at the time such orders are received.

Optochin

(C. Drug Co.)—Optochin is the trade marked name given to ethyl-hydrocupreine, a synthetic derivative of cupreine, $C_{19}H_{22}O_2N_2$, an alkaloid occurring together with quinine in the bark of *Remijia pedunculata*. It is manufactured by Vereinigte Chininfabriken, Zimmer and Co., Frankfort a. M., Germany (Merck & Co., New York), and is covered by U. S. Patent No. 1,062,203. According to the announcement published in the March 7, 1917, issue of the *Journal of the American Medical Association*, it has been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of that organization for admission to "New and Nonofficial Remedies," and will probably soon appear in the appendix to that book.

Optochin (base) is described as a white or faintly yellowish, amorphous, odorless powder, having a bitter taste. It is nearly insoluble in water; easily soluble in alcohol, ether and chloroform; easily soluble in dilute acids, and very slightly soluble in petroleum ether. It is stated to possess the antimalarial and anesthetic action of quinine, but with a greater liability to produce toxic symptoms, such as tympanitis, deafness, amblyopia or amaurosis than when quinine is employed. Clinical investigation indicates that the drug may be of value in the treatment of lobar pneumonia when the proper dosage is determined. The internal use of the drug is in the experimental stage, and according to the *Journal*, "it is too soon to give a definite opinion as to the actual value of the drug in curing pneumonia." For adult males, 1.5 Gm. by mouth in twenty-four hours, divided into at least three doses, may be considered safe, but even in this dosage slight toxic effects have been seen. Reports indicate that the drug is of decided value in the treatment of pneumococcal infection of the eye (ulcus corneae serpens), and for ophthalmic use.

a freshly prepared 1 to 2 per cent ointment or solution in a bland fatty oil is recommended.

The hydrochloride of optochin or ethyl-hydrocupreine hydrochloride is also prepared by the same manufacturer, its action and uses being the same as those of optochin. It occurs as a white, or faintly yellowish-white, crystalline, odorless powder having a bitter taste. It is soluble in two parts of warm water forming a neutral or faintly alkaline solution; soluble in five parts of alcohol; very soluble in chloroform; almost insoluble in ether or petroleum ether. For application to the eye and instillation into the conjunctival sac a freshly prepared 1 to 2 per cent solution is used.

Some More Prescription Charges

(W. W. J.)—"Enclosed find two prescriptions. Please express an opinion whether too much or too little was charged for them or not?"

The prescriptions are as follows:

No. 1

Veronal	30 grains
Phenacetin	30 grains
Codeine sulphate.....	3 grains
Mix and divide into six capsules. Charge, \$1.	

No. 2

Salol	1 dram
Guaiacol carbonate.....	1 dram
Bismuth salicylate.....	1 dram
Sodium carbonate.....	1 dram
Mix and make into 12 powders. Charge \$1.50.	

Figuring on the basis of present quotations for materials employed the following approximations are obtained:

No. 1

Veronal (oz. \$4.20).....	\$0.30
Phenacetin (oz. \$2.40).....	.15
Codeine sulphate (oz. \$14).....	.10
Capsules05
Box, label, etc.....	.05
Services at \$2 per hour.....	.50
Estimated cost of doing bus. (25%).....	.15

\$1.30

Profit, say 25%.....

.30

Charge to customer.....

\$1.60

No. 2

Salol (oz. .16).....	\$0.02
Guaiacol carbonate (oz. \$6.50).....	.89
Bismuth salicylate (lb. \$5.20).....	.17
Sodium bicarbonate (lb. .05).....	.01
Powder papers, box, etc.....	.06
Service at \$2 per hour.....	.50
Estimated cost of doing business.....	.30

\$1.95

Profit, say 25%.....

.50

Charge to customer.....

\$2.45

As stated above, these estimations are based upon the average high cost of materials and of doing business at

the present time, the actual cost of materials, without freight, cartage, expense of doing business or profit added being approximately 65 cents for prescription No. 1, and \$1.15 for No. 2. As we figure cost of material, labor, etc., not less than \$1.50 should be charged for No. 1, and \$2.25 for No. 2. Some druggists would doubtless make a combination charge if both prescriptions were for one customer, but even on such an arrangement we are of the opinion that "W. W. J." would be contributing his services gratis.

Fertilizer for Flower Garden

(Clerk)—As an artificial manure for roses, dried blood, as a source of nitrogen, is said to give the best results when used in the proportion of 5 to 8 pounds per 100 square feet. Dried fish is also recommended in the proportion of 7½ pounds for the same area; or cottonseed meal, 10 pounds; or sodium nitrate, 4 or 5 pounds. A writer in the New Jersey Experiment Station Bulletin recently recommended superphosphate as a source of phosphorus in the proportion of 4 pounds to 100 square feet. As a source of potash, potassium sulphate is used at the rate of 12 ounces for the same area. For soil deficient in lime, ground limestone may be applied, using 25 to 28 pounds per 100 square feet. Wood soot scraped from the chimney where wood is used as a fuel is also recommended, the soot being placed in a suitable vessel and covered with boiling water, the mixture being allowed to stand for a few days, when it is sprinkled on the earth around the plants every two or three days. The author of this method says the application tends to make roses bloom.

For enriching the soil of flower gardens the London *Pharmaceutical Journal* last year published these formulas:

(1)

Ammonium sulphate.....	1 part
Ferrous sulphate.....	1 part
Magnesium sulphate.....	1 part
Oxalic acid.....	1 part

(2)

Ammonium sulphate.....	1 part
Ferrous carbonate.....	1 part
Magnesium carbonate.....	1 part

For use, the former is dissolved in water in the proportion of about 60 grains to 2 gallons. The latter may be used dry, compressed into pellets of a few grains each. According to the same authority, it is an improvement to add 12 per cent. of potassium nitrate and 50 per cent. of sodium phosphate to the above two formulas. Variant formulas have been published in previous volumes of the ERA. Consult the indexes.

Alcoholic Medicinal Proprieties

(R. O. G.)—A list of alcoholic medicinal preparations which cannot be legally sold without the payment of the special tax exacted of dealers is issued from time to time by the Internal Revenue Department, copies of which, we believe, can be obtained of the Commissioner of Internal Revenue, Washington, or possibly, of the Collector of your district. The preparations on this list cannot be handled unless you have paid the special tax as a liquor dealer, wholesale or retail (according to the quantity sold at one time). The list contains the names of those proprietary or patent medicines which have been analyzed by chemists of the Department and held by the Commissioner of Internal Revenue to be insufficiently medicinal to render them unsuitable for use as beverages.

The theory laid down by the authorities is that special tax must be paid for the manufacture and sale of alcoholic medicinal compounds which are not so medicated as to be unfit for use as a beverage and for the manufacture of medicinal cordials, flavoring extracts, essences, and soda water syrup which contain alcohol in excess of the quantity necessary to preserve the ingredients, extract the properties, or cut the oils and hold them in solution (Treasury Decision 1251). In some prohibition states the possession of a receipt for payment of this special tax is held to be *prima facie* evidence that the holder thereof is a liquor dealer, even though he may sell liquors only for "mechanical, medicinal or sacramental purposes." Under the revenue laws no distinction is made between druggists and saloon keepers as to the purposes for which the liquors may be sold.

Shampoo Liquid Soap

(W. T. G.)—We cannot give the formula for the proprietary preparation, nor can we improve upon the general types of preparations prepared by use of the various formulas given in the Era Formulary. As a rule, all shampooing preparations should contain a little free alkali and soap or quillaja, and are best when recently prepared. Here are three formulas taken from as many sources:

(1)

Pine tar.....	2½ ounces
Raw linseed oil.....	27 fl. ounces
Caustic potash.....	6 ounces
Alcohol.....	3 fl. ounces
Water.....	30 fl. ounces

Heat the tar and oil to 60° C., dissolve the caustic potash in the water, mix with the alcohol, and add this solution gradually to the oil and tar mixture, stirring constantly. Continue the heating until the oil and tar are thoroughly saponified, then adding water to make up to 80 fluid ounces.

(2)

Soft or green soap.....	1½ ounces
Potassium carbonate.....	2½ ounces
Alcohol.....	4 fl. ounces
Water.....	26 fl. ounces

Dissolve the soap and the potassium carbonate in the water and add the alcohol.

(3)

Borax.....	½ ounce
Ammonium carbonate.....	1 dram
Tincture of cantharides.....	2 drams
Glycerin.....	½ ounce
Water.....	20 ounces
Bay rum.....	10 ounces

Mix.

The question of odor is largely a matter of individual opinion and the manufacturer can usually add any perfume agent he may elect.

Labeling Solidified Alcohol

(T. D.)—According to an official statement published in the bulletin of the New Hampshire State Board of Health a few months ago "alcohol for heating, now quite extensively sold, consists of alcohol—usually denatured and frequently containing a large proportion of wood alcohol, mixed with small quantities of certain ingredients which serve to convert the former to a jelly-like consistence. Although not classifiable as a drug, yet some of these preparations have been so labeled in the past as to bring them within such category. The term 'solidified alcohol', unqualified, is referable only to standard ethyl alcohol which has been solidified by appropriate means. Certainly it is not legally applicable to wood alcohol nor to mixtures of wood alcohol with ethyl alcohol. Furthermore, the law of 1915 provides that wood alcohol, 'either crude or refined, under whatever name or trademark the same may be called or known' shall not be sold unless the container is conspicuously marked 'Poison. Wood Alcohol.' This law also provides that in the case of 'any alcohol which has been denatured by the addition of wood or methyl alcohol, the container of such in all cases shall be conspicuously labeled in red with the words; 'Poison. Denatured Alcohol.'"

The chemist of the New Hampshire Board of Health reports that one retailer was fined for the sale of a preparation of this character not thus marked, but as a result of an investigation of the situation and the sending of warnings to the manufacturers, the brands on sale when the report was prepared very generally complied with the law.

For preparing solidified alcohol, the Era Formulary gives this information: The process of solidifying alcohol depends on the formation of a soap in which the alcohol is enmeshed. Melt 4½ drams of stearin and add ½ dram of sodium carbonate, then add 95 drams of alcohol, heating for an hour in a closed vessel. The alcohol may be colored. The solidified product may be cut into cubes or other shapes.

In one variety of solidified alcohol advertised to contain "no grease or potash," the New Hampshire chemist reported that the analysis showed that it was radically dif-

ferent from the other brands examined, although, like the others, "fundamentally consisting of denatured alcohol. It does not, however, melt on heating, the burning cubes remaining solid to the end and leaving practically no incombustible residue.* * * * *The dry residue consists principally of nitro-cellulose, being a variety of gun-cotton. The latter retains alcohol with extreme tenacity, even at the temperature of boiling water. A criticism of this preparation is that it is necessary to impale the cubes upon a rigid point, in order to prevent their flying about while burning."

Cucumber Cream

(B. F. H.)—Any of the formulas for "cold cream" may be employed, it is said, by substituting cucumber juice for a portion of the water. Cucumber cream is supposed to have a pale green tint, although this color can be imparted by means of oil-soluble chlorophyll. However, here is a formula under the above title from the Era Formulary:

White wax, 1 ounce; spermaceti, 1 ounce; benzoinated lard (quantity sufficient), 1 pound; 6 fair sized cucumbers (those which have not become quite green appear to possess most odor), peeled and cut in slices; borax, sufficient. Melt the wax and spermaceti, add the lard and cool, add the cucumbers, stir well, then add 160 grains of borax and mix intimately; allow to stand twelve hours, melt over a waterbath at slowly increasing heat, and when melted strain through cheesecloth; place upon ice at once; when solidified separate it from the water underneath and incorporate 160 grains more of borax. The borax is said to develop more odor and tends to prevent decomposition of the juice while macerating, besides adding to the healing qualities of the cream. Maceration should not exceed ten hours, nor should more heat than is absolutely necessary be employed during the manufacture.

"Pharmaceutical Formulas" gives this formula:

Curd soap.....	½ ounce
Cucumber ointment.....	1 ounce
Spirit of cucumber.....	2 ounces
Oil of rose geranium.....	½ dram
Distilled water.....	30 ounces

Dissolve the soap in 2 ounces of water by boiling. Put the ointment in a very warm mortar and mix the soap solution thoroughly with it; then add the rest of the hot water slowly, stirring well all the time to produce a uniform cream; dissolve the oil in the spirit and add to the emulsion contained in a bottle, shaking well. Another good plan which seldom fails is; Melt the pomade on a water bath, and dissolve the soap in hot water separately. Put together and shake until nearly cold, then add the rest of the ingredients.

To make cucumber juice, take washed, unpeeled cucumbers, grate and express the juice, which heat, skim, and boil for five minutes; cool and filter. Now add 1 part of rectified spirit to 2 parts of juice, let stand for twelve hours or more, and filter. Spirit of cucumber is made by mixing three volumes of juice with one volume of rectified spirit, allowing the feculence to subside, and distilling three volumes from the clear liquor.

Manufacture of Sugar of Milk

(Ph. G.)—We cannot go into manufacturing details, but you will find in the 1913 Year Book of the A. Ph. A. a very good summary of the modern highly specialized methods employed in Germany and Sweden for the preparation of sugar of milk. As a general outline, the National Standard Dispensatory gives the following: The butter and casein are first removed from the milk, the whey is concentrated, and the liquid permitted to crystallize in large tanks, the crystallization being facilitated by the introduction of thin sticks or cords; the impure crystals are once or twice recrystallized from water. According to the same authority, prior to 1890 nearly all the sugar of milk used in America was produced in Switzerland, but since then large quantities are being made in this country, and at present (1916) the importation of Swiss sugar of milk has almost ceased. The present annual production in the United States is estimated to amount to 1,500,000 pounds. The Pharmacopoeia provides an official standard for sugar of milk and prescribed tests must show the absence of dextrin, cane sugar, glucose and starch. It is

extensively used as a nutrient, especially in the preparation of foods for invalids and infants, and in pharmacy as a vehicle or diluent for the administration of medicines in the form of powders.

RULING ON ARNICA FLOWERS

Examination of recent importations labeled as "Arnica" flowers by department officials has also revealed that in some instances another product having the botanical name of "*Inula britannica* L." has been substituted for the authentic arnica. This substitute is not recognized as official in the United States Pharmacopoeia, and so far as the officials know is not recognized as official in the Pharmacopoeia of any other country. The Department of Agriculture will recommend the exclusion from the United States of shipments offered for importation as "Arnica" flowers which consist wholly or in part of the adulterant "*Inula britannica* L," since "*Arnica montana*," which is the botanical name of the authentic arnica, contains active principles which are not found in the substitute.

The striking differences between the authentic product and the adulterant are, according to the officials in charge of the enforcement of the Food and Drugs Act, that in the adulterant the length of the young achene (undeveloped fruit) is very much shorter, about 1 mm. long, while it is from 5 to 7 mm. in the genuine product. The ligulate (ray) flowers are also considerably smaller in length and width than those of the true arnica flowers. The veins number four in the ligulate (ray) flowers of *Inula*, while ten have been observed in those of arnica and seven to twelve are reported in the literature. The receptacle (the enlarged end of the flowering stalk) is smooth in the *Inula* flowers but hairy in true arnica flowers. There is an abundance of hair-like structures of certain flower parts developed in both species which are the cause of a somewhat similar appearance of the products.

AMENDED RULES OF N. Y. B. P.

Secretary Warren L. Bradt, Albany, announces that the Board of Regents recently adopted certain amendments to rules 17, 20 and 21, which had been recommended by the New York State Board of Pharmacy. Under these rules a candidate who has standings below 75 per cent in not more than three written subjects, may be re-examined in those subjects within six months without payment of an additional fee. A candidate failing in any subject a second time must be re-examined in all subjects, while a candidate who has standing below 75 per cent in more than three written subjects may take an examination within six months without payment of an additional fee. In the licensed druggist examination the candidate who fails in one or more subjects must be reexamined in all subjects and may take a subsequent examination within six months without payment of another fee.

The purpose of the pharmacist examination, as officially stated, "is to determine the ability of the candidate to select and preserve the quality of the drugs handled by him and to test the thoroughness of his knowledge of the business in all its branches." After January 1, 1918, a candidate must attain a standing of at least 75 per cent in each subject. A candidate whose standing is below 75 per cent in not more than three written subjects, may be re-examined in those subjects. If below in more than three subjects he must be re-examined in all subjects except practical pharmacy passed at 75 per cent or above.

AMERICAN MEDICAL ASSOCIATION OFFICERS

Dr. Arthur Dean Bevan of Chicago, professor of surgery of the Rush Medical College, was elected president of the American Medical Association at the annual meeting. The association always elects its president a year ahead and Dr. Bevan will be installed next year. The other officers elected were: First vice president, Dr. Edwin H. Bradford of Boston; second vice president, Dr. John McMillan of the United Public Health Service; third vice president, Dr. Lawrence Litchfield of Pittsburgh; fourth vice president, Major Holman Taylor, U. S. A.; secretary, Dr. Alexander A. Craig of Philadelphia; treasurer, Dr. W. A. Pusey of Chicago, and chairman of the house of delegates, Dr. Hubert Work of Pueblo, Col.

NEWS OF THE ASSOCIATIONS

NEW YORK HARD AT WORK

The thirty-ninth annual meeting of the New York State Pharmaceutical Association was held in Richfield Springs and was one of the best the organization has ever held. It was a meeting that was progressive in every way, and most of the members who attended said that it had done more good to the profession than anything else that has happened in the past year.

President Elmer E. Chilson of Rochester opened the meeting with his address, taking up such topics as legislation, war taxes, U. S. P. and N. F., markets, and price maintenance. The subject of war taxes was one of the most warmly discussed at the meeting. Dr. J. Leon Lascoff, chairman of the committee on U. S. P. and N. F. gave an interesting talk on the propaganda of the year, and went into detail in discussing revisions. The committee on drug markets also made an interesting report.

The report of the State Board of Pharmacy contained a recommendation that the pharmacy law be amended so as to provide that a high school graduation shall be accepted as the equivalent to actual drug store work when an applicant is applying for registration. The discussion on the subject was warm, perhaps the most heated in the convention, and it was finally adopted to the extent that the Committee on Legislation was empowered to press it for passage before the State Assembly, if after sounding the members of the Association it was found that a sufficient majority seemed to favor it. There was, however, considerable antagonistic feeling to such an amendment expressed at the Richfield meeting.

One of the most interesting features of the meeting came from some of the New York City druggists who complained bitterly against the methods employed by Health Board inspectors who inspected their premises. Other complaints were heard from druggists who were inspected when they sought to take out permits or licenses for keeping alcohol. They said that in some cases they had been threatened with arrest if they did not take out the license or even if they had alcohol in the store.

Several interesting papers were read at the convention, many of them of more than passing importance to the members. Dr. J. Leon Lascoff, of New York, read one of those which received the most enthusiastic mention and which won a prize. It was entitled "Sterilization and Ampules" and was an exhaustive as well as a highly interesting discussion. "Educational Requirements for Future Pharmacists," another prize winning paper, read by Dr. Charles Schneider was interesting particularly because of the discussion of prerequisite education earlier in the convention. Dr. Paul Schneider read "Notes on the U. S. P. IX and N. F. IV."

The Association voted a donation of \$50 for the Red Cross fund and selected Catskill Mountain House as the next meeting place.

The election of officers resulted as follows: President, Richard C. Austin of Cairo; first vice-president, Henry B. Smith of Brooklyn; second vice-president, O. O. Bigelow, Richfield Springs; third vice-president, Robert S. Lehman, New York; secretary, Edward S. Dawson, Syracuse; treasurer, Frank Richardson, Cambridge; Executive Committee, Charles N. Lehman, Tottenville; Herbert G. Wright, Syracuse; Pincus Herz, New York; Delegates to the A. Ph. A. Dr. Alfred B. Huested, Dr. William C. Anderson and Dr. Gustavus Michaelis.

SILVER SERVICE TO THE WHELPLEYS

The Elms Hotel, Excelsior Springs, during the week of June 11-16, was the home of the Missouri Pharmaceutical Association (thirty-ninth meeting), Mo. Ph. Travelers' Association (twenty-fifth meeting), Ladies Auxiliary, (third meeting) and Missouri Board of Pharmacy (thirty-eighth year). The N. A. R. D. was represented by Secretary Thomas H. Potts, the N. A. B. Ph. by Secretary H. C. Christensen and the A. Ph. A. by Treasurer H. M.

Whelpley. John T. Kennedy was a delegate from the N. W. D. A., E. A. Sennewald represented the St. Louis A. R. D. and J. W. Giesburg, the Kansas Ph. A. William Mittelbach reported as a delegate from and Dr. Otto F. Claus as a delegate to the A. Ph. A.

The Mo. Ph. A. held a four-day session, with one hundred and thirteen members participating. Conditions affecting pharmacy as a result of the war were discussed. The retail drug trade was urged to advance prices in keeping with the present market. The association dealt summarily with those selling liquor under the guise of a drug store. A tribute was paid to the memory of the late Prof. Lewis C. Diehl, Dr. Wm. C. Alpers, Mr. Martin I. Wilbert, and John F. Llewellyn. The Committee on Legislation was instructed to work for a law which will make every registered pharmacist in the state a member of the Mo. Ph. A. (the South Dakota plan). The following papers were read and discussed:

1. Analysis for the Retail Druggist, C. H. McDonald;
2. Is your name an Asset?, Minnie M. Whitney;
3. The 1892 Mo. Ph. A. Meeting, Dr. H. M. Whelpley;
4. Notes on the National Formulary, Professor Francis Hemm;
5. Pharmacists and the War, Dr. H. M. Whelpley;
6. John Frederick Llewellyn—Observations, Dr. H. M. Whelpley;
7. Pharmacists and Missouri Archaeology, Dr. H. M. Whelpley; and
8. Mail Lists for Retail Druggists, A. N. Doerschuk.

It was decided to invest the James H. Beal Endowment Prize Fund in U. S. Government Liberty Bonds. At the opening of the meeting, the total membership was 545. Minnie M. Whitney, the chairman of the Booster Committee, reported 183 new members. Treasurer William Mittelbach reported a cash balance of \$563.60. President A. M. Howard made a very practical address. The Stevens Bill was re-endorsed. Officers for 1917-18 were elected as follows:

President, Henry D. Llewellyn, Mexico; first vice-president Minnie M. Whitney, Kansas City; second vice-president, A. C. Smith, Carrollton; third vice-president, F. E. Long, St. Joseph; permanent secretary, H. M. Whelpley, St. Louis; treasurer, Wm. Mittelbach, Boonville; assistant secretary, C. H. McDonald, Rocky Comfort; local secretary, R. S. Ford, Excelsior Springs. Council: A. M. Howard (chairman), Excelsior Springs; Dr. Otto F. Claus (vice-chairman), St. Louis; Prof. D. V. Whitney (secretary), Kansas City; O. J. Cloughly, St. Louis; John T. Davis, Hannibal.

H. M. Whelpley completed twenty-five years, as permanent secretary and desired to give up the work. On request of the association, he consented to serve for another year. Dr. and Mrs. H. M. Whelpley were presented with an elegant silver service, this being their silver wedding anniversary.

The 1918 meeting will be held at the Elms Hotel, Excelsior Springs, June 11, 12, 13 and 14.

The Mo. Ph. Travelers' A. registered one hundred and nine members. W. R. Adelsperger was the efficient chairman. Officers for 1917-18: President, C. L. Chittenden, St. Louis; first vice-president, Roy Walker, Kansas City; second vice-president, W. J. Walsh, Jr., St. Louis; third vice-president, J. D. Riley, St. Louis; secretary, W. R. Adelsperger, Kansas City; assistant secretary-treasurer Dan Liddy, Kansas City; sergeant-at-arms, J. J. Murphy, St. Louis.

The Ladies Auxiliary registered nearly one hundred members and had an entertainment program, all of its own. The officers for 1917-18 are: president, Mrs. J. A. Trimble, Butler; first vice-president, Mrs. Charles E. Zinn, Kansas City; second vice-president, Mrs. Geo. Bennett, Kansas City; third vice-president, Mrs. W. R. Adelsperger, Kansas City; recording secretary, Mrs. Roy E. Baer, Kansas City; corresponding secretary, Mrs. J. H. Barnes, Liberty; treasurer, Mrs. C. W. Loomis, Kansas City; auditor, Mrs. Otto F. Claus, St. Louis. Mrs. W. R. Adelsperger was chairman of the Entertainment Committee for the ladies.

NEW HAMPSHIRE MET AT MANCHESTER

The New Hampshire Pharmaceutical Association held a one-day annual session in Joliet Hall, Manchester, on June 26, nearly one hundred druggists being in attendance. The convention was called to order by Samuel S. Lightbody, of Rochester, and speeches were made by Fred Carter, of Boston, representing the wholesale druggists of New England, Henry O'Connell of the Traveling Men's Association, Lewis G. Gilman, of Manchester, and others. N. H. Scott, representative of the N. A. R. D. also spoke on Legislation.

The following officers were elected: President, William McCullis, Bristol; first vice-president, A. E. Wallace, Nashua; second vice-president, George F. Barbour, Concord, secretary, Eugene Sullivan, Concord; treasurer, S. Howard Bell, Derry; auditor, John H. Marshall, Manchester; and executive committee, G. E. Philbrick, Portsmouth; Paul H. Boire, Manchester; and Eugene Sullivan of Concord.

Officers of the Traveling Men's Auxiliary: President, Henry J. O'Connell, Boston, first vice-president, L. E. Bragg, Worcester; second vice-president, F. L. Carter, Boston; and executive committee, John McDougal, Lowell, Mass.; and C. N. Richards, Portland, Me.

After the business sessions, the members were taken about the city in automobiles, visiting many places of interest. The meeting closed with a banquet at which Goodwin E. Philbrick, of Portsmouth, served as toastmaster, and the Traveling Men's Auxiliary furnished a cabaret show. In the evening all drug stores were closed at 8 o'clock to enable the proprietors and clerks to attend the banquet.

ILLINOIS PH. A's NET GAIN

The principal features of the 38th annual meeting of the Illinois Pharmaceutical Association, held at Springfield on June 19 to 22, were the addresses of President Denton, who urged members to affiliate with the A. Ph. A., advocated a fair and just distribution of war taxes so these would not fall entirely on the retail dealer, recommended the endorsement of Butterick Co's plan of closing its advertising columns to the advertisements of mail order houses, and urged the indorsement of the N. A. R. D. schedule of \$2, \$4 and \$8 on proprietaries. Legislation should also be enacted prohibiting the vending of drugs from wagons and street corners. Prof. J. H. Beal presented a very comprehensive address on "Compulsory Health Insurance," as it relates to the pharmacist, and Frank Stockdale, of the Associated Advertising Clubs of the World spoke on the method of estimating advertising costs and profits, and the importance of the turnover in its relation to the profits of a business.

Secretary Day reported the accession of 135 new members during the year, a net gain of 89, the total membership now numbering 1283. Treasurer Garver reported collections of \$2017 during the year, and expenditures of \$1833.39. The report showed a balance on hand of \$2348.43, in addition to the Beal Fund of \$100, and the Permanent Fund of \$600.

The report of the legislative committee dealt with its work during the year. Thos. Potts of the N. A. R. D. made a strong plea for more thorough organization of pharmacists, and the association went on record favoring the recognition of pharmacy in the army and navy, also the formation of a pharmaceutical corps in the army. The Committee on Prize Essays awarded first prize to Claude E. Tilton, of Fairmount, and second prize to Mrs. Mary Hall Zwick, of Oak Park.

Secretary F. C. Dodds brought out very clearly the changes that had recently been made in the pharmacy law. Under the new law, the Board of Pharmacy, as such, ceases to exist and is replaced by the pharmacy examiners, five in number, who are to be selected by the director general of the department of education and registration. The examiners are to hold office indefinitely, and will conduct all examinations under the supervision of Mr. Dodds, who is superintendent of registration. For pharmacy examiners, the association selected the five who had received the highest vote of the registered pharmacists of the State, viz., Julius Reimenschneider, Chicago, Louis J. Pelikan, Chicago, F. W. Metzger, Springfield, W. S.

Denton, Beardstown and F. M. Hewitt, Carbondale. The secretary was instructed to submit these names to the Director General of Education and Registration, and to state that since five examiners are to be appointed, it will be satisfactory to the association if one or more names are selected from this list and others selected from the general membership of the association. As a member of the Advisory Board to the University of Illinois School of Pharmacy to succeed A. G. C. Ackerman, Chicago, the names of Herman C. Schuh, Cairo, O. U. Sisson, Chicago, and J. Robert Phillips, Springfield, were recommended to President James from which to make the appointment.

The following officers were elected, Byron Armstrong, Jacksonville; 1st vice-president, J. Robert Phillips, Springfield; 2nd vice-president, Frank J. Dubsy, Chicago; 3rd vice-president, John C. Wheatcroft, Grayville; treasurer, Chris. Garver, Bloomington; secretary, W. B. Day, Chicago.

Resolutions were adopted endorsing the Stephens bill, re-affiliation with the N. A. R. D. and appropriation, therefore, and thanks to the Sangamon County R. D. A., the Illinois Pharmaceutical Travellers' Association, and the management of the St. Nicholas Hotel. The selection of time and place of next year's convention was left to the Executive Committee, which meets in Chicago in November.

The Illinois Pharmaceutical Travelers' Association, which met on the same dates elected the following officers: President, George Leonard, Oak Park; vice-president, R. A. Whidden, Chicago; secretary-treasurer, Fred. Elsner, Chicago.

HOLD BIG TRI-STATE CONVENTION

Election of officers by the Mississippi, the Tennessee and the Arkansas pharmaceutical associations and the selection of places for the holding of the various state sessions next year concluded a three-day session of the Tri-State Pharmaceutical Association, on June 18 at Memphis.

Although no definite action was taken there is a decided opinion among the members of the three state organizations favoring the permanency of the Tri-State Pharmaceutical Association. Both the Mississippi and Arkansas organizations were ready for the question just before final adjournment but the subject was not brought up at that time, it having been decided to leave the matter to the executive committees of the three bodies.

A banquet at the Hotel Chisca at eight o'clock was the finale of one of the most enjoyable entertainment programmes ever tendered a convention in Memphis. R. R. Ellis of the Hessig-Ellis Drug Co., acted as toastmaster and responses were made by the leading spirits of the three state organizations.

Officers were elected as follows:

Tennessee—Harry Mayer, Memphis, president; John G. Ingles, South Pittsburgh, first vice-president; H. C. Mason, Smithfield, second vice-president; T. Jack Shannon, Sharon, reelected, secretary; Jerome Sands, Nashville, reelected, treasurer.

Mississippi—John Beard, McComb City, president; L. C. Brown, Rosedale, first vice-president; W. J. Cox, Batesville, second vice-president; Miss Flora Scarborough, Laurel, reelected, secretary and treasurer; Gus Kendall, Meridian, W. M. Gillespie, Charleston, and R. E. Ousely, Kosciusko, executive committee.

Arkansas—Dr. Jesse Hodges, Little Rock, president, Dr. W. C. Hogan, Atkins, first vice-president; J. E. Paris, Paragoul, second vice-president; Miss Mary Fein, reelected, secretary and treasurer; Bruce Greeson, Conway, chairman of the state executive committee.

The selection of the next places of meeting for the three respective organizations was as follows. The Mississippi association meets at Gulfport next June, which selection was made several months ago. The pharmacists of Arkansas selected Little Rock as their next convention city. The Tennessee druggists made no selection, leaving the matter to the decision of its executive committee.

Among the interesting addresses were those of George R. James in the interest of the Liberty Loan, and by Hugh Craig, of the N. A. R. D. A number of papers were read. A barbecue was tendered the three state associations at the Tri-State Fair Grounds by the Chattanooga Medicine

(Concluded on page 266)

SCHOOLS AND COLLEGES

TEXAS UNIVERSITY

Diplomas were granted to the following graduates at the commencement exercises of the School of Pharmacy of the University of Texas held in the Scottish Rite Cathedral, Galveston, on May 31; Thomas G. Barnes, Errol G. Davis, Dow Hudson, Chris. A. Olsen, Leslie C. Price, George C. Rochelle, Clarence Thompson, Gerald J. Walther, Luther W. Welch, Payne L. Williamson, and James E. Windle.

VALPARAISO UNIVERSITY

Dr. W. D. Henderson, of Ann Arbor, Mich., delivered an optimistic address on the "Golden Age of To-Morrow" at the commencement exercises of Valparaiso University School of Pharmacy when forty-eight students who had completed the graduate in pharmacy course received the coveted degree of Ph.G. Professors G. D. Timmons and E. H. Wisner presented the diplomas, after which Prof. Timmons awarded six prizes in recognition of high grades and superior excellence by the honor students, three of the prizes carrying a year's membership in the A. Ph. A., and three life membership awarded by the N. D. C. A.

UNIVERSITY OF ILLINOIS

The School of Pharmacy of Northwestern University, an offshoot of the old Chicago College of Pharmacy, originally started as the Illinois College of Pharmacy, has been taken over by the University of Illinois, the consolidation thus effected creating one strong University school under state control and supported by State appropriations, which is assured of a large student body and the support of the Illinois Pharmaceutical Association. In the consolidation, arrangements have been made to transfer the credits of the undergraduate students of the former Northwestern school to the University of Illinois, and all such students have been invited to continue their courses at the latter institution.

Prof. M. A. Miner, senior member of the faculty of the Northwestern University school, becomes professor of pharmacy in the Illinois school, and will have charge of the laboratory work in pharmacy during the first and second years, excepting the work in dispensing, which will be in charge of Prof. Snow, who will also continue to give lectures and recitations of both years, and also have charge of the third year's work in the Ph. C. course in pharmacy. Beside Prof. Miner and the student body of the Northwestern school, the museum and possibly a part of the library will be transferred to the Illinois school.

Prof. W. B. Day, who was recently re-elected and has already begun his eleventh year as secretary of the Illinois Pharmaceutical Association, received the honorary degree of Master in Pharmacy at the recent commencement of the Philadelphia College of Pharmacy.

The Woman's Organization of the C. R. D. A. recently presented the University of Illinois with the sum of \$115 to be used in establishing a loan fund for worthy women students in the School of Pharmacy. The fund is to be loaned upon the recommendation of the dean of the school, preferably to a woman student from Illinois.

WASHINGTON STATE COLLEGE

Commencement exercises were held at the Washington State College, Pullman, on June 14, fourteen students receiving the degree of Ph.G., and one the degree of B.S.

The pharmaceutical garden recently added to the equipment of the department of pharmacy, has received many accessions of new plants during the present year and now is considered one of the best in the West. A movement is planned to furnish standard assayed preparations to the Army and Navy, the work being done by the students.

WASHINGTON UNIVERSITY

Prof. John D. Spaeth of Princeton University delivered the commencement address to the graduates of Washington University at Seattle on June 13, at which time eleven

graduates received the degree of Ph. C., two of the number being young women. Two of the graduates who had successfully completed the four year course, were awarded the degree of B.S. (in Pharmacy), one being a young woman. Forest J. Goodrich was awarded the degree of M.S. (in pharmacy), and Raymond J. Moffatt, a graduate of the two year course was granted a certificate in pharmacy. Prof. Henry Suzzallo, president of the University presented the diplomas.

UNIVERSITY OF MINNESOTA

The College of Pharmacy of the University of Minnesota has been in existence twenty-five years, the commencement held on June 14 being the twenty-fourth of the college. Thirty-one students graduated from the course leading to the degree of Ph.G. The total registration during the year reached 105 or 42 first year students, 2 special first year students, 48 second year students, 10 third year students, 1 fourth year student, and 2 sixth year students. The registration of the previous year was also 105, while another coincidence is that the graduates this year exactly equal the number of last year or 31.

The following first-year men enlisted during April and May: Royce C. Martin and Francis A. Tuttle in the U. S. Marine Corps; Henry Hawlish in the U. S. Coast Artillery; Fred J. Sackett in the U. S. Navy Hospital Corps; Harvey M. Kinch, Ames P. Mattson and Arthur Thompson in agricultural service. The following seniors have enlisted: Benjamin Berkovitz and Peter Vadheim in the Medical Corps of the Army; Karl E. Blesser and Romayne Taylor in the U. S. Marine Corps.

UNIVERSITY OF IOWA

In conjunction with the commencement of all the colleges of the University, the College of Pharmacy held its graduating exercises on June 13, the address being given by Dr. Frederic Clemson Howe, Commissioner of Immigration, New York City. Twenty-seven students who had completed the course received diplomas. Four of the graduates expect to return in September and continue their work for the Ph.C. degree. The prize winners were E. J. Meister, who was awarded the nomination to membership in the A.Ph.A., offered by Dean Teeters to the senior attaining the highest rank in knowledge of organic drugs; E. L. Hazeldine, who was awarded a similar prize offered by Gus Scherling of Sioux City to the student obtaining the highest rank in organic chemistry; R. H. Boerner, who was given a set of Britton & Brown's Illustrated Flora offered by Senator J. M. Lindley, '89, for excellence in vegetable microscopy, and J. R. Doden, who received the prize offered by Prof. R. A. Kuever to the junior student attaining the highest rank in practical pharmacy.

MISSISSIPPI UNIVERSITY

At the recent meeting of the Mississippi Pharmaceutical Association in Memphis, the alumni of the department of pharmacy of the University of Mississippi met and elected the following officers; President, T. E. Avent, Oxford; vice-president, L. P. Hall, Tunica; treasurer, H. E. Duggins, Tutwiler; secretary, E. G. Cortright, Yazoo City.

OREGON AGRICULTURAL COLLEGE

Eight students received diplomas at the recent commencement exercises of the School of Pharmacy of Oregon Agricultural College, recently organized as an independent department by the board of regents of that institution. Previous to 1915, the course in pharmacy was offered in conjunction with the department of chemistry.

Adolph Zieffle, dean of the School of Pharmacy, is teaching courses in pharmacy in the College of Pharmacy, University of Michigan, during the present summer session. Prof. Zieffle is an alumnus of the Michigan institution, receiving his B.S. degree in pharmacy in 1907.

WOMEN IN PHARMACY

A Special Sales Promotion Law

By EMMA GARY WALLACE

PLANS which are successful in one locality can nearly always be used to good purpose in another, provided they are changed or adapted to meet individual conditions.

From time to time we read of Dollar Day plans and similar promotion schemes, but the details are seldom given so that we can make very much use of the idea.

A Dollar Day has been an annual event in Auburn, N. Y. for several years. That it has been successful is proved by its repetition. The efforts of leading up to this Day have not been excessive; good fellowship has been promoted among the retail merchants of different classes; and the merchants have become better and more intimately acquainted with the territory from which part of their trade is drawn.

Auburn is a city of between 36,000 and 38,000 people. It is located in the central part of Cayuga County which is sixty miles long and averages from sixteen to twenty miles wide. The territory is just dotted with villages, small towns, and hamlets which are contributory to Auburn, Syracuse, Geneva and other nearby places of comparatively large size.

The retail business men of Auburn have long seen the advantage of encouraging the people in this surrounding country to come into Auburn to trade rather than to go to other places or to shop by mail. Most of the people have conveyances of their own and many of them, automobiles. In addition to this, the country is intersected with an excellent trolley system, making it possible for most of the people to reach the city in good season in the morning if they wish to do so.

The First Step

The first step taken in promoting the Dollar Bargain Day Plan was to line up the merchants of all classes who were willing to offer special values for one dollar upon the date of July 14th. It was impressed upon these merchants that a mere perfunctory compliance would amount to little—and that real and special values for one dollar must be put forward in order to induce people to consider it worth their while to travel some distance to secure them.

The stores also put forward a fare refunding plan, provided a certain number of dollars were spent in the individual establishment. This schedule was carefully worked out so that the basis would be the same for all stores. Attention was called to the Dollar Day celebration through the newspapers. Auburn has two city dailies and there are several county weeklies. These were all used to good purpose.

The Next Step

The next step was to line up the merchants who had or were willing to procure automobiles for the day. Those registering with the Retail Merchants' Association were given a number according to the order of registration. Banners were printed in red on white which announced that July 14th was Auburn's Great Dollar Day Sale. Every auto carried two of these tied from the headlights back to the body of the car. Each car also bore its parade number in large letters in the rear. This left the sides of the body of the tonneau free for individual advertising, and each store made the best of this space in its own way.

Most of the cars were decorated with flags and bunting as well. The secretary of the local Automobile Association acted as Pace Setter and the procession started at eight o'clock in the morning for its county tour.

It carried with it a band and a trouble man, the latter functionary being a precautionary measure in case of tire or engine trouble. The Geneva County Ice Cream Company also sent a small Ford truck with three generous-sized containers of ice cream, the plan being to distribute ice cream cones free at every stop to attract the crowd.

Before the procession left the city it attracted a good deal of attention by taking in the main streets, and as there were fifty cars in line, the showing was very good.

Ready for a Start

The route had all been carefully mapped out and about twenty towns were made. A stop was made in the heart of each place, a short band concert given, free ice cream cones distributed, and each car used its own initiative in the distribution of printed sale literature and souvenirs.

The party made Seneca Falls for dinner, reaching Auburn at about seven o'clock in the evening, having covered one hundred and thirty miles and having reached a large part of the county population which numbers about 67,000.

This run was made on Wednesday, July 11th, preceding the Saturday sale, and the Thursday and Friday papers gave marked publicity to the plan and special values to be had on this famous Dollar Day.

The result was as during previous years that a very large crowd of people came to the city intent on buying and with the money to pay for their purchases. The Sales Promotion plan had been a success; it had not cost very much, and there were other advantages than those at first apparent.

Beating a Path

Once people have gone to a town or store and been cordially received, they are inclined to repeat the experiment until a path is beaten and they just naturally do their shopping in that section. In addition to this, the people are brought in, shown the special values in lines in which they are interested and in other lines as well, so that while they may not want any drug store articles on Dollar Day, they remember just where they saw an interesting display of hot water bags, sponges, plasters, perfumes, soaps, etc., etc. and as most of these people throughout the country have telephones a marked increase in telephone orders is manifest each year after the Dollar Day celebration.

Then the merchants themselves enjoy this annual "Get-Together" and outing and are able to co-ordinate their efforts to boom trade at less expense and with more far-reaching results than any one of them could possibly do alone. A group of merchants even in a large city could use the same plan, attracting trade to their section and advertising a day of special values by an easily gotten up pageant which would pass through the streets contributory to their territory.

The idea of following the plan up from year to year is also a good one, for it teaches the people the genuineness of the sale and the special buying opportunities offered. It tends to boom business at a time when it is rather dull and the advertising is cumulative from season to season.

If you have never done anything in this way in your locality, you will find it well worth your time to work out something of this kind.

WOMAN AND WAR-TIME ECONOMIES

The Federal Government, State Departments of Agriculture, State Universities, Home Defense Committees, churches, organizations and individual companies are all doing their "bit" to encourage reasonable economy and the conservation of food supplies. In some cities even the gas companies are putting out folders telling how to can and pickle and dry, and some of the Lodges of men are doing the same thing.

The drug store, and especially the drug store with a woman in it, should not be behind the times. Sterilization, sanitation, and conservation of health and efficiency and First Aid to good management have been her slogan for a long time. This is where she gets her innings.

Why not have demonstrations in the drug store to show just exactly how to sterilize and *why* the process effects sterilization, how to pasteurize baby's milk or food and when and how to use fine spices, pickling ingredients, olive oil, and other things which go to help preserve good things for our own use, sick room supplies, or for the babies who are so important in the community?

The woman pharmacist has a rare opportunity here. She will be heard as a man will not be, her profession enables her to speak with the voice of authority, her position in the community insures a hearing. While other people are telling how to do this, that, and the other, why should not the woman pharmacist demonstrate the proper use of many of the supplies which she sells? It should not be beneath her dignity to publish some good pickling recipes and to quote prices of first class stock which she has on hand for the purpose.

The Government is emphasizing the patriotic duty of good health. She should also stress the same thought, showing the need of prevention rather than of cure. This should not be theoretical. Neither should the whole matter end with the reading of this brief suggestive article. Make a definite plan for yourself how you can reach your public—whether it be through the newspaper, through window demonstrations, window displays, printed folders included in packages, personal approach before local clubs, or what.

Here is your chance to do your "bit" and to do it well. This particular opportunity may never and probably never will, come again. What are you going to do about it?

A CINCINNATI WOMAN PHARMACIST

That pharmacy opens up a field of activity for women in which they can obtain a full measure of recognition for their ability, is the belief of Miss Clare Marie Otis,

who recently graduated from the Cincinnati College of Pharmacy and of which her father, Dr. John C. Otis, of Cincinnati, is president. Miss Otis was educated at the Ursuline Academy, and having a marked talent for music, continued her studies at the Cincinnati College of Music. In 1915 she entered the Cincinnati College of Pharmacy, receiving her degree in June last.

It is her ambition to open and operate a store of her own, hence her determination to secure a systematic training to this end. Her thoroughness and efficiency, as shown by her past accomplishments, argue well for her future success.

While she has been intensely interested in all of the subjects which go to make a course in pharmacy, materia medica has been her favorite study, and she looks forward eagerly to prescription work as the part of her profession that she will especially enjoy.



MISS CLARE OTIS

AROUND THE CIRCUIT

The city of San Francisco recently unveiled an exceptionally fine statue of George Washington, the ceremony being attended by fitting exercises. Mrs. D. R. Rees, wife of one of the editorial men of the *Stirring Rod* impersonated Columbia and sang the "Star Spangled Banner" in a manner to thrill the vast company that listened to her.

Mrs. Paul Burton of Baltimore, has volunteered her services as a chemist for hospital aid work. Before her marriage, she was official chemist for the Massachusetts Board of Health. She received her training at the Massachusetts Institute of Technology and has specialized particularly in chemical analysis of mineral waters.

The Ladies' Auxiliary of the Texas Pharmaceutical Association have established a scholarship to be given to some Texas girl student in the study of pharmacy. Mrs. W. H. Wentland of Manor, Texas, is to receive applications for the scholarship and is prepared to give the terms of award. The officers of the Auxiliary are: President, Mrs. W. H. Wentland; vice-presidents, Mrs. George Reynolds and Mrs. O. C. Lang; secretary, Mrs. W. H. Cousins; treasurer, Mrs. W. D. Adams.

Miss Clare M. Otis, the only woman graduate this year of the Cincinnati College of Pharmacy was recently awarded the degree of Bachelor of Pharmacy. She is the daughter of Dr. John C. Otis, president of the college.

Mrs. W. L. Brittain, of the W. O. N. A. R. D., is in receipt of frequent congratulations upon the marked musical ability of her son, Master Thomas. He was the recent soloist at the large annual meeting of the Cincinnati Federation of Teachers' and Mothers' Clubs.

Mrs. Helen P. Schertz addressed the Louisiana Pharmaceutical Association meeting held in May in New Orleans on the subject of "The Status of the Pharmacists in the United States Navy." Mrs. Schertz is of the opinion that pharmacists must demand proper recognition and reward in order to receive it.

At the annual Alumni Association meeting of the Cincinnati College of Pharmacy, Mrs. Charles P. Harding was re-elected president, and Miss Inez Bates was elected secretary of the association to succeed Miss Lonora F. B. Danattelle. The association is very active and takes a great interest in the student body.

Miss Grace Haun and Miss Sadie Haun are among the incorporators of the Haun Drug Company, Akron, Ohio.

The sincere sympathy of the drug world is extended to Mr. Harry B. Mason, editor of the *Bulletin of Pharmacy*, who recently lost his wife by death.

The annual meeting of the California Pharmaceutical Association was attended by many women pharmacists, who took pleasant occasion to have a banquet together by themselves. Among the prominent women present were Mrs. Dockery and Mrs. Costello, of Fabiola Hospital, San Francisco; Mrs. Nelson, of the Merritt Hospital; Miss Pauline Nast, of the University Hospital; Mrs. Tane of the College of Physicians and Surgeons, San Francisco; Mrs. Philip and Mrs. Sawyers of Oakland. The problems of the profession were thoroughly discussed especially as affecting women.

Wouldn't it be fine to have a roll of honor of all the children of the drug folk under eighteen, who are owners of Liberty Bonds! Many of these little people have sacrificed more than we realize to help their country. Elizabeth, the three year old daughter of Mr. Joseph Schneider, of Cincinnati, upon her own initiative expressed her wish to own one. The wish was granted, her own small savings going into the fund.

Miss Catherine Gardner and Miss Ethel Knight, of Boston, were recently granted full registration by the Massachusetts Board of Pharmacy.

The women druggists of Baltimore, Md., attended the alumni banquet of the University of Maryland in a body, Miss Amelia Sonnenberg making the arrangements for the ladies in attendance.

The following officers have been elected by the Women's Auxiliary of the California Pharmaceutical Association: vice-presidents, Mrs. Richard Rees, Mrs. E. Oberdeener, Mrs. Leroy Wagner, Mrs. J. G. Munson, Mrs. E. V. Harris, and Mrs. H. N. Charters; recording secretary, Mrs. K. B. Bowerman; corresponding secretary, Mrs. Ina DeVoin; treasurer, Miss A. M. Wmslow.

Louisville Chapter, No. 11, W. O. N. A. R. D., held its June meeting in the Club Room of the Y. W. C. A. and on June 28th enjoyed a picnic dinner at Fontaine Ferry Park.

Cincinnati Chapter, No. 5, held its June 28th meeting in the country at Phillips, the occasion being in the nature of a summer outing.

Mrs. A. O. Zwick, a former officer and member of the Cincinnati Chapter, was recently awarded \$15,000 damages for injuries received in an automobile accident.

What Sort of Advertising?

Is Your Own or National Campaign Better?

FOR a retailer to hitch his advertising wagon to the star of a national advertiser is nothing new. The drug trade, of all others, is accustomed to handle nationally advertised goods, and yet there is no trade in which the pushing of goods under the retailer's own label is more prevalent. Druggists have not satisfied themselves which is the more profitable method of merchandising, and successful druggists express the most directly opposite opinions.

On the principal street of a New England city are two progressive druggists. Both have modern stores, finely located and well stocked, and both do a good business. These two men have built their success upon these opposite selling ideas.

"It most certainly pays better to push nationally advertised goods," replied the first to our question. "When I advertise or display in my windows nationally advertised goods I don't have to tell what they are and why they are good. My advertising and my displays mean something to everyone, for I merely call their attention to something they already know. That is why my advertising pulls so well, and the same thing is true in the store."

As we were talking a customer asked the clerk at the stationery department for two packs of playing cards.

"Congress or Bicycle?" asked the salesman politely.

"Congress, please," she replied promptly.

She knew the price and paid it, and walked out. By my watch, the whole transaction, including wrapping the package and making change, had taken less than two minutes. The proprietor looked at me and smiled.

"That's how it works—just like a clock."

"Perhaps," I suggested, "she is a regular customer who knows just what your stationery department handles and what she wants from your selection."

"If she had the clerk would have known she wanted the better grade without asking—we make a point of knowing our regular customers' wants—but we'll find out. Jim," he asked the clerk, "who was that woman who just bought the playing cards?"

"I think she is Mrs. Robert Smith, wife of the haberdasher. I wasn't sure enough to call her by name, sir."

"Oh, she's one of your regular customers then. Does she buy many playing cards?" I asked.

"No, she's not a regular customer. She comes in once in a while, but I never sold her a pack of cards before."

"Convinced?" asked the proprietor with a chuckle.

As Another Sees It

Right in the next block another successful druggist sang a very different song.

"I can't see the business sense," he said, "of pushing what can be bought in every drug store in town to say nothing of the department stores and the stationery, cigar, notion, and what-not stores. You see that display," he pointed to a counter piled high with neat jars of cold cream bearing his own label, "well, we sell about thirty gross of that each year, and I make just twice the profit I would on any trade marked brand."

"That's a splendid record, but how much do you spend in advertising it?"

"I can't tell you. We use four inches double column in both local papers, with twice that space Fridays and Saturdays, and the cold cream is run in every now and then in with the regular copy. Once in a while we give the whole space to the cold cream, and about three or four times a year we have a window display. 'Chapped hands in winter and sunburn in summer' with a good deal of talk about 'skin cleaning' all the year round is the keynote of the advertising. It's a good cream, and it repeats. We do put a good deal of work on it, and maybe if we put the same effort on Milkweed or Daggett's we would sell more than thirty gross, but I am right from the middle of Missouri when it comes to selling sixty gross, and that's what our sales would have to be to get the same profit."

So it goes—some druggists adhere to the nationally advertised goods; others push bulk goods and goods under their own label. The tendency, among the leading stores, is undoubtedly towards the well known, trade marked lines. The manager of the chain store in the same city summed up this situation neatly.

The Chain Stores Idea

"Of course, we push anything that sells," he said with a grin, "but for advertising purposes the nationally advertised article is best. All our advertising is of the bargain sale type. We don't believe in slashing prices, but we shade them, and a penny off Listerine or Glyco-Thymolin is better than a fifty per cent. cut in our own mouth wash for bringing customers into the store. Of course, we always hand out whatever a customer asks for, and I am strongly in favor of handling only national brands. Most of our other store managers feel as I do. Its cuts down the size of the stock, it saves time in selling, and it is most profitable in the long run. The national brands are certainly the foundation of our business. We set a lot of store upon the number of sales a day, and a manager whose store does five hundred dollars gross business in five hundred sales is not in so strong a position as one who does the same business with a thousand sales. It costs a lot more, of course, to do business that way, but it is better business. Lots of druggists can't see it that way, but it is so."

All druggists are familiar with the exclusive agency way of tying up with national advertising, largely through candies and cameras, but only a few have fastened all their sales efforts to the national advertising campaigns. Merchants in other lines have done so. H. G. Larimer, of Chariton, Iowa, is probably the best known of those who devote all their energies to selling only trade marked goods. His business is said to be the largest of any retailer in his line in a town of five thousand in the whole of the country. Mr. Larimer's selling methods have been adopted for the use of building business for a whole town by Hugh McVey, the sales expert of Des Moines, and this plan, through the co-operation of the Agricultural Publishers' Association, has been tried out in the small town of Hampton, Iowa.

Having made this selling method the basis of his marked success, Mr. Larimer was well able to explain its advantages to the Hampton merchants. These advantages, he pointed out, are: 1. advertised goods are already half sold; 2. time is saved in both buying and selling advertised goods; 3. capital and space are saved because smaller stocks can be carried; 4. fewer clerks can handle the stock and wait on more customers when only trade marked lines are carried; 5. advertised goods are a great trade magnet (50% of Mr. Larimer's sales are to farmers who live outside of his own county).

After Mr. Larimer had shown the reasons for his success in handling only nationally advertised goods, Mr. McVey worked out with the Hampton merchants a selling scheme by which all the merchants of a town can "cash in" on Mr. Larimer's idea. The retailers did not club together in any general fund, nor did they in any way make any co-operative effort. Each one merely agreed to devote his regular advertising space in the local papers to pushing advertised goods he already had in stock and to display only nationally advertised goods in his windows. Each one was perfectly free to push such well known lines as his experience and judgment dictated would be most profitable to him. "Buy It in Hampton—Thrice Guaranteed Goods" was adopted as a slogan, and all merchants used this in their advertising. There was a good deal of window washing and not a little re-arrangement of stock and fixtures among the retailers of Hampton prior to the opening of the campaign, but all this upon individual initiative.

The result was a sensational success. As soon as the people of Hampton and the farmers of the surrounding

country grasped the idea that "Thrice Guaranteed Goods" means goods guaranteed by the maker, by the local paper that carries the advertising and by the local merchant who sells the goods, with the maker's trade mark and brand for the protection of the buyer, then business began to boom in Hampton. In the face of the bad weather last spring and despite the generally unsatisfactory business conditions, the average retailer during the first three months the plan was in effect increased his business 15%. The three months just passed have seen this increase maintained, and the best stores in Hampton now report a 20% increase over the sales of the corresponding month of last year.

This "Hampton Plan" is at once the simplest and most widely successful of any community business boosting plans. The biggest and best thing about it, however, is that it can be used either by the merchants of a town or city collectively, or by the individual retailer. It is a strong argument on the *pro* side of the nationally advertised trade mark *versus* the dealer's own private brand or loose bulk goods selling debate, but it also furnishes a simple method of testing out the two systems without additional advertising or selling expense. There is not a druggist who has not quantities of nationally advertised goods in stock. Most druggists are doing some advertising and all have show windows. All that is necessary is to pick out some of the most popular brands in the most popular lines and advertise them and display them. Adopt the "Thrice Guaranteed Goods" motto for the store and tell the public what it means. Such a test, fairly conducted, will enable each druggist to answer for himself the question whether or not it pays to push advertised goods.

PROMOTED TO ASSISTANT SURGEONS

The Naval authorities at Washington have recently made public through the *Official Bulletin* of July 6 the following list of chief pharmacists included in the list of warrant officers promoted to commissioned ranks and grades (assistant surgeons) in the line and staff of the Navy; Edward R. Noyes, 1014 South Carolina Avenue, Washington, D. C.; Oscar G. Ruge, 1507 Decatur St., N. W., Washington, D. C.; Richard F. S. Puck, 54 Third St., San Francisco, Cal.; Charles E. Alexander, 1344 Oak St., N. W., Washington, D. C., Howard E. Sausser, Annapolis, Md.; Laurence O. Schetky, 4901 Cedar Avenue, Philadelphia, Pa.; Paul J. Waldner, Olney, Pa.; Maury D. Baker, 1218 Swissvale Avenue, Wilkesburg, Pa.; Carl B. Furnell, Wilton, Me.; Stephen Wiersbicki, 1436 Meridian Place, Washington, D. C.

BRISTOL-MYERS CO. ADD TO PLANT

The Bristol-Myers Company, manufacturing chemists of Brooklyn, N. Y., whose product Sal Hepatica is well known to druggists, are adding two new buildings to their plant in Hillside, N. J., where they have in operation a manufacturing building, warehouse, power plant and machine shop. The new buildings consist of one three-story structure, 60 by 80 feet, which will be used for light manufacturing and research work in connection with the chemical department, and will be equipped with a dining room and shower baths; and a one-story structure, 80 by 100 feet, which will be used for increasing the production of the present plant and manufacturing additional products which the company contemplate bringing out. The new buildings, which will be ready for occupancy on October 1, will give the company more than 22,000 additional square feet of space.

NEW ORLEANS DRUG CLUB ELECTS OFFICERS

The New Orleans Drug Club, organized in the early part of 1916, and composed of well known druggists, jobbers and men affiliated with the drug trade of New Orleans, recently elected the following officers: President, Dr. George A. Thomas; vice-president, I. De Lanzac; recording secretary, E. H. Vaughn; financial secretary, P. A. Troxler; treasurer, Jacob Ipser; sergeant at arms, N. Voelker; chairman house committee, J. J. Kemmler; chairman entertainment committee, J. P. Ipser; press representative, Mark H. Briedy. The Club parlors are located at 121 Decatur street.

FOUGERA COMPANY WINS LABEL SUIT

In a sweeping decision which favored E. Fougera & Company in every point the Appellate Division of the State of New York recently destroyed the force of the now famous Goldwater ordinance in the suit over labels brought by Fougera and other companies against the city. The defendants or city, are permanently enjoined from enforcing or taking steps to enforce the provisions of the ordinance which provided that the formulas for patent medicines should in all cases be printed clearly on the labels of the bottles or containers.

The case has been a long one and has occupied the State court since January 7, 1916. It was only last month that the argument on it was finally ended and it was given to the hands of the Appellate Division for decision. The court held that the formulas were trade secrets and as such were property which the laws of the country, state and city, protect in the fullest measure. It was apparent, held the court, that enforcement of the Goldwater ordinance would deprive the plaintiffs of their property and their most important stock in trade.

Aside from the questions of property it was maintained by the attorneys for the companies involved that the provisions of the city ordinance conflicted with the law of the state, known as the Public Health law. That law deals more broadly with the question of patent medicines and has been acceptable to the manufacturers at all times.

Still further objections were offered by the plaintiffs. But these the court did not even consider, basing its judgment upon the two first and most important objections and giving the decision in full in favor of the Fougera company. The decision was handed down July 13, more than a year after the test case was started.

Charles M. Russell and Montaigu M. Sterling, secretary of E. Fougera & Company conducted the cases for that concern. Other plaintiffs were Charles N. Crittenton Company and H. Planten & Sons. Cadwalader, Wickersham & Taft represented the last named concern. Corporation Counsel Lamar Hardy and special assistant Terence Farley represented the Board of Health.

IOWA PH. A. SELECTS FORT DODGE FOR 1918

One of the big features of the entertainment program of the Iowa Pharmaceutical Association meeting, held at Dubuque, was the field day at Union Park, many athletic events being contested for which prizes were awarded to the winners. The annual address of President J. A. Todd, of Sioux City dealt with the relation of the Association to the National Defense Council of Iowa and recommended that druggists should do all in their power to assist the government in the present crisis. He also recommended that druggists should become candidates for the office of state senators and representatives as far as possible in order to obtain suitable legislation to safeguard business interests. He indorsed the plan adopted last year of holding a mid-winter session, and recommended that for such meetings lectures by one or two efficiency men on professional or merchandizing topics of interest to the drug trade should be secured. During the meeting a number of addresses were made by prominent druggists.

The following druggists were elected: President, Thomas Watts, Holstein; first vice-president, John G. Becker, Dubuque; second vice-president, George Judish, Ames; third vice-president, T. W. Dowds, Guthrie Center; secretary, Al Falkenhainer, Algona; treasurer, J. M. Lindley, Winfield.

Besides a smoker and Dutch lunch on Monday evening, the visitors were given an all-day's outing on the Mississippi river, with a moonlight excursion in the evening. Fort Dodge was selected as the place for holding the 1918 convention.

The Dallas Co. (Texas) Druggists' Association recently elected officers decided to ask for representation on the Dallas Board of Health and indorsed President Wilson's attitude on the war and selective conscription. The new officers are: President, T. J. Coulson; vice-president, L. O. Donnell; secretary and treasurer, George K. Butcher. Directors: A. J. Urbish, Russell V. Rogers, Charles Smith, Arthur Skillern and Sam. Nassek.

BUYING AND SELLING

DRUG MERCHANDISE

Gifts in the Drug Store

THE drug store, especially the small town store, has always been a natural place for gifts, souvenirs, art goods, pictures and such things. Even in the cities, some of the drug stores have made good money from the side line, although in competition with art stores of every description. But in the smaller towns, where the art store is not known, or where it has not a strong hold, the drug store, with its firm reputation, can do a big thing for itself if it puts in gifts.

In Provincetown, Mass., the Goff pharmacy sells as many souvenirs of Cape Cod as do the regular art stores, and one of the prominent points in Provincetown is the prevalence of art stores. They are thicker than artists and art-actors in smocks. They abound, being on practically every corner of the one-way streets of the picturesque village. While this article is not meant as a travelogue to the town on the point of the Cape, it is meant to show that even there, where visitors are more common than natives and where almost the entire business of the town is planned for the visitors, a drug store has been able to make a good thing out of gifts, even with strong and active competition from art stores.

A stock of gifts has many advantages. Not the least is the gain in prestige given through an artistic and beautiful display of that stock. Of course, one can display gifts and souvenirs as badly as he can display his ordinary lines if he tries hard enough. . . but it is more difficult. The very nature of the goods lends itself to desirable display.

What the War Has Done

Putting aside, for a moment, the talk of display, consider what an impetus and opening the war has given the novelty gifts. In the first place, the United States' parlors or living rooms are becoming almost unanimous resting places for pictures or statuettes of "Papa" Joffre. The new busts of President Wilson are selling fast. Why isn't the druggist in on the profit to be made from those things? Principally, of course, because in such a side line, he is naturally a follower not a leader. It is the gift shop man who discovers the new paying novelty—but the druggist, at least, can trail along. In war time, the band wagon that conveys war souvenirs is big enough for everyone.

The statuettes of General Joffre and President Wilson which have become so important to gift shop men, are bought for \$4.00 a dozen, delivered in the back room of the shop. The druggist can get the same price. They are displayed in the store attractively—and they sell for 75c apiece, which is certainly profit enough to cover the carrying of them. And a large American flag in the window, flanked and surrounded by little Joffres and Wilsons makes an attractive window, whatever the business of the store may be.

The chain stores are selling flags. They are not only selling them spasmodically but they are selling them in droves. Flag selling is becoming one of the most important side lines of the Riker-Hegeman stores. Why? Simply because the war has made people want them. Flags may not be gifts or novelties. . . although in some communities they seem to fit in the latter class. . . but they always have been on sale in the gift shops and almost never in drug stores.

The Johnson Company of Newark, a good drug store sells a model cannon very fast. It is a simple model and can be bought for 50 cents. It sells for \$1.00. It is merely one of the French 75s and because it has made such a reputation for itself as an effective gun "over there" it has been popularized here. The model is good, and it makes

a remarkably good paper weight. It is sold for that purpose, and the Johnson store is making quite a boost on it.

Selling War Pictures

In America, who is there who does not want a war picture of some sort? The *New York Times Midweek Pictorial*, a magazine of pictures, has become more popular in New York than the newspaper itself. It has suddenly blossomed forth as a regular magazine and whereas it started as an experiment, sold by newsboys through the circulation department, it now appears on all newsstands and is handled by a news distribution company. That is because it has become a big seller. Why? Pictures.

War pictures are being turned out by all the big picture publishing companies with great rapidity. Most of them find their way to gift shop counters where they do not rest for long. The people are buying pictures. The copy of the picture shown so recently in the Royal Academy in London, "Mother! Mother!", is selling better than any other. A few of them would not take up the room in the drug store when kept as stock, but under the present circumstances, they couldn't be kept that way. They would sell too fast.

The war is slowly being brought home to America. It is not the best plan in the world to capitalize patriotism by selling it unadulterated. If you offered to sell a Red Cross Sundae special and said you offered it because you were a patriot you'd either become extremely poor or be run out of town. But if you sold the sundae special as a Red Cross special as one of the passing attractions of the fountain you'd get along. If you sell war gifts because you want everyone in town to know you are a hero and very, very patriotic, keep a time table handy to look up the trains leaving the city.

Gifts in the Summer Time

In Oyster Bay, L. I., Willard C. Bradley, who has one of the best drug stores on the entire Island, has a stock of gifts each summer. Regardless of wartime, Mr. Bradley has made money on his sideline. In the last analysis, Oyster Bay is not a summer resort in the accepted sense of the word, but there is enough transient business to pay the druggist when he couples it with the regular trade. Perhaps the presence in town of the Colonel has something to do with the success of the trade, for postals and gift pictures or calendars showing the great T. R. in various poses in his home or on his estate are popular. Whatever the cause, Mr. Bradley sells his souvenirs. What he is doing in war time is not known, but is certain that he is doing something. He's built that way.

Each summer finds the residents of a town in a gift buying mood. The heat makes it, probably. They want to buy novelties and little things that add beauty and coolness to the home. They go to the gift shop, or, if there is none in the town, they don't buy. If the druggist carried a stock of gifts, they'd go to him. First, because they know him; second, cool drinks are inducements; and third, because he knows them.

Drugs are needed by the United States Army. They are needed badly. Here's another chance for the retailer to get in on the band wagon and conserve as much as possible. This economy thing is as valuable in the store as in the kitchen.

Are you one of the druggists who is putting up the price of goods because the other fellow is, or because you know you can get what you ask? The Food Board says that \$50,000 a month is not too much to credit to overcharge in the cost of living for the city of New York.

HOT WEATHER AND ICE CREAM

Summer-time to the drug store should mean more than merely hot weather with not quite so much to do. While there may be an excuse for doing very little business when the streets and sidewalks discourage customers from coming to the store, it is possible, still to do some business. Admitting the circumstances are all against a great volume of business, why permit defeat to grip you without a struggle?

There are many things that can be done. Very special specialties are not only possible but desirable. The druggist who has a small automobile for delivery purposes and who does not use that machine in conjunction with the telephone in hot weather is losing business. He has the machine and it is not always busy. It would not be a difficult task to arrange the schedule so that it would not be in much use between, say, the hours of one and four in the afternoon. And those are the hot hours.

Having arranged for the use of the delivery wagon, consider the telephone and what it means. These days, there is hardly a housewife or houseowner who doesn't have a telephone. Suppose, by using cards, the newspapers and every other possible means of advertising, the druggist with the delivery machine let it be known that during the hot days he was making sherbet or an ice and that his delivery wagon would gladly stop at the house with a pint, a quart, or a gallon.

Knowing what the druggist would do, and when, the woman in the hot stuffy house, tired and thirsty and hot, could merely go to the telephone, call up the enterprising druggist and ask for the cream. And he could deliver it, in a hurry.

Delivering ice cream is not a new stunt, of course. But this hot weather plan would call for a highly specialized treatment. It would have to be advertised widely, and the trade would have to be somewhat educated up to it so that the delivery wagon would not be idle. It would be a simple process and it would make money and the natural money making side line of the drug store is ice cream. If it is too hot to go out, the housewife will be only too glad to have her cooling refreshment brought to her.

THE TRAVELLING LIBRARY

One Sunday in July it rained all day. In a residential section of Brooklyn some twenty men, who had arranged a tennis tournament had nothing to do. The courts were drowning and the men looked out of their windows disconsolately. Nothing to do and the Sunday papers had all been read in bed before breakfast. Three of those men got together, put on raincoats and walked around to "Ryer's."

"Ryer's" is the local name for the store run by "Doc" Ryer and its popularity is made plain by the way it is considered by the residents of the neighborhood. The men went around to get books, for "Doc" Ryer is a wise gentleman, and he keeps a circulating or traveling library. The men got the books, paying two cents a day for their use, but stopped at various counters on the way out. One man bought a pound of candy, another remembered he wanted some shaving soap, the third couldn't think of anything he wanted but he bought a drink for the other three just for good measure. He had brought candy home on Saturday—so he told Mr. Ryer to send a quart of ice cream around to the house at tea time. All together Ryer made about \$1.50 on the three men's purchases.

The point is that those three men would never have gone to Ryer's that Sunday morning unless they knew he had what they wanted to make interesting a hapless, disagreeable day. He had that library and that was what they wanted to use. Merely getting them into the store was responsible for the rest of the sales, because not one of them expected to buy a single thing when he started for the store.

There is money in any drug store venture which attracts trade. It may not be a library, it may be a phonograph concert, or an exhibit of some sort. But if it gets people into the store it makes them buy something else. "Doc" Ryer believed in that principle and it helped.

STRAIGHT TALK

War is revolutionizing trade in England and France, and there is good reason to believe that in some ways, it will do so here. One of the most probable changes will be in cash sales. They are going to grow, just as they have in England. It is true that in London, where the question of trade has been important, persons who once let bills run a long time, even long under the somewhat lax system of England collection, pay cash for their goods. They will also do so here. Such a way of doing business is going to demand of the druggist courtesy, good stock, ability and willingness. Because he is very likely to lose the "charge" way of advertising that in a way helps him now.

Dirt in a drug store is as bad as eggs that are ready to blossom forth into chickens in egg drinks. If you look out for one you should look out for the other.

Another thing to worry a druggist is the lack of light. If your shop isn't light, make it so. It is the man who is not afraid to let rays of light get into every corner of the store who makes it a success.

Soldiers like drinks. If you happen to have a soda fountain near a camp or armory, you have a great chance to boom one end of business. You can also use the fountain to tip the soldiers off to your other stock, because they'll use some of it in spite of their own Quartermaster's Department. Sweet chocolate, by the way, is becoming a necessity, and in war time, or even in camp time, soldiers will "eat up" cigarettes. It wouldn't be a bad idea to carry a good stock of those things if you happen to be within visiting distance of a camp, these days.

The parcels post can be used during the summer months. When your regular customers go away for the summer they often want to keep their regular druggists as far as possible. By using parcels post the druggist can send whatever they want whenever they want it.

Politeness is more necessary in a druggist than in most other retailers. His business demands tact and it demands that he be universally polite to everyone with whom he comes in contact. He can turn away trade quicker by being impolite to them than he can get new customers to take their places. What course do you pursue?

The druggist with the public spirit is the druggist who is going to be liked these days. It is easy to become public spirited but the trouble is not to overdo it. You can jump on various band wagons and do various things for the city or town or village but if you get a name for being public spirited because it helps you privately. . . its "good night." Temperance is a virtue.

THE VIRTUES OF PROHIBITION

There is no doubt that prohibition has virtues. It depends upon your angle of looking at it, what the total amount of those virtues will be. The druggist and the soda fountain man can see more good in the movement than the hired orator of the anti-whiskey society can find on pay day. Why? Because, without considering the ethical end of it, a new selling point has been opened up for him that should be a wonder.

One of the remarkable things about prohibition is that its value to the drug store doesn't lie wholly in the fact that soda will naturally take the place of whiskey. With a prohibition country, candy will be eaten, and there will be a distinct advance in the number of smokers. In these three lines the principal advantages to the drug store will be found. And the wise druggist who puts in a big stock of candy and prepares to serve a large number of sodas over his fountain is the man who will be tickled to death that the law has been passed.

In one way, prohibition is going to mean an educational campaign. Because it certainly is true that those who have been in the habit of buying intoxicating liquor in the saloons are going to find it a bit difficult and perhaps a bit dumbfounding to go to the soda stores for drinks there. But the druggists have a better chance of getting them. . . his store has so much to offer.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

NEW HANBURY MEDALLIST

Prof. Henry G. Greenish, dean of the School of Pharmacy of the British Pharmaceutical Society, London, has been awarded the Hanbury Gold Medal for 1917. Prof. Greenish is well known to English speaking pharmacists throughout the world, not only for his work as one of the two editors appointed by the General Medical Council to supervise the preparation of the last edition of the British Pharmacopoeia, but as a pharmacist, teacher and microscopist, his work on the "Microscopical Examination of Foods and Drugs" being extensively employed by students and officials engaged in the enforcement of food and drug laws. He comes of a pharmaceutical family, his father, the late Thomas Greenish, being for years prominently active in the profession.



PROF. H. G. GREENISH

Prof. Greenish is a graduate of the School of Pharmacy maintained by the British Pharmaceutical Society in London, where for some years he has served as professor of "pharmaceutics." The award of the Hanbury Medal to Prof. Greenish is considered by his colleagues as a tribute to his ability as a scholar and teacher, and of the high regard in which he is held by the workers in English pharmacy. The names of but two Americans appear on the roll of Hanbury Medallists, the first being the late Prof. John M. Maisch of Philadelphia, upon whom it was conferred in 1893, when he was on his deathbed, and Dr. Frederick B. Power, director of the School of Pharmacy of Wisconsin University from 1883 to 1892, and director of the Wellcome Research Laboratories, Snow Hill, London, from 1896 to 1913. Since Dr. Power's return to this country he has been connected with the Bureau of Plant Industry, Washington, as a specialist in phytochemistry.

FROM ERRAND BOY TO DIRECTOR

From errand boy at 12, to director at 28 is the remarkable record of Frank J. McDonough, who was recently elected a director of McKesson & Robbins, Inc., of New York. He was born in Brooklyn in 1889, and after graduating from the Parochial School, entered the employ of McKesson & Robbins in 1901. He did his work well, being advanced through various positions to the import department, under the late J. C. Wagstaff, whom he succeeded in 1909, later becoming assistant to John McKesson, Jr., in the handling of foreign purchases. In 1910 he was sent to Europe, and on his return was given charge of this department of the business. He also handled all the insurance business of the house, and in 1916 the purchasing of all drugs and chemicals was put in his charge.



F. J. McDONOUGH

—ELMER WILLIAMS, pharmacist of Hailey, Idaho, has left for San Francisco where he is to take a commission in the Hospital Reserve Corps.

CHARLES W. SNOW RETIRES AS RETAILER

Charles W. Snow, 82, who for years has had the distinction of being the oldest merchant in Syracuse, N. Y., on May 2 retired from the retail drug business, having sold his controlling interest in the Powers Drug Company to Philip K. Heldmann, for more than a year manager of the company. Mr. Snow retains his interest in the wholesale firm of Gibson-Snow Company, Inc., formed in February, 1916, by the merger of C. W. Snow & Co., of Syracuse; Walker & Gibson, of Albany, and the Gibson Drug Company of Rochester.



CHARLES W. SNOW

As a clerk and proprietor, Mr. Snow has been in the retail drug business in Syracuse for sixty-seven years. His first position was as a clerk in the drug store of W. B. Tobey, who took him into partnership when he was nineteen years of age. In 1866 the firm dissolved and Mr. Snow at once opened a store in East Genesee street. There he laid the foundation for a business which grew to large proportions. In 1888 he erected the present ten-story Snow building, which was the first fireproof "sky scraper" in Syracuse. The first and second floors of this building were devoted to the retail and wholesale drug departments, respectively. Besides being vice president of the Gibson-Snow Company Mr. Snow is chairman of the board of directors of the First National Bank of Syracuse, yet he still takes pride in the fact that he was a successful retail druggist.

BREVITIES

—HERBERT CARL RAUBENHEIMER, son of Otto Raubenhimer, of Brooklyn, N. Y., a recent graduate of the department of pharmacy of the College of Jersey City, is a prize winner of unusual ability. Last year he won the college junior prize and this year he won the college gold medal for having the highest average in all subjects, and also, the gold medal for the highest mark in theoretical pharmacy, as also the special prize of a U. S. P. IX for the best work in practical pharmacy and dispensing. He also captained the basketball team in 1915 and was manager last year, besides finding time to be athletic editor of the college bulletin. He is a graduate of the Brooklyn Boys' High School, and next year expects to go to Pennsylvania to continue his studies.

—JOHN A. LAZARDES, a young Egyptian who recently passed the Georgia Board of Pharmacy, besides a working knowledge of English, speaks four other languages. He came to this country about three years ago, where he secured a position in a French drug store in New York. He attended night school and got a primary education. He then matriculated in a Southern pharmaceutical school, and while studying pharmacy, attended the night school of the Georgia School of Technology, receiving a high school diploma just a short time ago. He has taken out his first papers and in two years expects to become a naturalized American citizen. He expects to continue his studies in pharmacy and intends to make his home in the United States.

—EDWARD M. LEE, registered pharmacist employed at R. F. Linton's drug store, Providence, R. I. has received

an appointment as sergeant, in the Medical Enlisted Reserve Corps of the Army. He took the examination in May and has just received notice of his appointment. Mr. Lee is a graduate of the Rhode Island College of Pharmacy and has been practicing pharmacy for a number of years. He is a resident of the Fairmount district and is a member of the Rhode Island Pharmaceutical Society and the Kappa Psi.

—JOSEPH A. LARIVIERE, who recently graduated from the Massachusetts College of Pharmacy, also passed the State Board of Pharmacy with high standing, and so pleased was his father with the showing the son had made, that he presented the latter with a large up-to-date pharmacy completely equipped for business and located in Worcester St., Southbridge, Mass. The young man is 24 years of age and a graduate of the Southbridge High School. Last summer he served as prescriptionist with Brewer & Co., Worcester.

—ELPHREDE J. LEDOUX, a druggist of Manchester, N. H., was four times rejected for the medical department of the Regular Army. Then he underwent a surgical operation to overcome a physical defect that each time had prevented him from being accepted. On applying for the fifth time he passed examinations, and was accepted. Mr. Ledoux is a well-known graduate of Massachusetts College of Pharmacy.

—G. LEON GAINLEY, after completing a course in the Massachusetts College of Pharmacy, recently passed the Massachusetts Board of Pharmacy and has enlisted in the medical department of the army with the rank of lieutenant. He is a graduate of the Adams, Mass., High School, and the fact that he has received a commission has won for him the congratulations of his many friends.

—E. G. BACH, junior member of the Hannon-Bach Pharmacy, Inc., Stevens Point, Wis., has been accepted as a pharmacist in base hospital unit No. 13 and left his home for enlistment at Chicago. Mr. Bach went to Stevens Point from Green Bay four years ago and became identified with the Hannon-Bach firm. He is anxious to do his "bit" for Uncle Sam.

—PROF. HAROLD G. MOULTON of the University of Chicago, urges conscription of perfume factories to manufacture munitions. He argues that if industrial conscription were to obtain, the government could close the plants making luxuries and put the workers thus available into plants required for war purposes.

—GEORGE C. GUERARD, proprietor of the Guyton Pharmacy, Guyton, Ga., was married recently to Mrs. Valentine Toccanier of New Orleans. The marriage came as the culmination of a romance begun about a year ago when Mrs. Toccanier became the governess for Mr. Guerard's two little boys in his Guyton home.

—JARED T. SPARKS, who conducted a very successful drug business in West Centralville, a suburb of Lowell, Mass. for almost a quarter of a century, has retired and will take a well-earned vacation. He will be succeeded by the Charles L. Cordeau Co., composed of Charles L. Cordeau and Frank X. Monette.

—T. BERTRAND FUNK, druggist of Waverly, Mass., gave two thirds of all his profits to the Red Cross for two weeks in June. Not satisfied with that he has offered his store as a bandage making headquarters and is prepared to give first aid kits to every new recruit from Waverly.

—A. A. ACKERMAN, a Lynn, Mass., druggist, who gave over part of his fine pharmacy for a Regular Army recruiting station, won such lasting gratitude of the fighting men that a delegation of soldiers recently accompanied him all the way to Boston on a recent trip to that city.

—LEONARD G. CURRIER, who has conducted the drug store at 309 Grand Ave., New Haven, Conn., for the past twelve years, has sold the same to Israel Liebman, and will continue his drug business at East Haven and also the superintendence of the East Haven postal station.

—W. P. MASSOCO, formerly with Archer T. Davis, druggist of Decatur, Ill., and more recently with Flint, Eaton & Co., of the same city, has enlisted in the medical reserve corps with the grade of sergeant.

—A. P. STEBBINS, druggist at Barron, Wis., is exhibiting an interesting collection of photographs showing the government arsenal at Washington fifty-two years ago, when his father, Major F. N. Stebbins, had charge of the Government paymaster's department.

—JOHN H. DORSEY, prominent Dorchester, Mass., druggist, presided at the dedication of Ronan Park, Dorchester, and at the banquet arranged by the Meetinghouse Hill Business Men's Association of which he is the energetic president, which followed.

—CAPTAIN HERBERT E. NEWPORT, of New Hartford, Conn., a druggist who organized the local home guard at the outbreak of the war has left the city to work in Hartford. Capt. Newport was one of the most influential citizens of his town.

—ADRIAN T. WRIGHT, of Michigan City, Ind., recently escaped drowning in Lake Michigan by the narrowest of margins. He was in a motor boat party when the boat was overturned and was saved by another party that sped to the rescue.

—RICHARD W. DWAN, a druggist of Lonsdale, R. I., who had been missing since Memorial Day was found on June 3, in Brockton, Mass. He left home to go for a walk and nothing was heard of him until his brother found him in the Shoe City.

—BERFORD L. LAMBERT, 24 years old, of Staunton, Va., son and heir of the founder of the Lambert Pharmacal Company, of St. Louis, enlisted on June 20, as a private in the marine corps and was sent to Port Royal, S. C., for training.

—K. W. LUNBERG, pharmacist of Iranistan, Conn., has left for a vacation from which he does not expect to soon return. After he has spent two weeks in the country he will act as an ambulance driver in France.

—MISS MAY PATERSON, who enjoys the reputation of being one of the most efficient salesladies in Atlanta, Ga., has returned to Jacobs' main pharmacy on Marietta Street, that city, where she was formerly employed.

—A. SPIEGEL, of the A. Spiegel Drug Co., Milwaukee, Wis., recently purchased a summer home on the west shore of Pine Lake, Nashotah, in the heart of the Wisconsin summering section.

—HEROLD NEWHALL, son of D. H. Newhall of the *National Druggist*, has enlisted in the Medical Department of the Regular Army. He reported for duty at Fort Slocum on July 3.

—CLARENCE STOCKS, associated with the Barnesville Drug Co., Barnesville, Ga. for several years, has enlisted in Company G. Second Infantry, for the present stationed at Macon, Ga.

—CHARLES REYNOLDS, Harold Djedel and Joseph Winkel, drug clerks of St. Paul, walked to Green Bay, Wis., to enlist but were refused when they arrived as being under the necessary age.

—EARL G. WHEELER, a druggist of North McGregor, Iowa, has enlisted in the Hospital Corps of his state. He was one of the first men of the town to answer the call to the colors.

—CHESTER A. HULL, who has a successful business in Belmont, Mass., has put a sign in his window announcing that his store will be indefinitely closed as he has "enlisted for the war."

—A. B. LAMBERT, president of the Lambert Pharmacal Company of St. Louis has been commissioned lieutenant in the signal corps and has joined an aviation squadron.

—MARTIN C. BLOCKHART, who formerly owned a drug store in Good Hope, Kansas, has sold the store and will become a consultant chemist for the State Board of Health.

—MISS MARY PARKER, for seven years employed at the Rexall store, Coloma, Wis., has resigned and will accept a position as pharmacist in one of the army hospitals at the front.

DEATHS IN THE DRUG TRADE

PROF. F. M. GOODMAN

Prof. F. M. Goodman, dean and professor of botany and materia medica in the School of Pharmacy, University of Illinois, from 1891 to 1913, died at his home at West McHenry, Ill., on June 27, aged 68. He had been in poor health for several years although not confined to his bed.



PROF. GOODMAN

The end came suddenly, as he had been working in his garden on the day of his death. Prof. Goodman was a member of the old guard of pharmacists in Chicago, being a member of the second graduating class of the old Chicago College of Pharmacy, that of 1871, and the only student to receive the diploma that year. For many years he was in the drug business in Chicago, his last venture being the erection of a building at 75th and South Chicago Ave., where he conducted a successful pharmacy until 1895, when he sold out, so that he could devote his whole time to his college work and engaging in his botanical pursuits. These he continued until 1913, when failing health caused him to retire from active work. Prof. Goodman was widely known among the alumni of the school. In addition to his ability as a teacher, his talent as an artist was recognized, and many pharmacists will recall portraits in oil of the late Prof. C. S. N. Hallberg, Prof. E. S. Bastin, and Messrs. Ebert and Whitfield which he painted and presented to the Chicago College of Pharmacy, and which for a number of years graced the walls of the office and library of the college. He is survived by his widow and three children, all of whom are grown.

E. AVERY BREWER

E. Avery Brewer, wholesale and retail druggist of Worcester, Mass., died July 18 at his summer home, Duxbury, Mass., from heart disease. Ten days previously physicians had ordered him to give up active business for the summer. He was born in 1853 in Wilbraham, Mass., and graduated from Wilbraham Academy with a chemist's degree. When 21 he entered the employ of Bush & Co., of Worcester. Nine years afterward he bought an interest in the company. In 1893 he became the sole owner. Eventually he had stores in Boston, Providence and New York, and owned large interests in Carter, Carter & Meigs of Boston; Brewer & Co., Inc., and the Continental Food Products Co., manufacturers of soda fountains. Mr. Brewer's first wife was Elsie Dickinson, and after her death he married her sister, Mary A. Dickinson. He is survived by a son, Howard, and a daughter, Mary Brewer; also a sister and a brother.

RECENT DEATHS

—THOMAS J. STEVENS, a graduate of the University of Maine, '78, and for many years in the retail drug business at Auburn and Portland, Me., and later as a drug salesman covering New England territory, was killed by a bolt of lightning in the garden of his home in Vienna, Va., on June 20. In 1914 he was struck by an automobile in Lewiston, Me., with the result that he was obliged to relinquish his connections with the drug business, buying a small farm in Virginia in order to be near his son who held a government position in Washington. He was born in Auburn in 1855. His widow and two sons survive.

—FREDERICK SPREEN, 36, pharmacist at the Frisco Hospital, St. Louis, died on June 21, six hours after severing an artery in his left leg in a fall through a glass door while romping with a fellow employe after a bath. The men were chasing each other around the room when Spreen slipped on the wet floor, his leg going through the glass door, the broken glass causing several bad cuts on his body beside the one on his left leg.

—JAY H. BOHER, 70, one of the oldest druggists of Harrisburg, Pa. is dead. He opened a drug store in the Commonwealth Hotel building in that city more than forty years ago and although the property changed hands many times, he continued to conduct the business until his death. He was a member of St. Stephen's Episcopal church and of the Improved Order of Heptasophs. He is survived by his wife and two daughters.

—JOHN R. SEIDENBACHER, a druggist of 2600 North Halsted St., Chicago, who had been missing from his home for two days, was found dead in Lincoln Park, of that city, on June 29. A week previous to his disappearance he sustained an injury to his head in a fall, and the police believe that the injury caused his disappearance. It is thought that his death was due to natural causes. He was 40 years of age and lived with his family at 1706 Balmoral Ave., Chicago.

—W. A. BISHOP, well known Savannah, Ga., druggist since 1885, died in that city on July 3 of angina pectoris, after an illness of but one hour. He was born in Norwalk, Ohio, in 1863. He was a 32nd degree Scottish Rite Mason, a past master of Zerubbabel lodge, and a member and deacon of the First Presbyterian church. His widow, one son, Dr. E. L. Bishop, of Savannah, and a grandson, E. L. Bishop, Jr. survive.

—JOHN N. PRASS, 52, formerly one of the leading druggists of Dayton, Ohio, died on July 14 after suffering several hemorrhages. He was a graduate of the Philadelphia College of Pharmacy, class of 1890. His pharmacy on West Third Street, Dayton, was destroyed by the flood in 1913. He was a member of the Knights of Pythias and of the Foresters. He is survived by his widow and one daughter.

—DR. HARRY V. LUCAS, 66, who had been connected with the drug stores of Louisville, Ky., from the time he was 14 years of age, is dead of organic heart trouble, after an illness of three months. He was a graduate of the Medical Department of the University of Louisville, and had operated drug stores at various points in the city. His widow, two daughters and two sons survive.

—DR. GEORGE M. CHAMBERLIN, a druggist and one of the oldest graduates of Rush Medical College died on June 30 in Chicago. He was born in Saratoga, N. Y., in 1842, attended the University of Michigan, graduating from Rush Medical College in 1866. He located in Chicago in 1868 and had conducted a drug store there up to the time of his death.

—FRED SCHUMACHER, who conducted a drug store at Highland Park, Ill., for twenty-seven years, is dead after an illness of two months, due to a complication of diseases. He was born in Allegan county, Mich., and was 55 years of age. He is survived by his widow and three sons, one of whom, Howard, was associated with his father in the drug business.

—ALPHONSE SCHIESELE, druggist of West Bend, Wis., died recently at Columbia Hospital following an attack of pneumonia. He was born in Germany and was 64 years of age. He went to Milwaukee 26 years ago, where he spent a short time and then located at West Bend. He was in charge of the Wolfram drug store.

—RUSSELL C. BUTTS, head clerk for several years with the Hatheway Drug Co., Houlton, Me., died recently, following an operation for appendicitis. He was 27 years of age and was to have been married within a few days. He was a member of the Masonic order and of the Maine Pharmaceutical Association.

—FRED DRAKE, prominent druggist and former county clerk, was found dead in the kitchen of his home at Marion, Ind., on June 19. The coroner who investigated the death declared it was a case of suicide.

—FREDERICK J. HENNING, who conducted a drug store at 697 Third Ave., Detroit, Mich., for twenty-seven years, and which he sold last August, died on July 3 after a brief illness. He was 52 years of age, and a graduate of the University of Michigan. He was a Mason. His widow, a son, and a daughter survive.

—JOHN CROCKER FOOTE, capitalist and veteran druggist of Belvidere, Ill., died at his home in that city on July 12. He was a descendant of the Mayflower pilgrims and a prominent member of the Sons of the American Revolution, of which organization he was a national officer.

—WILLIAM HENRY WOODCOCK, for 12 years a druggist of Seattle, Wash. died June 27 after a lingering illness. He was born in London, England, 69 years ago, and spent several years in New York City. He is survived by his widow, three sons and three daughters.

—ORYLLE BALDWIN, a registered pharmacist until recently in the employ of F. S. Ward, of Salem, died in Portland, Ore., of tuberculosis from which he had suffered for several months. He was 22 years of age and the only son of his widowed mother.

—A. G. WAGNER, who had been in the drug business at Falls City, Neb., for thirty years, died on June 24. He had been in failing health for about a year. He was 60 years of age and is survived by his widow and one son.

—HERMAN G. POEHLMAN, JR., druggist and life long resident of Manchester, N. H., died recently, aged 43. He was a member of the Turnverein and Haragari Club. He is survived by his widow and one daughter.

—JOHN T. BERRY, president of the J. W. Crowds Drug Co., wholesale druggists of Dallas, Texas is dead. He had been a resident of Dallas for thirty-five years. He is survived by his widow and one daughter.

—DR. EDMUND DOUGLASS, 71, druggist at Hillsboro, Ill., died on June 18. He had been in poor health for some months. He is survived by his widow, a son and a daughter.

—WILLIAM J. BALCH, who had conducted drug stores in Toledo, Ohio, for 45 years is dead. He is survived by his widow, one son, and seven daughters.

—C. O. PACKARD, a pioneer druggist of Mendocino, Cal., died at his home in that city on June 15.

—STEPHEN STIGER, pioneer druggist of Toledo, Ohio, died recently, aged 84. He retired in 1909.

LOWELL DRUG STORE UNLOCKED FOR HOURS

Azro M. Dows, of A. W. Dows & Co., Lowell, Mass., writes the ERA that his city boasts of being the only "town" in Massachusetts where the druggists have sense enough to take one day off in the year closing all their stores without exception. But this doesn't complete the story. For eight hours on the day of the druggists' recent outing, the main entrance to Dows' drug store in that city remained unlocked from 10.30 in the morning to 6.30 o'clock in the evening, while an investigation showed that not a thing was missing from the store. The three cash registers had about \$75 in them. The fact that the store was unlocked was discovered by Mr. Harmon, Mr. Dow's son-in-law, who happened to pass the store in the evening. Mr. Dows did not learn of the incident until after midnight when he and his bookkeeper returned from Nantasket. Whether Mr. Dows' good fortune is to be attributed to "luck" or that "the world is growing more honest," is still a debatable question.

HARRY B. MASON'S WIFE DEAD

Mrs. Carolyn Thayer Mason, wife of Harry B. Mason, editor of the *Bulletin of Pharmacy*, died of pneumonia at her home, in Detroit, recently, after a short illness. Mrs. Mason was the daughter of Walter N. Thayer of Brooklyn, N. Y., former president of the Brooklyn city council and warden of Clinton prison. Two daughters, Adelaide, age five, and Margery, age two, survive.

The Massachusetts Supreme Court in an opinion sent recently to the Senate of that State classed as unconstitutional a proposed law which would prohibit merchants giving trading stamps and similar coupon premiums with merchandise. A bill to prevent such practice had been filed in the Legislature. The decision seems to favor the use of trading stamps.

The Eastern Druggists will have to take off their hats to their Western brothers. Most of the reports that pharmacists have closed up shop to go to war, come from beyond the Ohio.

PROPOSES ANOTHER TRI-STATE MEET

More than two hundred druggists attended the 26th annual meeting of the Alabama Pharmaceutical Association held in Tuscaloosa in June, a splendid address of welcome being delivered by Howard L. Smith, city attorney. W. E. Bingham, also extending a welcome to the visitors. President Vance, in his annual address discussed subjects of interest to the drug trade, and particularly urged co-operation on the part of the trade for pushing forward all lines of business during the critical war period. Resolutions calling on the Government to establish a pharmaceutical corps, and to continue the annual meetings of the state association were also adopted. A committee was also appointed to confer with similar committees from Georgia and Florida regarding the formation of a tri-state association to meet at some other time during the year than June, the time of the annual meeting of the Alabama Ph. A.

Names recommended to the Governor from which to select a successor to Sam A. Williams, of Troy whose term of office expires in October: Sam A. Williams, Lee Wharton, Gadsden, J. D. Humphreys, Huntsville; C. T. Ruff, Montgomery; and T. A. Van Antwerp, Mobile. The following officers were elected: president, C. R. Walker, Ensley; first vice-president, J. F. Spearman, Anniston; second vice-president, Luther Davis of Tuscaloosa; treasurer, S. L. Toomer of Auburn; secretary, W. E. Bingham, of Tuscaloosa. Executive committee, J. D. Humphries of Huntsville, Carl Wharton of Gadsden, J. R. Edwards of Anniston.

Huntsville was selected as the place of next meeting. The Traveling Mens Auxiliary had charge of the entertainment program which included various amusements and a barbecue at Riverview Park.

CHARLESTON PLACE OF NEXT MEETING

The West Virginia Pharmaceutical Association held its 11th annual meeting at Deer Park, Md., and selected Charleston as the place of next meeting. The following officers were elected: President O. O. Older, Charleston; 1st vice-president, Fred Allen, Horton; 2nd vice-president, J. M. Haggerty, Clarksburg; secretary, A. B. Berry, Morgantown; treasurer, G. A. Bergy, Morgantown. The entertainment program included a reception, dancing, and closed with a banquet.

ITALY BUILDS QUININE FACTORY

The Italian Government is building a large factory at Turin for the making of quinine, which has been a State monopoly since 1900. During 1914 Italy imported 46,359 kilos, valued at 2,596,104 lire, of which Germany supplied 34,995 kilos, the Dutch Indies 10,000 kilos, Great Britain 642 kilos Switzerland 626 kilos and France 73 kilos. During 1915 the imports amounted to 35,000 kilos, and for the first eight months (January-August) of 1916 the imports were 64,965 kilos. This much larger consumption is, of course, due to the war, and that accounts for the building of a new factory, the ground having been placed at the disposal of the Government by the Turin Municipality. Hitherto the manufacture of quinine has been entrusted to the Central Military Pharmacy in Turin, but they could only supply a small proportion of the demand.

MEYER BROS. ADD TWO STORES TO CHAIN

Meyer Bros., owners of drug stores in Fort Wayne, Anderson and Kokomo, Ind., recently increased their chain of stores to eight in number by the purchase of two pharmacies in Muncie. The first store now operated by the firm was opened in Fort Wayne sixty-five years ago, the firm being incorporated in 1903. The officers of the company are G. H. Heine, president and treasurer; F. C. Heine, vice-president, and Arthur Beuke, secretary.

NEW YORK B. P. MEMBERS REAPPOINTED

The re-appointment of the following members of the New York State Board of Pharmacy for the term of three years has been announced; John Hurley, Little Falls; J. Leon Lascoff, New York, and Jacob Diner, New York.

Boards

NEW YORK

Secretary Warren L. Bradt, of Albany, reports that 161 candidates passed the licensing examination for pharmacist held by the New York State Board of Pharmacy on May 23 and 24. On the same dates 43 candidates successfully passed the examination to qualify as druggists.

COLORADO

As a result of the quarterly examination held by the Colorado Board of Pharmacy at Denver, June 1, ten applicants who successfully passed the test were awarded registered pharmacist certificates, and eight applicants were awarded assistant pharmacists' certificates, Miss Kathryn Kirby, of Ault, being one of the latter class.

NORTH DAKOTA

Fourteen applicants were successful in passing examinations for registered pharmacists; seven "made the grade" for assistants, and two were admitted by reciprocity as a result of tests held in Fargo on June 19 to 21 by the North Dakota Board of Pharmacy. The examiners were H. L. Haussamen, Grafton, president; W. S. Parker, Lisbon, secretary, and W. P. Porterfield, Fargo. Two members of the board were not in attendance. The next meeting of the board will be held at Fargo on November 20, 1917.

GEORGIA

The Georgia Board of Pharmacy met at Macon just previous to the annual meeting of the Georgia Pharmaceutical Association and examined a class of forty-eight applicants for registration, thirty-two of whom were successful. The applicants came from a large number of Southern States, Cuba and one from Cairo, Egypt. Taking the examination were also two colored men and one colored woman.

MISSOURI

The Missouri Board of Pharmacy had but 23 candidates for registration present at its meeting held at Excelsior Springs in conjunction with the annual meeting of the Mo. Ph. A. One of the number was called to Ft. Riley during the examination. He had enlisted in the Officers' Reserve Corps. Eight applicants were granted certificates as registered pharmacists and five as assistant pharmacists. Gus A. Fischer, of Jefferson City, recently appointed to the board to fill a vacancy, was present for the first time as a member of the board. Another vacancy occurred on July 1, and the Mo. Ph. A. recommended to the Governor the following names from which to make an appointment to fill the vacancy: A. C. Smith, Carrolton; E. G. Cox, Craig; H. C. Tindall, Excelsior Springs; Ed. G. Orear, Maryville; R. G. McKibben, Wellsville. The annual report of Secretary E. G. Cox submitted at the meeting shows 5011 registered and 154 assistant pharmacists in the State on June 1, 1917. The next meeting will be held in St. Louis on Oct. 8.

FLORIDA

Governor Catts, recently named the State Board of Pharmacy, with W. D. Jones, as chairman, and M. W. Hunter, of Fort Myers and Walter White, of Pensacola, to fill the place of members whose term of office had expired. The terms of two members of the board had not expired.

MASSACHUSETTS

The Massachusetts Board of Registration in Pharmacy held night sessions to finish up its work for the past month, as result of the call for pharmacists in war service. Fifty-eight were awarded full registration, and 33 were awarded assistants' certificates. In the final examinations

an innovation took place. Fifty-three were examined in dispensing in the Massachusetts College of Pharmacy laboratory in the morning, and in the afternoon 53 others were examined. Then, the next day, these 106 were examined at the State House in oral and written work. Two girls, Misses Ethel Knight and Catherine Gardner, both of Boston, won full registration.

PENNSYLVANIA

At the examinations held in Pittsburgh and Philadelphia June 5, 6 and 7 by the State Pharmaceutical Examining Board 446 persons applied for registration and certificates. Two hundred and seventy-one applicants took the pharmacist examination, of whom 229 were successful and forty-two failed. At the assistant pharmacist examination 175 candidates appeared, of whom 105 passed and seventy failed. The board has advanced the entrance requirements for admission to the graduate course in a college of pharmacy from one to years' completed high school course, effective for a pharmacy course beginning in 1918. Prospective pharmacy students should notice that the course beginning in the fall of this year is the last under which they may enter on one year's high school education. The next examinations will be held in Williamsport on September 1.

NORTH CAROLINA

At a meeting of the North Carolina Board of Pharmacy held in Raleigh on June 5 and 6, a class of eighty-one candidates, seventy-one white and ten colored, presented themselves for examination for license to practice pharmacy. Of the number thirty-nine were successful. The next examination will be held at Raleigh on November 9. F. W. Hancock, Oxford, N. C., is secretary-treasurer of the board.

MARYLAND

Twenty-six applicants were successful in passing the recent examination and were granted certificates of registration by the Maryland Board of Pharmacy, while twenty-one were successful in passing the examination for assistant pharmacists. The result of the examination was announced by Ephraim Bacon, of Baltimore, secretary of the board.

LOUISIANA

The Louisiana Board of Pharmacy through Secretary Joseph T. Baltar, recently announced the result of the examination of applicants at Tulane University in May. Sixteen of the applicants were successful as registered pharmacists, and five as assistant pharmacists. The next examination will be held in New Orleans on August 18 and 19.

Governor Pleasants recently appointed the following as members of the Louisiana Board of Pharmacy: E. H. Walsdorf, New Orleans, vice himself, term expired; J. T. Baltar, New Orleans, vice himself, term expired; Anthony Di Trapini, New Orleans, vice himself, term expired; George W. McDuff, New Orleans, vice Gustave Seeman, term expired; P. A. Capdau, New Orleans, vice F. J. Simon, term expired; J. G. Wafer, Homer, vice John R. Taylor, term expired; Edgar E. Ewing, Bienville, vice W. E. Allen, term expired; John F. Whitley, Winnfield, vice E. L. McClung, term expired; and John E. Guess, Kentwood, vice L. E. Carruth, term expired.

DISTRICT OF COLUMBIA

Five applicants were successful in passing the examination recently held by the District of Columbia Board of Pharmacy and were granted licenses. The next examination of the board will be held on July 12 and 13.

The Adams County, Ill., Retail Druggists' Association met in annual session at Quincy on June 7 and elected the following officers for the ensuing year: President, Percy Brown (re-elected); vice-president, W. H. Heidbreder; secretary, C. A. E. Koch; treasurer, William Schlinkmann. J. C. Singer, a representative of the N. A. R. D., was present and gave an informal address.

HOLD BIG TRI-STATE CONVENTION

(Concluded from page 253)

Company. The barbecue was followed by a ball game between picked nines of the local retail druggists and travelers.

The Mississippi organization became a member of the National Association of Retail Druggists.

The Tri-State Association adjourned subject to the call of the president. The following officers of the tri-state organization will continue in office: Edw. V. Sheely, of Tennessee, president; Harry Mayer, Tennessee, general secretary; Gus Kendall, Mississippi, W. R. Appleton, Arkansas, D. J. Kuhn, Tennessee, vice-presidents; T. A. Robinson, Tennessee, treasurer; Miss Flora Scarborough, Miss M. Fein and T. J. Shannon, secretaries.

NEBRASKA BUYS LIBERTY BONDS

In his annual address at the 36th annual meeting of the Nebraska Pharmaceutical Association held at North Platte, Pres. J. E. O'Brien, of Omaha recommended the appointment of a committee to draft a new pharmacy law, to be ready for adoption at the next annual meeting of the association, and also that each pharmacist either put up or have made for him by some reputable house, a line of remedies. Treasurer Adams reported the finances in good shape, and Secretary McBride reported a membership of 600 with an accession of more than 50 members during the year.

Prof. Henry Kraemer of the Philadelphia College of Pharmacy gave an illustrated lecture on drug plants, and Dr. George Borrowman, Jr., chemist in the State University, delivered an address on the potash industry of Nebraska, showing the State to be one of the greatest producers of commercial potash in the United States. Chairman Mikkelsen announced that twenty-five papers had been secured, some of which were read and discussed but all are to appear in the annual proceedings.

The following officers were elected: president, Neils Mikkelsen, Kenesaw; vice-presidents, W. R. Wingert, Callaway; J. H. Stone, North Platte; A. N. Brooks, Hastings; William Milder, Omaha; Charles Rutherford, Aurora; treasurer, D. D. Adams, Nehawka; secretary J. C. McBride, University Place.

Names selected for appointment to the board of pharmacy: E. C. Felton, York; Joseph Cording, Litchfield; J. W. Fetter, Maxwell.

Delegates to the A. Ph. A. meeting at Indianapolis; Orel Jones, Oconto; Dr. R. A. Lyman, Lincoln; and H. C. Newlin, Omaha.

Resolutions supporting the president of the United States in international complications were adopted, and the association voted to buy \$500 worth of Liberty Bonds, the druggists featuring a patriotic parade headed by a band in honor of the event, marching to the fair grounds, where a Wild West show and an exhibition of broncho busting was featured. The visiting ladies were entertained by an auto trip to Sioux Lookout, National Cemetery, and other points of interest, with a lunch at the State Experiment Station. A banquet was served, the convention closing with a ball at the Masonic Hall. Lincoln was selected as the place for next year's meeting.

WISCONSIN PH. A. DISCUSSES PUBLICITY

Eight hundred Badger state druggists attended the thirty-seventh annual convention of the Wisconsin Pharmaceutical Association in Milwaukee, June 25 to 29. All the officers, with one exception, were returned to their chairs, and the roster is as follows President, J. J. Possehl, Milwaukee; first vice-president, B. Schwanberg, Wausau; second vice-president, F. W. Mueller, Oshkosh; third vice-president, A. C. Otto, Grand Rapids; secretary, E. G. Raeuber, Milwaukee; treasurer, Henry Rollman, of Chilton.

Officers of the Wisconsin Pharmaceutical Travelers' Association, an auxiliary of the Wisconsin Pharmaceutical Association, were elected on Thursday as follows: President, Ira Davis; first vice-president, Walker Strickland; second vice-president, J. J. Carnahan; third vice-president, Tom Folden; secretary, Dr. M. H. Pritchard; treasurer, E. B. Raeuber.

A plea for representation on the advisory commission of the counsel of national defense on behalf of the pharmacists of the country was made on Wednesday morning by Eugene C. Brokmeyer, counsel for the N. A. R. D.

He deplored the fact that there is no such representation, and declared that unless the drug trade and pharmacists have representation inside the government, they will get no justice at all in comparison with the amount they really need under the stress of present day conditions. He stated that Congress, and the members of the judiciary committees at the present time are being informed on the subject of drugs by the United States public health service and the medical service. He said that "Our salvation depends on our building up an association as strong or stronger than the American Medical Association," and suggested suspension of German patents during the war as a practical way of giving United States manufacturers a chance to supply the demand.

It is planned, at the next session of the Wisconsin state legislature, to propose a bill providing for the payment of \$2 a year toward the state pharmaceutical association, which system will make every registered pharmacist a member of the state association.

Efforts to secure military rank and other suitable recognition for pharmacists in the army and navy, reports on the establishment of a college of pharmacy at the University of Wisconsin, and on the employment in drug stores of boys under sixteen years of age, and the question of shorter hours and partial Sunday closing, were all taken up and recommendations made.

The Milwaukee druggists' campaign of publicity for the enlightenment of the public in respect of the drug business and its service to the world, was explained at the convention, and it is supposed that several other cities of the state will follow Milwaukee in the promotion of interest in things pharmaceutical, the advertising slogan to be "the drugstore is the service shop of all America."

The association selected the names of G. V. Kradwell of Racine, H. E. Kraft of Milwaukee, and M. C. Traser of New London, to be submitted to Gov. Philipp who will select from them a man to fill a coming vacancy on the state board of pharmacy.

J. J. Possehl and E. G. Raeuber of Milwaukee were elected delegates and L. G. J. Mack and Hugo Wussow, alternates, to the Cleveland convention of the National Association of Retail Druggists in September.

S. A. Eckstein presided as toastmaster at the big banquet on Thursday evening. Thomas Potts, secretary of the N. A. R. D. responded with a talk on the necessity of co-operation and unity, not only among druggists particularly, but among the entire populace of the nation. He urged the druggists and their guests to do everything possible to help the President win the war.

The Ladies' Auxiliary reelected officers as follows: President, Mrs. J. M. Kaunheimer; vice-president, Mrs. J. J. Bakke; secretary, Mrs. Herman Lambeck; treasurer, Mrs. W. E. Porter.

MICHIGAN ADDS 116 NEW MEMBERS

President C. H. Jongejan made several recommendations in his annual address at the meeting of the Michigan Pharmaceutical Association, held in June at Grand Rapids. These were the adoption of a system of service by which the druggists of the State might more readily acquaint themselves with the fluctuations in drug prices, the appointment of a committee on fraternal relations to obtain uniform pharmacy laws in all States, the employment of women to overcome the shortage of clerks during war time, contributions to the Red Cross Society and the purchase of Liberty Bonds.

Secretary Wheaton reported an increase of 116 added to the rolls during the year, the total membership now being 712. There were addresses by Wilhelm Bodeman of Chicago on the installation of pay telephone stations in their stores, L. M. Lewis on the sales of liquors by druggists after May 1, 1918, and by Otto E. Bruder, of Chicago, on elevating the ethical standard of pharmacy. Resolutions were adopted asking the Government to give greater recognition and higher rank to pharmacists, that the State board of pharmacy give credits to pharmacists who enlist in the hospital units, but who may not have served four years apprenticeship in retail stores, and that the association give \$100 to the Red Cross.

The following officers were elected: President, P. A. Snowman, Lapeer; first vice-president, Dwight Miller, Union City; second vice-president, Axel Durchman, Hancock; treasurer, E. E. Faulkner, Delton; secretary, F. J.

Wheaton, Jackson, reelected; new members of the executive committee, J. A. Skinner, Cedar Springs, and D. G. Look, Lowell; trustee of the Prescott memorial fund, L. A. Seltzer, Detroit, who serves with Charles F. Mann and J. W. Knox, both of Detroit.

The Michigan Pharmaceutical Travelers' association which met in connection with the state pharmacists, elected the following officers: President, W. F. Griffith, Howell; vice-presidents, W. E. Collins, Detroit; C. J. Reilly, Grand Rapids; Joseph Wells, Athens; secretary-treasurer, W. S. Lawton, Grand Rapids, reelected; chairman of council, George T. Wilcox, Lansing; Members, Charles S. Rogers, Grand Rapids; F. E. Wicks, Detroit; H. C. Reinhold, Detroit; W. O. Gladding, Kalamazoo; John J. Dooley, Grand Rapids; H. B. Wilcox, Grand Rapids, and Leo A. Caro, Grand Rapids.

NORTH CAROLINAS SUCCESSFUL MEET

One of the most successful meetings the North Carolina Pharmaceutical Association ever held was that at Asheville in June, the attendance being larger, and more new members were gained than at any previous meeting. After the customary welcoming addresses, President E. G. Birdsong reviewed the events of the past year, making several recommendations. Secretary J. G. Beard, of Chapel Hill, reported that druggists throughout the State were taking more interest in the organization than ever before.

E. L. Tarkenton, of Wilson, was in charge of the committee on queries and papers. A paper which attracted considerable attention, and which won for the author a prize copy of the National Standard Dispensary, was that presented by Frank S. Smith, of Asheville, newly elected member of the Board of Pharmacy, on "A Pharmaceutical Crisis." A splendid paper was also read by J. A. Goode, of Asheville. Another feature of the program was an illustrated lecture dealing with the manufacture and standardization of biological products by Dr. J. H. Crum of Detroit. The report of the Legislative Committee described in detail the fight that was made by the association against the attempted legislation known as the "open formula" bill, which was championed by the State Board of Health. The Committee stated that the passage of the bill would have been ruinous to the retail druggists of the State.

A discussion of the problems arising out of the entrance of the United States into the war took up considerable time of the association, and a number of plans were discussed by which effective pressure could be brought to bear upon Congress to improve the status of pharmacists in the army and navy. It was hoped that a standard plan of action could be determined in a method that would gain the endorsement of the war department for an improved rating of druggists in the hospital corps or another branch of the service later to be organized.

The following officers were elected: President, G. A. Matton, High Point; vice-presidents, S. E. Welfare, Winston-Salem, G. R. Pilkington, Pittsboro, and E. E. Missildine, Tryon; secretary (re-elected), J. G. Beard, Chapel Hill; treasurer, E. V. Howell, Chapel Hill; member of board of pharmacy, Frank S. Smith, Asheville; members of the executive committee, P. A. Lee (chairman), Dunn, S. O. Blair, Monroe, and S. M. Purcell, Salisbury. Raleigh was selected as the place of next meeting, the date being left to the local secretary, H. T. Hicks, and President Matton.

The entertainment program consisted of a reception at the Battery Park Hotel, an automobile drive throughout the city, a banquet and entertainment at the Grove Park Inn, a dance at the Battery Park Hotel, a bridge tournament for the visiting ladies, including appropriate prizes, and a trip to the top of Mt. Mitchell, the highest mountain east of the Rockies, the trip being taken in a special train chartered by the Traveling Mens' Auxiliary.

SERVICE CRAZE A BURDEN TO DRUGGISTS

Resolutions endorsing the attitude of President Wilson and calling on every member of the organization to write to the Georgia senators and congressmen protesting against the levying of undue taxes on drugs during the war, were adopted by the Georgia Pharmaceutical Association at its 1917 meeting held at Macon. Dr. H. D. Bell, retiring president, recommended the formation of a traveling men's

auxiliary, and thought that committees from the wholesalers, retailers and manufacturers should be formed for work to keep down taxes. The following officers were elected: I. A. Solomons, Jr., Savannah, president; T. F. Burbanks, Cedartown, first vice-president; Herman C. Shuptrine, Savannah, second vice-president; D. G. Wise, Atlanta, third vice-president; T. C. Marshall, Atlanta, treasurer and Jasper L. Brooks, Tifton, delegate to the National Association convention at Atlanta. T. A. Cheatham was re-elected secretary. Names to be submitted to the Governor for appointment on the State Board of Pharmacy, B. S. Persons, Macon; H. D. Bell, Albany; Cook Jordan, Bartow; W. A. Pigman, Savannah, and T. C. Marshall, Atlanta. Retiring President Bell installed the new officers.

Mrs. Henry Bell, of Albany and Commissioner of Agriculture J. J. Brown were given honorary membership in the association.

Subjects discussed during the session dealing with the commercial phases of the retail drug business emphasized the contention that the retail druggist is over-burdened with the service craze. It was shown that the sending out of drinks and petty packages is a feature of the retail drug business which has developed into a profit-destroying custom. It was brought out in the speeches that the public generally has an exaggerated notion of the profits in soft drinks and drugs. Tybee Island was selected as the meeting place for next year's convention. The date to be set in June next by the committee.

MAINE PH. A. HALF CENTURY OLD

Owing to the scarcity of help occasioned by the war, the plan to celebrate the fiftieth anniversary of the organization of the Maine Pharmaceutical Association at Kineo this year was cancelled, and instead the association held a one-day's business session at the Falmouth Hotel, Portland on June 29, and elected the following officers: President, H. C. Buxton, Fort Fairfield; vice-presidents, F. H. Neal, Fairfield; E. F. Carswell, Gorham, and Fred Cox, Bath; treasurer, A. W. Meserve, Kennebunk; secretary, M. L. Porter, Danforth. Nominees for appointment to the board of pharmacy; H. C. Buxton, Fort Fairfield; A. W. Meserve, Kennebunk; E. F. Carswell, Gorham; and George O. Tuttle, Portland.

A. G. Schlotterbeck, who was present at the organization of the Maine Ph. A. fifty years ago, was presented with a bouquet of fifty roses in recognition of the distinction.

BAY STATE DRUGGISTS AT SWAMPSCOTT

That druggists pass on to the buyer the additional taxes that they will have to pay as result of the war, rather than embarrass the government with selfish objections, was advocated by the retiring president, Ernst O. Engstrom, in opening the 36th convention of the Massachusetts State Pharmaceutical Association, at Swampscott, Mass.

These new officers were chosen: President, Walter S. Doane, Worcester; vice-presidents, Clifford B. Thompson and Charles C. Doane, Springfield, and A. H. Parquette, Lynn; secretary, James F. Guerin, Worcester; treasurer, James F. Finneran, Boston; trustees, William J. Sawyer, Boston; F. E. Mole, Adams, and James W. Cooper, Plymouth; member of State Board of Trade, Prof. Elie H. LaPierre, Cambridge.

For candidates for the State Board of Registration in Pharmacy C. W. King of Chicopee Falls, Clifford B. Thompson of Springfield, Phillip V. Erard of Springfield, Percy N. Hall of Westfield, Frank H. Carver of Plymouth, Walter W. Bradbury of Chicopee, Ernst O. Engstrom of Pittsfield, and A. E. Summer of Springfield were nominated.

The Traveling Men's Auxiliary elected: President, A. W. Jackson, Somerville; vice-presidents, E. W. Emery, Quincy, and W. E. Andrews, Watertown; secretary-treasurer, J. H. Johnson, Boston; executive committee member, Charles H. Perry, Medford.

The entertainment features were up to standard. Mrs. J. H. Johnson, Mrs. L. C. Ellis, Mrs. W. Chamberlain, Miss G. M. Gerrish, Mrs. M. A. Green, Mrs. Fred P. Wright, Mrs. Wilbur E. Andrews, Mrs. J. A. Baader, and Mrs. W. A. Wilson were a reception committee for the ladies.

KANSAS PH. A. MEETING WELL ATTENDED

The technical side of pharmacy received a large share of attention at the recent meeting of the Kansas Pharmaceutical Association held in Topeka, papers being read by R. M. Vliet, Wichita, D. Von Riesen, Marysville, W. S. Amos, Kansas City; R. B. Bird, Winfield; Leon A. Congdon, Topeka; F. J. Zuck, Lawrence; E. B. Mallott, Abilene; and J. A. Searcy, Leavenworth. Clyde Miller of Topeka, also presented a paper on "Interinsurance," and Edward Dorsey, of Ottawa, discussed the ups and downs of legislation.

J. W. Montfort, president of the Oklahoma Board of Pharmacy, was present and told of the effort of the board in his state to get a laboratory established which would permit the examination of a large class in practical pharmacy in the capitol building, which he stated would soon become a reality. If the resolution adopted by the K. Ph. A. convention is received favorably by the next session of the legislature, all druggists in the state will automatically become members of the association. Legislation following the plan of the Montana law, which provides that all druggists shall pay an extra dollar annual registration fee, the same to be turned over to the association, was recommended.

The following officers were elected: Walter S. Henrion, Wichita, president; J. F. Tilford, Wichita, first vice-president; Joseph DeMain, Macksville, second vice-president; D. Von Riesen, Marysville, secretary; John M. Brunt, Topeka, assistant secretary; John Schmitter, Gypsum, treasurer; Harry Dick, Lawrence, chairman of the legislative committee; L. E. Sayre, Lawrence, librarian.

Following are the nominees from whom the governor will select two next fall to fill vacancies on the state board of pharmacy: J. F. Tilford, Wichita; J. W. Giesburg, Kansas City; F. W. Ekstrand, Salina; A. E. Topping, Overbrook; Charles F. W. Seitz, Salina; Will S. Dick, Lawrence; D. F. Deem, Stark; George W. Stansfield, Topeka; J. W. Cookson, Wichita, and J. A. Searcy, Leavenworth.

Officers elected by the Travellers' auxiliary: Joseph Bailey, Hutchinson, president; W. D. Mowry, Kansas City, first vice-president; W. D. Barrett, Topeka, second vice-president; W. S. Wilson, Burlington, third vice-president; E. C. Hammill, Kansas City, secretary and treasurer; Marty Ramey, Kansas City, sergeant at arms; W. J. Brennaun, Kansas City, chairman of the entertainment committee, and Nate P. Koontz, Topeka, chairman of the executive council.

The Ladies' Auxiliary elected Mrs. G. Q. Lake, Kansas City, president; Mrs. Ray Lassig, Kansas City, first vice-president; Mrs. J. M. Brunt, Topeka, second vice-president; Mrs. N. J. Petro, Topeka, and Mrs. N. G. Edelblute, Topeka, secretaries.

A complimentary dinner to the druggists and their wives, at which more than 300 plates were laid, was one of the features of the convention. Ed. Arnold served as toastmaster. The principal speaker of the evening was Dr. John Emerson Roberts, of Kansas City. Patriotism was the theme of all the speakers, and resolutions were adopted asking Congress to give pharmacists and chemists the same recognition as accorded to physicians in the military service. Kansas City was selected as the place of meeting next year.

VOTE TO MAINTAIN PREREQUISITE

Druggists from all sections of the State were in attendance at the annual meeting of the Washington Pharmaceutical Association which held its annual meeting in the Chamber of Commerce Assembly rooms, Spokane, on June 14 to 16. State and national questions relating to pharmacists, imposition of taxes, and the sale of alcoholic medicines were discussed, the meeting closing with a picnic outing at Liberty Lake, seventeen miles east of the city, and a dance at the Lake pavilion at night.

The following officers were elected: President, Henry G. Duerfeldt, Spokane; 1st vice-president, Dr. A. A. Tozer Everett; 2nd vice-president, Mrs. Emily McRae, Spokane; 3rd vice-president, G. C. Morton, Tacoma; secretary, Elmer Brown, and treasurer, G. A. Lukens, Spokane. Executive committee, A. L. Ritter, W. A. Clizer, W. C. Stone, E. L. Jones, E. L. Brown, G. A. Lukens, and H. G. Duerfeldt, Spokane; D. B. Garrison, Seattle; George Watt,

Pullman; Dr. C. W. Johnson, Seattle, and G. C. Norton, Tacoma. Recommended to Governor Ernest Lister for appointment to the State Board of Pharmacy; E. L. Jones, D. B. Garrison, W. A. Clizer, Spokane; F. A. Gillette, Hoquiam; and J. Lawrence Randles, Granite Falls.

The association voted to insist upon the maintenance of the college graduation prerequisite requirement for the registration of pharmacists, and that the Board of Pharmacy should apply for membership in the National Association of Boards of Pharmacy. It also voted that the Board should provide a means of reciprocal registration, a provision which is not now enjoyed in Washington and the absence of which, it is claimed, causes a shortage of drug clerks in the State.

A committee consisting of H. G. Duerfeldt, E. L. Jones, Arthur Thayer, George Watt and D. B. Garrison was appointed to get from the authorities in Washington information as to how alcohol could be rendered unfit for internal use and yet be employed for medicinal use free from taxation. The committee will also seek information regarding what items are now sold and used for medicinal purposes that are classed as alcoholic beverages. Mrs. McRae presided at the banquet given by the Association. Invitations for next year's meeting were received from Chelan, Seattle and Olympia, but the selection of the time and place was left to the executive committee.

UTAH WILL HAVE PHARMACY SCHOOL

At the seventeenth annual meeting of the Utah Pharmaceutical Association held in the Hotel Utah, Salt Lake City, the druggists decided that a concerted and general revision upward in prices of most of the articles sold by retail druggists was necessary, and also registered their protest against what they asserted was a discriminatory war tax. The announcement that the University of Utah would this fall open a school of pharmacy was received with enthusiasm and the association adopted a resolution pledging its support to the undertaking. The support of the Idaho Pharmaceutical Association to the new institution will also be requested. Prof. Le Roy D. Swingle, who will have charge of the course, said that two additional members of the faculty would be needed for the new department and that these would be selected in the near future.

John Culley, of Ogden, gave a talk on the "Unit System of Pricing," and Mrs. Culley, chairman of the Ladies' Auxiliary, outlined the plans of that organization for the coming year. Addresses were also made by Charles R. Mabey on "Patriotic and Pharmaceutical Preparedness;" by Earl J. Glade, on "Business Efficiency;" Attorney General Dan B. Shields on the "Prohibition Law," and H. E. Jenkins on the "Workmen's Compensation Law."

The following officers were elected: President, H. H. Peterson, Richfield, 1st vice-president; J. L. Boyden, Coalville; 2nd vice-president, June W. Clark, Ogden; secretary (re-elected), F. J. Holland, Salt Lake; Treasurer, John Culley, Ogden. Board of directors, the officers with B. F. Riter, Logan; Edward Johnston, Mount Pleasant; C. H. Stevens, Provo; C. H. Hesser, Bountiful; M. D. Howlett, Eureka; Eugene L. Wade, and C. J. Sarvey, Salt Lake.

The convention closed with a banquet at the Hotel Utah. Provo was selected as the place for the 1918 meeting.

CONNECTICUT MET AT NEW SHOREHAM

The Connecticut Pharmaceutical Association held its 41st annual convention at the New Shoreham Hotel, J. F. Finneran, of Boston, chairman of the executive committee of the N. A. R. D., delivering an address. The following list of names was selected to be presented to the Governor from which he is to appoint one to fill the vacancy that occurs in the State Pharmacy Commission next year; J. A. Levery, Bridgeport; A. L. Dickinson, Salisbury; J. B. Ebbs, Waterbury; C. P. Gladding, Hartford; J. B. Hartigan, Bridgeport, and J. A. Hodgson, New Haven. The place of holding the next convention will not be decided until the coming mid-winter meeting.

The following officers were elected: president, Carl R. Ramsay, of New Britain; first vice-president, Edward M. Nolan, of Torrington; second vice-president, G. T. Hull, of New Haven; secretary and treasurer, P. J. Garvin, of Bristol. Mr. Garvin has been secretary and treasurer for six years.

Credit and Commercial Decisions

By GEORGE H. MURDOCH, Newark, N. J.

A will drawn by a layman should receive the same construction as the layman would give it.—*In re McQueen's Will*, 163 N. Y. S. 287.

Payment of a debt to a third person, with the approval, or at the request of the creditor, is, in legal effect, a payment to the creditor.—*Shuman v. Shuman*, 91 S. E. (W. Va.) 264.

A promissory note, payable to the order of the maker thereof and properly indorsed by him, is: "negotiable instrument"—*Jordan v. First National Bank of Rome*, 91 S. E. (Ga.) 287.

As to the payee of notes, parties who signed them for the accommodation of the maker were joint makers.—*Wolf v. Brakebill*, 162 P. (Cal.) 918.

Gifts of securities are not presumed, since ownership of such property once proved, is presumed to continue.—*In re Canfield's Estate*, 163 N. Y. S. 191.

Every presumption must be made and every reasonable doubt be resolved in favor of the validity of a statute.—*Joel v. Bennett*, 115 N. E. (Ill.) 641.

If one to whom an instrument is executed is in possession of it, a presumption will arise in favor of its delivery which can be rebutted only by clear and positive evidence to the contrary.—*Smith v. Noble*, 191 S. W. (Ky.) 641.

That a husband deposits money in the name of his wife, and the two have joint possession of the deposit books, does not of itself constitute a gift.—*Schwab v. Schwab*, 163 N. Y. S. 246.

The lessor of a soda fountain, under a contract for purchase, being the holder of the legal title, is liable for the personal property tax upon it.—*Robertson v. Puffer Manufacturing Company*, 73 So. (Miss.) 804.

Power in a surety company's charter to issue bonds guaranteeing performance of "contracts," other than insurance policies, includes guaranteeing payment of notes.—*National Surety Company v. Lanahan*, 99 A. (Md.) 790.

The bankruptcy law (Act July 1, 1898, c. 541, 30 Stat. 544) is paramount, and the jurisdiction of the federal courts in bankruptcy is exclusive, supplanting all proceedings under state insolvency laws.—*In re Mullings Clothing Company*, 238 F. (U. S.) 58.

Where a bankrupt transferred to a third person accounts due from debtors, the validity of such transfer as between the parties is not affected because the several debtors were not notified.—*In re Hawley Down-Draft Furnace Company*, 238 F. (U. S.) 122.

The law gives every person a right to dispose of his property as best suits him, so long as he is possessed of sufficient mental capacity, acts freely, and observes the required legal formalities in the execution thereof.—*In re Moyer's Will*, 163 N. Y. S. 296.

As to papers placed in a safety deposit box kept by a bank as an accommodation to customers, the bank occupied the position of a bailee without compensation, and was only bound to exercise slight care.—*Kierce's Administrator v. Farmers' Bank*, 191 S. W. (Ky.) 644.

Where one of the parties to a contract is prevented by the other, without just cause, from executing the same, he is entitled to recover an amount equivalent to the profit of which he has been deprived and such other damages as he may show that he has sustained.—*Cothern v. Julia Lumber Company*, 73 So. (La.) 845.

When the law gives a remedy for a wrong done, the compensation should be equal to the injury sustained, and the latter is the standard by which the former is to be measured. The injured party is to be placed as near as may be in the situation which he would have occupied had not the wrong been done.—*Van Sickle v. Franklin*, 162 P. (Okla.) 950.

Where the shipper of a trunk received from the carrier a receipt, a condition of which required her to commence suit on any claim growing out of the transportation contract within one year from the date thereof, she could not, after one year, in the absence of waiver of such condition, sue for the loss of articles in the trunk.—*Barter v. Barrett*, 163 N. Y. S. 244.

The good will of an established business is an incorporeal property, which may be sold in connection with the

sale of the business on which it depends. The sale of a business and its good will carries with it a sale of a trademark used in connection with the business, although not expressly mentioned in the instrument of sale.—*President Suspender Company v. Macwilliam*, 238 F. (U. S.) 159.

Contraband goods, carried by a neutral vessel from a neutral country to a port of a belligerent in time of war, are "lawful merchandise," within a clause of the charter party limiting her use to the carriage of such merchandise, where the export of such goods were not prohibited by the laws of the country from which the shipment was made.—*Atlantic Fruit Company v. Solari*, 238 F. (U. S.) 217.

In garnishment proceedings, where the judgment debtor claimed that money in the hands of the garnishee was exempt as the proceeds of the sale of the judgment debtor's homestead, the burden was on him to establish his claim by showing that the money was a part of the proceeds, and that it was exempt because he had not already received the amount of the proceeds of sale to which the homestead statute (Comp. Laws 1907, § 1147) entitled him.—*Giesy-Walker Company v. Briggs*, 162 P. (Utah) 876.

Under a contract giving defendant an exclusive agency for plaintiff's goods for two years, and providing for the sales of goods from time to time to defendant at a price fixed by agreement of the parties, the successive sales were severable, and each was a contract of sale by itself. In such case, the breach of the agency side of the contract arising from plaintiff's failure to accept defendant's orders for goods in accordance with the contracts would not alone prevent plaintiff's recovery for goods already sold and delivered.—*Mark v. Stuart-Howland Company*, 115 N. E. (Mass.) 42.

A dated contract, reading "We hereby guarantee the account of" a certain person "for any merchandise shipped from this day," contained no ambiguity, warranting parol testimony showing that the subject-matter of the guaranty was the "account" of the guaranteed person for goods already "sold" to him, but not "shipped" until the guaranty was given, since all definitions of the word "account" define it substantially as "some matter of debt and credit, or demands in the nature of debt and credit, between parties," or "as a course of business dealings or relations requiring the keeping of records," for the ordering of goods which the vendor is unwilling to ship without adequate security does not come within such a definition of the term "account," there being at such time no "debt and credit" as between the immediate parties, nor business dealings "requiring the keeping of records"—*Anselwitz v. Greenstein*, 163 N. Y. S. 180.

DELAWARE PH. S. ELECTS OFFICERS

No papers were read at the recent annual meeting of the Delaware Pharmaceutical Society held in the Hotel du Pont, Wilmington, but N. B. Danforth gave an address on "Trade Interests," and Dr. Adolf Miller gave a brief address on the work of the Philadelphia College of Pharmacy. The members present also discussed the operation of the Harrison Narcotic law and its administration methods. Reports were received from the various officers and committees, the session concluding with the annual luncheon. The following officers were elected:

President, Harry C. Culver, Middletown; first vice-president, George W. Rhoads, Newark; second vice-president, H. K. McDaniel, Dover; third vice-president, R. M. Cauffman, Seaford; secretary, Miss Nora V. Brendle, Wilmington; treasurer, Oscar C. Draper, Wilmington.

Executive committee: James T. Challenger, New Castle; N. B. Danforth, Wilmington; Harry C. Culver, Middletown; W. H. Chambers, Lewes, and C. B. Swayne, Smyrna.

The society recommended the following names to Governor Townsend, from which to appoint a member of the Delaware Board of Pharmacy to succeed W. R. Keyes, whose term of office expires on July 1; W. R. Keyes, Clayton; J. O. Bosley, Wilmington; Thomas Donaldson, Wilmington; John M. Harvey, Wilmington; Albert Dougherty, Wilmington.

PATENTS & TRADEMARKS

PATENTS

Granted June 26, 1917

- 1,230,899—Harold Hibbert, Pittsburg, Pa, assignor to Union Carbide Co., New York, N. Y. Process of making acetic acid.
 1,230,916—Robert G. Mason, Brooklyn, N. Y. Liquid container.
 1,230,971—Harry L. Wilson, assignor of one-third to John F. Loeffler, Washington, D. C. Siphon.
 1,231,009—Henry A. Gardner, Washington, D. C. Recovering picric acid from washwater.
 1,231,123—Benjamin T. Brooks and Dillon F. Smith, assignors to Gulf Refining Co., Pittsburg, Pa. Production of chlorinated hydrocarbons.
 1,231,383—Joseph Komorous, assignor to Parisian Novelty Co., Chicago, Ill. Powder receptacle.
 1,231,384—Joseph Komorous, assignor to Parisian Novelty Co., Chicago, Ill. Powder receptacle.
 1,231,471—Edgar Arthur Ashcroft, London, England. Manufacture of anhydrous magnesium chloride.
 1,231,476—Giuseppe Bevilacqua, Genoa, Italy. Process for the production of carbonate of lead.
 1,231,494—Georges Claude, Boulogne-sue-Seine, France. Neon tube.
 1,231,508—Vernon R. Doncaster, Orleans, Vt. Bottle-cap.

Granted July 3, 1917

- 1,231,853—Ubaldo Corbelli and Ercolo Antolini, Rome Italy. Method for preservation of solutions of trichlorid of iodine for purifying contaminated water.
 1,231,859—Coleman J. Davis, Hardinsburg, Ky. Stopper or cork extractor.
 1,232,061—Archibald Montgomery Low, London, England. Stoppering means for bottles and like receptacles.
 1,232,105—Frederick Lynn Shelor, Salem, Va. assignor to International Filler Corporation, Richmond, Va. Bottle filling apparatus.
 1,232,112—Rufus E. Smith, and Frank E. Cable, Syracuse, N. Y. Machine for making capsules.
 1,232,137—Alvin Welling, Covington, Ky. Bottling machine.
 1,232,175—Juan Baenninger, Quilmes, Buenos Aires, Argentina, assignor to Barry-Wehmiller Machinery Co. Bottle-washing machine.
 1,232,373—Antoine Mouneyrat, Paris, France. Organic arseno phosphorus compounds and process of making same.

Granted July 10, 1917

- 1,232,517—Charles H. Ely, East Orange, N. J. Tooth-brush.
 1,232,933—Kenkichi Kimura, Saikamachi, Japan. Compound tooth-brush.
 1,232,967—Joseph Pinson, Brooklyn, N. Y. Non-refillable bottle.

Granted July 17, 1917

- 1,233,333—Harry Essex and Irwin W. Humphrey, assignors to Gulf Refining Co., Pittsburg, Pa. Process of purifying amyl compounds.
 1,233,374—William G. Lindsay, Newark, N. J., assignor to The Celluloid Co. Process of making pyroxylin compounds.
 1,233,483—Frank J. Kristofek, St. Paul, Minn. Bottle-cap remover.
 1,233,564—Carleton Ellis, Montclair, N. J., assignor to Ellis-Foster Company. Process of making nitric acid from ammonia.
 1,233,626—Harry M. Weber, East Orange, N. J., assignor to Ellis-Foster Co. Process of making sulfuric acid of predetermined strength.
 1,233,627—Harry M. Weber, East Orange, N. J., assignor to Ellis-Foster Co. Making oleum of predetermined strength.
 1,233,656—Benjamin L. Fetter, Americus, Ga. Dosage-bottle.
 1,233,737—Arthur L. Currey, Chicago, Ill. Bottle-stopper.
 1,233,873—Lincoln Hall, Los Angeles, Cal. Label-holder.
 1,233,896—James F. McDonnell, Lakewood, Ohio, assignor by direct and mesne assignments, to the McDonnell Bottle Cap Co. Bottle-cap.
 1,233,925—1,233,926—Ottokar Serpek, Paris, France, assignor to Societe Generale des Nitrates, Paris, France. Process of manufacture of aluminum nitrid.
 1,233,986—James B. Conant, Cambridge, Mass., assignor to Smet-Solvay Company. Process of producing benzyl chloride.
 1,233,998—William F. Elgin, Glen Olden, Pa., assignor to H. K. Mulford Co., Philadelphia, Pa. Vaccin-point.
 1,234,093—Francois Debove, Ville d'Avray, France. Cork.

TO STUDY ADVERTISING IN SOUTH AMERICA

The Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, has chosen J. W. Sanger, a practical advertising investigator, counsel, and writer of New York, to investigate advertising methods employed in South America. Before leaving this country Mr. Sanger will devote two months to visiting manufacturers, exporters, advertising agents and others who desire to learn something about advertising in South America, and who have suggestions to make as to the scope of the investigation. The results of this investigation will be published in bulletin form, which, as well as Mr. Sanger's personal services in advisory capacity when he returns to this country, will be available to any American manufacturer who wishes to promote trade in Latin America by advertising. Manufacturers and others who wish to consult him may address their inquiries to the Division of Commercial Agents, Room 409 Customhouse, New York.

A NEW BEACON FLASHLIGHT

Just now, when the dealer is putting forth the full force of his selling effort on those lines that attract and appeal to vacationists about to leave town, the Beacon Electric Works announce the addition of a new member to their already extensive flashlight family. This new flashlight, already is popularly known as the Pocket Searchlight, because it combines, with its unusually compact size, the efficiency of an intensely brilliant, far-reaching light, which is obtained by a new and scientifically designed Reflector and Bull's-Eye lens. It is ideally adapted to the vacationist's need in that, when not in use, it can be conveniently carried in one's pocket or belt. It is equipped with a combination flash and permanent contact, has every other feature that can possibly contribute to greater convenience and efficiency, and is handsomely finished in black and nickel. The Beacon Electric Works, New York and Chicago, announce a special bulletin covering this new Beacon number which they will be glad to send to any dealer who asks for it. Send for a copy.

ECKMAN'S ALTERATIVE REDUCED IN PRICE

The Eckman Manufacturing Co., Philadelphia, announce a reduction in the prices, both wholesale and retail, of Eckman's Alterative. The reasons for the reduction at this time, they state, are because of the thoroughness, after years of selling expense, of the distribution of this product all over the United States, and the desire of the company to help equalize or standardize prices for their product in the drug trade. In many instances, dealers made big cuts in the selling price, some offering it for sale at slightly above their dealer's cost, thus injuring to a great extent the business of those dealers who attempted to maintain higher prices. The manufacturers state that the new prices to the consumer will be the means of bringing increased sales to the retailer and consequently larger profits, in dollars and cents, by reason of the additional sales.

EXPOSITION OF CHEMICAL INDUSTRIES

Advance information indicates that the Third National Exposition of Chemical Industries to be held at the Grand Central Palace, New York, during the week of Sept. 24, will be the largest and most complete exposition of these industries ever held at any place in the world. It will show what chemistry means to present day civilization, all of the latest developments, and how the manufacturer can by greater effort or efficiency become more productive. Already the list of exhibitors contains 250 names of companies entering every field of industry.

On Monday, Sept. 24, opening addresses will be made by Dr. Charles Herty, Prof. Julius Stieglitz, Dr. Colin G. Fink, Dr. G. W. Thompson, as representatives of the various chemical societies, while among the speakers provided for other days are W. S. Kies, vice-president of the National City Bank, who will speak on "The Development of Export Trade in South America"; Prof. Marston T. Bogert, chairman, National Research Council, who will speak on the "Operation and Work of the Research Council for National Weal," and Dr. L. H. Baekeland of the Naval Consulting Board, who will make an address on "The Future of American Chemical Industry." A symposium upon the National Resources as Opportunities for Chemical Industries in which prominent leaders in their respective lines will take part, is also announced. A motion picture program showing various developments in the industries has also been arranged, the attempt being made to show the present progress and possibilities of the chemical industries and what they mean to this country.

—J. F. GALLAGHER, a druggist of Dayton, Ohio, has retired as president of the Ohio Pharmaceutical Association. E. R. Selzer of Cleveland was elected to succeed him. self.

—REUBEN PFEILER, a member of the Bock Drug Co., Sheboygan, Wis., and a graduate of the University of Wisconsin, 1914, was recently married to Miss Lula Horn.

—SAMUEL McDONALD, a former druggist of Fargo, and Grand Forks, N. D., was recently elected mayor of Seward, Alaska, defeating his closest competitor by ten votes.

THE DRUG MARKETS

BAR SILVER HIGHEST SINCE 1892

Proposed Alcohol Tax a Disturbing Factor—Trading Mostly of Routine Character—Caffeine Tending Downward

NEW YORK, JULY 25—Local business during the past month has been in the main without incident, while trading in drugs and chemicals has been almost entirely of a routine character. The regulations issued for the control of exports, in so far as they relate to drugs and chemicals, are causing some dissatisfaction, and it is hoped the Department of Commerce will soon be able to eliminate most of the objectionable features. Licenses under which German chemical firms have been exporting to the United States through northern European neutral countries have been revoked by the Treasury Department, the effect of this action remaining to be seen. It is said that a considerable proportion of foreign medicinal products have been imported in this manner.

Manufacturers have been restricting their output to current necessities, and show little disposition to bid for future business. The proposed Federal taxation of alcohol is very disquieting to all manufacturers, and should the bill covering this additional tax be enacted, many of them will sustain great financial losses, if not actual bankruptcy. The freight situation is still a disturbing factor, and many buyers at a distance from the business centers are holding aloof from ordering until conditions are more settled and they have a better knowledge on which to base their hopes of receiving goods.

Advances in prices have been noted for acacia, acetphenetidin, acetylsalicylic acid, tannic acid, all grades, anise seed, antipyrine, balsam of tolu, bay rum, caraway seed, cloves, Honduras cochineal, cubeb berries, U. S. P. ether, guaiac resin, Carthagena ipecac root, larkspur seed, lycopodium, blue malva flowers; oils of star aniseed, refined birch tar, cloves, coriander, Malaga olive and English sandalwood; pancreatin, pareira brava root, potassium acetate, bromide, nitrate, and prussiate; various quinine salts, resorcin, silver nitrate, sparteine sulphate, spirit of ammonia, aromatic spirit of ammonia, and spirits turpentine.

Declines in prices are comparatively few in number, among them being aloin, benzonaphthol, caffeine, both pure and citrated; celery seed, gentian root, Epsom salt, mercury, neatsfoot oil, oils of pennyroyal, savin and ylang ylang; rosemary leaves, green soft soap, sodium benzoate and sodium and strontium bromides.

OPIMUM—The market reflects an easier appearance, due to the arrival of Persian grades, which, however, do not come up to U. S. P. requirements. Only small lots of Turkish are available. Jobbers quote \$30 @ \$32 for natural, \$31 @ \$35 for granulated, and \$31 @ \$32.50 for U. S. P. powdered.

MORPHINE—The market shows strength, although prices are unchanged at \$10.80 @ \$12 for sulphate in ounces, and \$10.85 @ \$12 per ounce in 1/8 oz. vials. Diacetylmorphine, alkaloid, is held at \$15.40 @ \$16.60 per ounce; hydrochloride, \$14.60 @ \$14.80.

QUININE—Notwithstanding the reported arrival of considerable quantities of bark, prices for this febrifuge have been advanced by jobbers on the basis of 85 @ 86c for sulphate in bulk in 100-oz. tins, 90 @ 93c in 5-oz. cans, and 95c @ \$1 in 1-oz. cans. The alkaloid has been advanced to \$1.69 per ounce, while a revision of the schedule for other quinine salts shows the following quotations: Acetate, \$1.69; arsenate, \$1.86; arsenite, \$1.65; bisulphate, 90c @ \$1; citrate, \$1.53; glycerophosphate, \$2.52; hydrobromide, \$1.47; hydrochloride, \$1.47; hypophosphite, \$1.66; phenol-sulphonate, \$1.49; lactate, \$1.66, and salicylate, \$1.44. Cable advices are to the effect that London makers are behind in their deliveries, although spot sales by second hands are reported at 2s 8d @ 2s 9d per ounce. There is a local demand for red cinchona bark in quills, jobbers

quoting 60 @ 65c per pound; Calisaya, yellow, is offered at 45 @ 50c.

ALCOHOL—A strong tone pervades the market, with distillers advancing prices, although they will not urge sales until the revenue situation at Washington is settled by Congress. Following are the quotations obtaining, with the tendency still upward; Cologne spirits, 95 p.c., U. S. P., barrels, gallon \$4.35 @ \$4.40; less, gallon, \$4.45 @ \$4.55; commercial, barrels, gallon, \$4.28 @ \$4.30; less, gallon, \$4.35 @ \$4.45. Denatured is also higher at \$1.13 @ \$1.25 per gallon by the barrel or less. The demand for wood alcohol continues, and quotations have been advanced to \$1.15 @ \$1.34 per gallon by the barrel.

GLYCERIN—The demand, particularly for dynamite grades continues strong, and prices are advancing. Jobbers quote 66 @ 68c per pound for C. P. in bulk, drums and barrels added, and 69 @ 70c per pound in cans; less, 75 @ 77c per pound. The announcement from Washington, noted elsewhere in this issue of the ERA, that Government chemists had evolved a method of producing glycerin from sugar at less than a third of the present price, is not seriously considered as a commercial factor of importance.

FORMALDEHYDE—The demand for this article continues, and quotations are firm, due also to the increasing market value of methyl alcohol. It is reported that large inquiries are being received from abroad, with manufacturers generally holding aloof from supplying other than ordinary quantities. Jobbers continue to quote at last month's advance of 20½ @ 35c per pound.

ACETPHENETIDIN—Present asking prices of \$1.85 @ \$2 per ounce for U. S. P. are slightly lower than those obtaining a month ago.

ACETANILID—Prices have been marked up to 65 @ 70c per pound. This advance is attributed to the increased cost of acetic acid and aniline oil, the basic materials used in manufacturing.

BENZOIC ACID—Increased production of the grade made from toluol has eased the market considerably, and prices have been reduced to \$4.75 @ \$5 per pound. Sodium benzoate is held at \$5.85 @ \$6.50, which is also considerably below last month's quotations.

SUGAR OF MILK—Manufacturers report a recent advance in first hand prices, although jobbing quotations remain at 52 @ 54c for powdered in bulk, and 52 @ 54c for powdered in 1-lb. cartons. The abnormally high price for this article is due to the enormous demand for condensed and powdered milk for export, and the cessation of importations of sugar of milk. Before the war, manufacturers in Switzerland, Holland, and some other European countries were among the leading producers of the world.

ANTIPYRINE—The market is firm at \$1.80 @ \$1.85 per oz.

BALSAM OF TOLU—Has advanced to 60 @ 65c per pound.

BAY RUM—Jobbers have marked up prices on less than barrel lots to \$2.65 @ \$2.80 per gallon.

BENZONAPHTHOL—Is in better supply and prices have declined to 85c per ounce.

BROMIDES—Manufacturers have recently revised prices on the basis of the cost of production, although the market shows a firm undertone. On the basis of the revised schedules, jobbers quote the following prices: Ammonium, 1-lb. bottles, 95c @ \$1.05; calcium, \$1.20 @ \$1.30; lithium, \$3.20; potassium, \$1.45 @ \$1.65; sodium, 50 @ 55c; strontium, 85 @ 95c, each per pound, respectively. Bromoform has been advanced to \$3.50 @ \$3.75 per pound.

CAFFEINE—Quotations are lower than those obtaining last month, jobbers asking \$14.50 per pound for pure, and \$9 @ \$9.50 per pound for citrated. The present high figures are attributed to the heavy seasonable demand for caffeine by soft drink manufacturers, the situation being further accentuated by the difficulties encountered in shipping tea sweepings from the Far East, which is the principal source of production.

CARAWAY SEEDS—There is a growing scarcity of both Dutch and African supplies in the market, and prices con-

time to advance, jobbers asking 90 @ 95c per pound for whole, and 95c @ \$1 for powdered.

CELERY SEED—A revision of jobbing prices is reported, whole seed being held at 90 @ 95c and powdered at 95c @ \$1 per pound.

CLOVES—In common with all spices indigenous to the Far East, the shipping of supplies is surrounded with difficulties, and prices are advancing. There is a good demand for Zanzibar, which are held at 45 @ 50c per pound for whole, and 50 @ 55c for powdered. Penang are quoted at 50 @ 55c.

COCHINEAL—Honduras is higher at 90c @ \$1 per pound.

CUBE BERRIES—There is considerable demand but the offerings are light, and the tendency of prices is upward. Jobbers quote \$1.20 @ \$1.25 for sifted, and \$1.30 @ \$1.35 for powdered.

GENTIAN ROOT—A revision of prices shows a downward tendency, 20 @ 25c per pound for whole being asked; powdered, 25 @ 30c.

IPECAC ROOT—Carthagen shows an easier tendency, whole being offered at \$2.75 @ \$3.06, and powdered at \$3.25 @ \$3.50.

LARKSPUR SEED—Is higher at 35 @ 40c per pound for whole, and 45 @ 50c for powdered.

LYCOPDIUM—Is in light supply, with quotations advanced to \$1.85 @ \$1.90 per pound.

LUPULIN—Is easier at \$2.80 @ \$3 per pound.

EPSOM SALTS—The demand has lessened, and jobbing quantities are quoted at from 8 @ 10c per pound.

MALVA FLOWERS—Small blue continue to advance, \$2.50 @ \$2.60 per pound being the prevailing jobbing quotation.

NUTGALLS—Are in better supply, with jobbers quoting 55 @ 60c for whole, and 65 @ 70c for powdered.

OIL OF BITTER ALMOND—Revised quotations show a slight advance, \$16.50 @ \$17 being asked.

OIL OF STAR ANISEED—Is in scant supply and higher at \$3.30 @ \$3.50 per pound.

OIL OF CLOVES—The recent sharp rise in the price of the raw material caused a corresponding advance in the quotations on this oil, which is now held at \$2.90 @ \$3 per pound. It has been stated that the shortage in supplies of cloves has caused producers of the oil to advance their values, and that still higher prices may be anticipated.

COD LIVER OIL—Prices are firmly maintained, and Newfoundland has recently been marked up to \$3.10 @ \$3.50 per gallon. Norwegian, by the barrel, is slightly lower, with quotations at \$123 @ \$125; less, per gallon, \$4.60 @ \$4.70.

OIL OF CORIANDER—In sympathy with higher prices for the seed, quotations have been advanced to \$1.40 @ \$1.50 per ounce.

OIL OF PATCHOULI—Is higher at \$2.25 @ \$2.50 per ounce.

OIL OF PENNYROYAL—Is lower, \$1.75 @ \$1.85 per pound being asked.

OIL OF SANDALWOOD—English or East Indian oil is steady at \$14 @ \$15 per pound; West Indian is in somewhat scanty supply, but still quoted at \$7.50 @ \$8 per lb.

POTASSIUM SALTS—Several advances are quoted, acetate being held at \$1.65 @ \$1.80; nitrate at 43 @ 49c, powdered, 44 @ 50c; prussiate, red, at \$3.25 @ \$3.50, and yellow, \$1.45 @ \$1.55 per pound respectively.

RESORCIN—Is in better supply and jobbers have lowered prices to \$1.20 @ \$1.25 per ounce for pure white.

SILVER NITRATE—Following the recent advance in commercial bar silver, which now records the highest price quoted since the big silver speculation in 1892, nitrate has been marked up to 65 @ 70c per ounce, fused cones being held at 65 @ 70c per ounce. Before the war broke out, bar silver was selling as low as 42c per ounce, but shortly after hostilities began the price started to go up rapidly as the result of heavy purchases of metal by the European belligerents for coinage purposes. Recently the United States has also been buying large quantities for the same purpose, the purchases of the last three months being placed at several million ounces. Bar silver is now quoted around 79c per ounce.

SPIRIT OF AMMONIA—Owing to the increased cost of the basic materials, prices for aromatic spirits have advanced to 70 @ 75c and spirit of ammonia to 80 @ 85c per pound, respectively.

SPIRITS TURPENTINE—Following the upward movement of primary markets, jobbing prices have been advanced to 43 @ 55c per gallos.

O-SPOT-O, A CLEANER THAT CLEANS

O-Spot-O, introduced by Lehm & Fink, Inc., is claimed to be a cleaner that really cleans, and one which has no embarrassing limitations. By its use one can do as good as a job with a soiled or stained garment as can the professional cleaner, while the odor is pleasing, and the preparation will remove any kind of spot from any kind of fabric and will leave no mark or ring to show where it was applied. Besides, O-Spot-O will not ignite or explode. Druggists who are the lookout for a meritorious article of this class should investigate this proposition. Display advertising relating to it is appearing in all of the big national magazines, which will appeal particularly to the women, while dealers are already enjoying quick sales on this preparation. It is put up in an attractive bottle and carton, both of which carry full instructions for use, and retails for 25c. Give it a trial.

CONKLIN PEN CO., TO CONTINUE

That the Conklin Pen Mfg. Company, Toledo, Ohio, which made a voluntary assignment on June 18 last, will continue business, was the consensus of opinion of the creditors who held a meeting on June 26 at the offices of the company. A resolution expressing this action was unanimously adopted by the creditors, and a committee of five was selected to assist the assignee and present management of the company in an advisory capacity. The financial difficulties are attributed to the comparatively large increase of business for the working capital invested. The company announces that it is now prepared to fill orders promptly.

MULFORD EDUCATIONAL DISPLAY

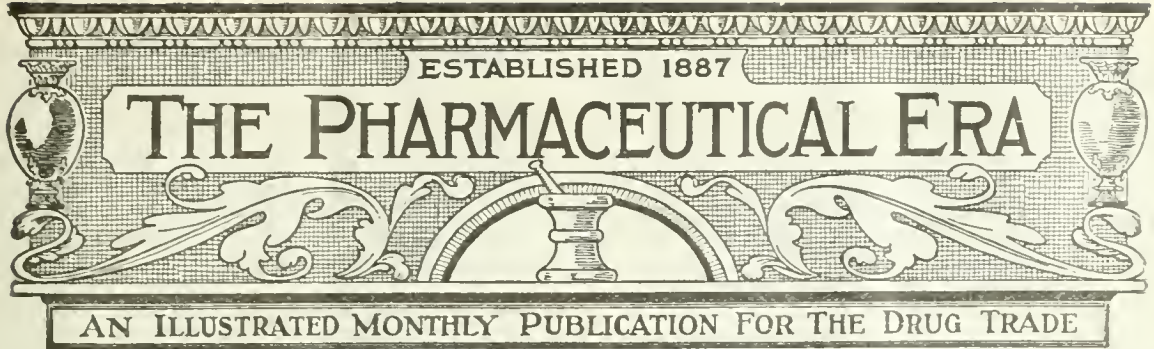
As one enters the corridor of the Pharmacy and Chemistry Department of the Ohio State University at Columbus, the first impressive sight is the large well illuminated mahogany finished display case shown, herewith, containing pharmaceutical and biological products arranged in a most attractive manner. All of the display material for this case was furnished by the H. K. Mulford Company, of Philadelphia.

In the upper portion of the case a series of charts have been arranged demonstrating the causes of various bacterial diseases, and the manufacture of bacterins, serobacterins, tuberculin, smallpox and rabies vaccines, mercurialized serum, antitoxins, diagnostic tests, hay fever pollen extracts and ampuls. The lower portion of the case is devoted to a display covering practically all of the galenical preparations of the U. S. Pharmacopoeia.

Both the faculty and student body of the pharmacy school of the Ohio State University have expressed their appreciation of the educational value of this display while visitors to the institution have been highly pleased with the exhibit.

PRICES OF ABBOTT'S SPECIALTIES ADVANCED

The Abbott Laboratories announce an advance in the prices of Abbott's Saline Laxative, Salithia and Sodoxylin, due to the increasing difficulty encountered in securing raw materials, particularly those which are imported. The new prices, which became effective on July 20, are as follows: Saline Laxative, small, \$2.80 per dozen; less than half a dozen, 24c each; medium, \$4.70 per dozen; less than half a dozen, 40c each; Salithia, small, \$3.20 per dozen; less than half dozen, 27c each; medium, \$5.50 per dozen; less than half dozen, 46c each; Sodoxylin, \$5.50 per dozen; less than half dozen, 46c each. All the prices given are subject to a 15 per cent discount to retail druggists. Druggists should protect their profits by asking 30c for the small size Saline Laxative, and 50c for the medium size; 35 and 60c respectively for the small and medium size Salithia, and 60c for Sodoxylin.



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ALCOHOL FOR MANUFACTURING PURPOSES

So far the ruling issued by the United States Food Administration that all processes in the production of distilled spirits for beverage purposes must cease at 11 o'clock p.m. on Saturday, September 8, has had but little effect on the prices of alcohol, as the ruling relates only to spirits for "beverage purposes." But the proposition now before Congress to raise the internal revenue tax on spirits from \$2.20 per gallon, as proposed by the House, to \$3.20 per gallon, has served to cause an advance in prices which puts this commodity in the forefront of products used by the drug trade that have been affected by the war.

But alcohol the druggist must have, whatever may be its cost, for so far, it is the only solvent that has been found that will preserve many indispensable drugs without changing their medicinal or chemical properties, besides being the raw material from which ether, chloroform, hydrate of chloral and many other pharmaceutical chemicals are made. Druggists as a class will not find fault with the prohibition that seeks to conserve the transposition of food materials into beverages, but no prohibition should be placed on the manufacture of alcohol for industrial and commercial purposes. It has a place in the manufacturing world that can not be filled at present by any other substitute without great inconvenience and financial loss. Considering the great abundance of the vegetable matter which can be utilized in its manufacture, it can be produced wherever plant life flourishes, so that its economic production for use in the arts and sciences is a question of great importance. As the economist sees it, the commercial production of alcohol should be encouraged while indulgence in it as a beverage should be discouraged.

WORK FOR ARMY PHARMACEUTICAL CORPS

The movement now under way to provide for the formation of a pharmaceutical corps in the Army Medical Department, we believe will meet the approval of the drug trade of the entire country. The reasons why such a corps should be established are very fully set forth in the brief submitted to the Surgeon General, an analysis of the situation which every druggist should carefully read, and then use his best influence to have the necessary legislation effected. The formation of such a corps is provided for in Bill No. 5531, recently

introduced in the House of Representatives by Congressman G. W. Edmonds, of Philadelphia, which a careful reading will show, does not contemplate any radical changes or reorganization of the existing Medical Department. Both the proposed bill and the brief referred to appear elsewhere in this issue of the ERA, and they show as clearly as can be shown that by a re-adjustment of the regulations the medical corps can be relieved of its burden of non-medical duties, records and accountings.

That the pharmacist will perform the duties that may fall to him, should this legislation be enacted, there can be no reason to doubt. He has been professionally trained, and upon the proper performance of his duties all branches of medicine are compelled to rely. This is pre-eminently true of the practice of medicine in civil life, and in the last analysis, would be equally true in conserving and guarding the lives and health of those serving in the military forces of the United States.

But there is another phase of the situation which should appeal to the intelligent citizen and interest him in securing the passage of the bill raising the status of pharmacists in the Government service. That is the value of pharmacy as a national asset, especially in the present exigency, when it is recognized that our success will depend upon the proper utilization of every available talent. As stated in the brief submitted to the Surgeon General, it is just as reprehensible to waste talent as to waste materials, and not to provide for the use of the talent possessed by pharmacists in filling this great need, savors of negligence and lack of foresight. Why a competent pharmacist should be assigned to driving mules or other duties which require no professional knowledge or training, is difficult to understand, especially when his services are so urgently needed in other directions and which he could adequately perform. And if the pharmacist renders professional service, he is entitled to some recognition for such service, both in the matter of rank and pay. The experience of pharmacists in all of the armies of the world proves this contention, and it is up to the drug trade of the country as a united whole to speak and work for this much desired legislation. In this co-ordinated effort the National Pharmaceutical Service Association has been organized with the sole object of mobilizing the pharmaceutical interests of the Nation to this end, while all of the State pharmaceutical associations of the country have gone on record favoring the recognition of the pharmacist and his employment in the service of the country in his professional capacity. The National associations, beginning with the A. Ph. A., which is holding its annual meeting in Indianapolis this week, are also doing their "bit," but it is none the less the duty of the individual pharmacist as a citizen, whether he be a member of an association or not, to use his best influence with his representatives in Congress to secure the passage of the measure which seeks to provide for the formation of a Pharmaceutical Corps in the Army Medical Service.

PHARMACISTS SHOULD MASS THEIR STRENGTH

The value of the State pharmaceutical association to every druggist is so obvious that a reference to the subject in these columns ought not to be necessary. Yet year after year, the old question of what shall be done to increase the numbers of roll membership comes up for discussion, showing that no feasible plan to accomplish this desire has yet been evolved, notwithstanding the effort and best thought of a generation have been working on the problem. That pharmacists are not more receptive to a method that will enable them to fight as a unit against inimical legislation, is one of the curious anomalies of our time. Most other callings and trades are fully organized and ready to protect their common interests, while numbers in the drug trade are not identified with their fellows and make no effort to protect the rights of all. Is it any wonder that workers in pharmacy sometimes get discouraged and say that complaining growlers in the retail trade deserve all they are getting because they have never made a move even to help themselves?

The membership of no State pharmaceutical association is concordant with the numerical strength of the drug trade in its territory, yet there are druggists who, when they do want assistance, are not above asking organizations to help them out, forgetting that they have reciprocal duties to perform. It is these who should be classed as "slackers" and carry all of the opprobrium that goes with the epithet. It may be the humanitarian instinct that prompts the few to work for the good of the many, and their reward may come to them hereafter. But the punishment of the "slacker" is generally meted out to him as he goes along, not alone in the usually unsuccessful effort he must make to protect himself in playing the game individually, but in the loss of opportunity to learn from others who have surmounted difficulties that in most instances parallel his own.

In an endeavor to bring home the real value of a druggists' organization, the New York State Ph. A. has recently started the publication of a bulletin—No. 1 has just been mailed to all druggists in the State—the purpose of which is to acquaint druggists of their rights and obligations under existing laws, or which may arise under new laws or regulations that may be enacted or promulgated and which affect their business, thus enabling the druggist, if he reads at all, to avoid many of the pitfalls and technicalities that surround him. The bulletin is a tangible exhibit of what the association is doing for the druggists of New York State, and non-members, by enrolment alone, if they are not in a position to do more, can make the association's work more effective and their own protection and existence more sure by giving the association their financial support. If every State association included in its membership all of the druggists of its territory, there would be fewer absurd bills relating to pharmacy introduced in the legislatures, and a still less number would stand the chance of becoming laws. Pharmacy needs to mass its strength on the firing line, if it is ever to occupy its rightful place.

SELLING THROUGH SUGGESTION

It is a comparatively easy matter for the average druggist or clerk to make a sale and satisfy a customer, providing one has the article to supply the demand and the price charged therefor is at all reasonable. Creating a demand requires another type of genius, however, for considerable perception is needed to discover a customer's wants, or that he may be interested in another line of goods than that he had in mind when he entered the store. If the salesman is really "wise" to his work he will early recognize that every customer presents a potential opportunity for the sale of more goods. Therefore it is a demonstrable fact that if the customer is approached in an intelligent and diplomatic manner it will almost always be found that he is in need of something he had no idea of buying when he started on his purchasing mission.

The faculty of associating ideas has added materially to mental progress in the world of thought. It has contributed none the less to the success of enterprises in the world of business. The use of suggestions germinating from the association of ideas is really capable of extended application, and the salesman who can make use of his ability in this direction that will lead up to consummating further transactions with a customer, has a qualification that is characteristic of all successful merchants. The reasoning faculty of the average individual is quite susceptible to pertinent suggestions, and the salesman who can correctly deduce from a given lead the particular avenue that should be followed to win success, has within his grasp possibilities that would do credit to the genius of a Sherlock Holmes.

Applied to the art of selling goods, the use of the suggestive faculty is not a new thing. It ought to be employed much more than it is. It certainly requires but little mental effort to conclude that the purchaser of a toothbrush will naturally be interested in a line of dentifrices, or that the man who wants a safety razor will ordinarily need certain shaving requisites. In fact the sale of one of a score of articles kept in stock in a well-regulated pharmacy should be suggestive of various related lines and pregnant with possibilities.

As a general proposition the average customer is glad to hear suggestions and to get "pointers," and he usually concludes that he is getting some information whether he purchases any of the suggested articles or not. He is thus receptive and is generally willing to listen. This condition of mind tends to create the opportunity, and if the salesman is wise in his generation, and advances what he has to say in a spirit of fairness, he is sure to increase the number of sales. People like to go where they believe they will get a fair deal; they are usually grateful for any suggestions they may have received, and they do give credit to the man who, they think, knows. Such a reputation is a living and far-reaching advertisement, and the principle behind it lies very close to the intellectual qualification that dominates the methods of the successful salesman.

THE ADAMSON BILL AND FOREIGN PATENTS

The Adamson Bill, generally known as "Trading with the Enemy Act," recently passed by the House of Representatives, has been awaiting the action of the Senate for some time, and is not yet a law. While it includes in its provisions various enactments which the belligerent countries have developed for the regulation of foreign commerce during the present contest, that part of the bill in which druggists as a class are most interested is the clause which confers authority on the Federal Trade Commission to grant licenses to citizens of this country to operate patents owned by enemy aliens. Specifically, if the bill should become a law, it would give American manufacturers the right to apply for licenses to make many of the German synthetic remedies now controlled by representatives of foreign patentees in this country.

Some of these are drugs which are likely to be needed in the army in considerable quantities, and that proper provision for their manufacture should be made is becoming more obvious every day. Newspapers throughout the country have been calling attention to the fact that the prices charged for these drugs have been so tremendously above the actual cost of production that something should be done to put an end to the abuse. But how is this to be accomplished?

The Adamson Bill, besides authorizing the granting of licenses by the Federal Trade Commission for working enemy patents, provides for the maintenance of suits in equity by an enemy or ally of the enemy to restrain infringement, other than under a license of the Federal Commission, such an arrangement aiming to provide for an ample supply of such drugs without infringing just property rights and to give no excuse for resentful retaliation. *The Journal of the American Medical Association*, which has devoted some study to the provisions of the bill as it would apply to the manufacture of salvarsan, is not in favor of granting exclusive control—that is, exclusive license—to any one person or firm. It states "that to do so would simply perpetuate the old monopoly and the old conditions. England has adopted a law which, in principle, is similar to the Adamson bill, and there several concerns have been licensed to manufacture the product," salvarsan being taken by the editor as a typical example, and characterized as a "monopoly." *The Journal* does not lose sight of the fact that besides the question of ending the monopoly, the Federal Trade Commission, should the Adamson bill become a law, will have the responsibility of deciding the question of scientific qualifications and ability to make the product on the part of those who may make application. In this particular, the suggestion is a good one that the Commission secure the co-operation of the United States Public Health Service, under whose supervision the drugs should be manufactured, no matter who the licensee may be.

Mrs. E. Root, owner and proprietor of the Root Pharmacy of San Francisco, has recently sold the establishment to her manager, G. W. Hokanson.

WILFUL NEGLIGENCE OR DISHONESTY

A homily on the use of inaccurate scales and weights by druggists ought not to be necessary, but when Government and State officials report the large number of cases they have found to exist in some localities, it is time that something should be done to correct these shortcomings. The druggist who is derelict in this respect is like the proverbial suitor going into court with unclean hands; the hearing is against him, for whatever excuses he may offer, whether those who listen may say so or not, they will conclude on the face of the evidence that he is either wilfully negligent or actually dishonest.

Apparently the use of worn out weights is too glaringly common, and the average druggist forgets that constant use means wear, and when followed for a term of years, the effect is shown by a gradual lessening in size and weight of the metallic mass corresponding to the unit employed. This is an ever constant condition, and to keep balances and weights within the limit of negligible error requires frequent examinations and checking with standards of known accuracy. That druggists do not devote sufficient attention to their "instruments of precision," if scales and weights can be so-called, is shown by the report of an inspection in Washington recently by Department officials who found, the newspapers state, that 90 per cent. of the weights used in filling prescriptions were inaccurate. It is also stated that without exception the druggists themselves were unaware that their weights were faulty, the principal explanation given being that the weights had been used for years and had been considerably worn.

Again, in a recent bulletin published by the Food and Drug Department of the Kentucky Agricultural Experiment Station, the drug inspector states that weights and scale pans were found to be cleaned with alkaline powders and acids, and that many of the weights had been used by several generations of druggists. "Fully 50 per cent. were without adequate metric weights and measures for compounding U. S. P. and N. F. remedies, while 18 per cent. were without a copy of the U. S. Pharmacopoeia." Such findings are repugnant to all true pharmacists, and it is refreshing to observe that these professional shortcomings are somewhat guarded against in some States by board of pharmacy regulations which require that every drug store must be provided with a copy each of the Pharmacopoeia and National Formulary, a provision which, for the druggist's own good, should everywhere obtain.

The examples cited probably are not peculiar to the localities named, for occasional reports indicate that similar conditions exist in many stores. It is painful to admit that there are owners of drug stores who are trying to do business without a copy of the Pharmacopoeia at hand, but it is much more difficult to give a reasonable explanation of why a druggist should use inaccurate weights. Of course, the druggist who doesn't have a Pharmacopoeia is not likely to protect himself by using official tests,

while his use of inaccurate weights is not a very high tribute to professional ethics or commercial honesty. The druggist who allows these conditions to exist has only himself to blame.

TIME TO ELIMINATE ITINERANT PEDDLING

Many times in recent years pharmacists in the various states have endeavored to secure legislation that would effectively prohibit the indiscriminate peddling of remedial agents, but such agitation has not always accomplished what druggists have uniformly desired. Recent developments tend to show that such enactments are becoming more and more necessary. Newspaper reports have been current for several weeks that peddlers in various sections of the country have been selling court plaster infected with tetanus germs, supposedly prepared by enemies of this country. That there has been some foundation for these reports is confirmed by the Department of Justice, which recently issued a statement that some of the samples on analysis were found to contain such disease germs, and the public was straightway cautioned against purchasing any of this remedy except from approved sources, the warning being particularly directed against purchasing small packages from peddlers and vendors.

Court plaster is but one of a large number of remedial agents the peddler can easily handle, and if this experience serves to emphasize the dangers which beset the public health where such selling methods are allowed, it also brings with it the opportunity for the druggist to state his contention why indiscriminate vending in any remedial agents should be under legal control.

Itinerant peddling has always been a thorn in the flesh of legitimate druggists, as it forced them to meet a kind of competition that was unfair, for the gentry who pursued such a calling were not licensed as pharmacists; they were not under the supervision or control of those whose duty it is to see that such products are up to standard, while the expense of the peddler in doing business his way was never great and usually, negligible. On the other hand, the legitimate druggist in the practice of his profession, has always had heavy expenses to meet. He had a fixed place of business, and the quality of his goods could be determined. If his preparations were not up to standard, the authorities had a licensed individual to deal with and one whose responsibilities were more or less valid. Not all legislators could be made to see these facts, however.

But what is now more to the point, the court plaster experience tends to bring home the fact that the selling of medicines by itinerant and unknown peddlers constitutes a real menace to the public health. Such evidence is worth tons of argument, and the time is ripe for the enactment of precautionary measures that will effectively prohibit the sales of medicines by unlicensed vendors. Such legislation would be immensely more effective in its results than could ever be obtained by advising the public to abstain from buying medicines of peddlers.

Should Patent Law Discriminate Against Chemical and Medical Discoveries? *

By CHARLES M. WOODRUFF, of the Detroit Bar

A PATENT has been defined as a contract by which the government secures to the patentee the exclusive right to vend and use his invention for a few years, in consideration of the fact that he has perfected and described it and has granted its use to the public forever after.

In harmony with constitutional provision we now have a patent law which gives ample protection and therefore incentive to American research workers in the field of chemistry, medicine, and pharmacy. And what sciences deserve more encouragement than these, affecting as they do the health and lives of our people?

It therefore seems remarkable to the lawyer, and even to the intelligent layman, that a movement is actually on foot to deprive those who, above all others, should have the effectual protection of our patent

laws, and to single them out as unworthy of the reward granted to inventors in other fields of discovery. That such a bill as the Paige Bill has been introduced and seriously considered seems unexplainable.

What Mr. Paige Proposes

The Paige Bill provides that no patent shall be granted "upon any drug, medicine, medicinal chemical, coal-tar dyes, or colors or dyes obtained from alizarin, anthracene, carbazol, and indigo, except in so far as the same relates to a definite process for the preparation of said drug, etc." In other words, Mr. Paige proposes to grant a "process" but not a "product" patent.

To those who have some knowledge of medical and pharmaceutical history the matter is not so astonishing, and two explanations appear:

1. Medico-pharmaceutical prejudice founded on tradition.
2. The exploitation of the American public by German chemical concerns.

Treating of these in the order given, we are brought to remember that until very recent times the physician could not recover for his services upon an implied contract. He was supposed to be practicing from a higher motive than the despised tradesman. Doctors who did not have independent sources of income depended upon honorariums from patients who were grateful enough and able enough to give them. If it was a goose from a peasant or a crown from a gentleman, it was all the same. This custom worked out poorly for both the public and the profession, and so, like a great many rules of the early common law, it was changed when a courageous judge, defying precedent, declared that the laborer was worthy of his hire—in other words, that a professional man, in the absence of an express agreement, was entitled to recover what his services were proved to be reasonably worth.

For the same reason that a doctor could not recover for his services on a *quantum meruit*, he did not seek compensation of any kind for any discovery he might chance to make. This, however, was merely a matter of ethics and never a rule of law. What was a rule of ethics with respect to the relation between a physician and his patient was formerly also a rule of law, it is true; but the law changed because it was not just, and we now find

the most ethical physician sending out his bills periodically, entirely satisfied with the new order of things.

He is not so quick, however, in abandoning the companion rule of ethics respecting medical and pharmaceutical discoveries. On the contrary, he would enforce his ethical tenets upon his fellows by a severe rule of positive law.

In this the physician is the successor of the religious zealot who sought to make the world believe as he believed, by the power of the State, the result being that it took centuries of religious wars for control of the State to demonstrate that both the State and religion would best prosper by absolute separation.

When we look at the matter from the broader viewpoint of political economy and weigh it in the scales of jurisprudence—which is the formal science of positive law—the ethical reasons advanced in favor of the Paige Bill appear narrow and without weight.

German Exploitation

The other explanation needs only to be referred to. We all know how the German houses have exploited America during the last twenty-five or thirty years. It is proposed to punish them by robbing the American chemist of every possible incentive to discover new products, and to encourage him to confine his efforts to inventing new processes for old products. This is the same wisdom the pet bear displayed which, desiring to relieve his sleeping master from the annoyance of a buzzing fly upon the master's bald pate, brought his huge paw down upon the fly and the master's head with such force that his master slumbered ever after.

Improvements in processes are desirable, of course, they are being made continually, but they are not being patented except in connection with new products, and this of necessity. We have in mind a new process for producing a certain well-known substance which reduces the cost of production one-half, but it is not patented, and never will be. The owner prefers to run the risk of being able to keep the process a secret rather than the risk of having it divulged in the specifications of a patent and being able to prove an infringement. And this is the case with thousands of private processes used in our laboratories.

But the public is not crying for new chemical and pharmaceutical processes. It wants new products. Our research laboratories are not maintained to invent new processes, but new products, and where is the reward for the initiative and enterprise of the manufacturers who are spending immense sums in salaries to research workers, in apparatus and supplies, if product patents are not granted?

If such a measure as the Paige Bill becomes a law new products may be discovered, but the processes of making them will be kept secret and in more than one case the secret will be buried in the grave of the inventor. We have personal knowledge of just such an instance in the varnish trade.

More recently the advocates of the Paige Bill have acknowledged the force of the objection that a patent on the chemical process is practically worthless, and point out that our patent law should be amended so that one charged with infringement of a process patent must bear the burden of proof and actually demonstrate his ability to produce the product by some other process—probably a new process he has invented and upon which he is entitled to a patent. We are reminded that this is the German law.

Is that not all very incongruous? Think of it a moment. Remember that America is not Germany, nor her institutions our institutions, and then you will appreciate the fact that this proposition involves a political revolution.



CHARLES M. WOODRUFF

* Abstracted from a Paper read before the Indianapolis Branch of the A. Ph. A.

Fundamentally Wrong

In America innocence is presumed until guilt is shown. Shall Congress be expected to do the injustice of first depriving an important class of inventors of earned reward for their inventions, and then right the injustice by establishing a principle that is recognized in all free countries as fundamentally wrong? The presumption of innocence is one of the sacred rights for the preservation of which our forefathers fought.

Again. If a man has discovered a new process he has the natural right to keep that process secret. The law recognizes and enforces that right; and yet the advocates of the Paige Bill submit a plan to correct the wrong the bill effects that involves the injustice of compelling another to disclose a trade secret, as the alternative of being adjudged to have infringed a process patent. We modestly submit to the distinguished pharmaceutical jurist who suggested that adoption of German law into American jurisprudence that this might be held to be a violation of the fourteenth amendment to the constitution of the United States, in that it was a deprivation of property without due process of law.

Let us emphasize the statement that a chemical process patent is practically worthless, and the fact that this is admitted by the advocates of the Paige Bill; have we not shown that the method they propose for making a process patent valuable is not possible under our system of government?

The Paige Bill itself is un-American in that it discriminates. The spirit of our institutions demands that our patent laws shall treat all inventors alike. Any bill that has the effect of giving a man who discovers a new toy, or a new face powder, or a new dog collar a patent on the article itself, while it denies one to the man who may discover a substance that will be to cancer what antitoxin is to diphtheria—such a bill not only violates the foundation principle of equality before the law, but is supremely ridiculous.

Patent is a Contract

But we are reminded at this point that we must forget the individual and remember the public. The answer may well be that whatever is unjust to the individual is injurious to the public. The sincerity of some who make this suggestion may also be questioned; but neither the sincerity nor insincerity of an advocate has anything to do with the merits of any proposition. The patent law is in the interest of the public. We have read that the patent is a contract by which the public buys the free use of the patent forever, in consideration of a monopoly for a few years.

The constitution delegates to congress the power to "promote the progress of science and useful arts."

How?

"By securing for limited times to authors and inventors—"

What?

"—the exclusive right to their respective—"

Processes only?

No, indeed! "—writings and discoveries."

Discovery is an exclusive word. It may be a process and it may be a product. There is no warrant in the constitution for discrimination between processes and products, and the public owes to-day all that it enjoys over and above what they enjoyed in their day to the members of the Constitutional Convention of 1787, whose wisdom and foresight gave congress the power to grant patents for products, as well as for processes.

Lest we may be accused of generalization let us give one concrete reason why the trade and the public are both benefited by the product patent as applied to medicine. We all know how concerned the originator of a new therapeutic agent is to preserve the quality of his product. He has spent a moderate fortune in preliminary laboratory and clinical research the results of which convince him of his duty to lay it before the profession; he is interested in its success, and therefore, naturally in the quality of every lot he puts out. With him quality is the first consideration. He has a scientific pride in the substance.

Supposing the substance is not patented, when do competitors think of entering the field?

Not until the harvest is ripe; and the only concern of any one who is dishonorable enough to undertake to reap

such a harvest is to get in all of the crop he possibly can.

Quality? That's nothing. He'll overcome the advantage an originator naturally has by prices. Prices are cut; dealers' profits are reduced; and the outcome of the whole matter is that the originator is wronged morally, if not legally. The reputation the genuine product has gained is destroyed by inferior quality of competing brands. The trade loses the just profits the originator can no longer maintain, and the accumulated burden of moral injustice finally rests upon the shoulders of the public.

In the name of equal right and common justice we therefore submit that product patents should not be denied inventors in the field of chemistry, medicine, pharmacy, and surgery.

DEFINING THE NARCOTIC LAW

Merton E. Lewis, Attorney General of the State of New York, has just handed down two opinions regarding the New York Narcotic law, copies of which have been sent to members of the American Association of Pharmaceutical Chemists.

The first communication from Mr. Lewis, addressed to Dr. Matthias Nicholl, Jr., Deputy Commissioner of Health, follows:

"Section 247 of the Public Health law, the habit-forming drugs, of this year, provides:

"The provisions of this section shall not prohibit the sale of drugs enumerated in section two hundred and forty-five of this chapter to persons registered under the laws of the United States and residing outside the State of New York.

"A letter from Charles Wesley Dunn, dated June 30, 1917, addressed to Joseph A. Warren, which you submit to me, contains the following interpretation of the above provision:

"As I read this section, pursuant to its express provisions, and having in mind the jurisdictional limitations of a State law, it seems that when a dealer in his State receives an order from a buyer in another State, the buyer being registered under the Federal narcotic law, that no official State order form is necessary to authorize the transaction. Conversely, when a buyer in New York State orders narcotics from a seller in another State, the seller being registered under the Federal narcotic law, an official State order form is not required. Such transaction would be evidenced by the official order forms under the Federal narcotic law, which must be preserved, both by buyer and seller, and which are available for the inspection of the State authorities as well as the national authorities.

"I should say that Mr. Dunn was correct when the seller is in New York State and the buyer outside the State, but the converse is not provided for by the statute, and I do not think follows from anything appearing therein. Upon what theory the statute has been drafted to cover the one instance and not the other, I am not aware, nor is it necessary at this time to enter upon a discussion of the exercise of State and Federal powers relative to the sale of habit-forming drugs."

Here is Mr. Lewis' second letter:

"With reference to the instance cited by Charles Wesley Dunn in his recent letter of July 10, wherein a manufacturer uses an opium solution in the manufacture of a preparation for external use containing an amount of the drug within the minimum quantity specified in Section 245 of the Public Health Law, I would say, in accord with our advice of July 5, that if the manufacturer is a manufacturing pharmacist he is entitled to obtain the drugs upon the official order blanks. He is not, however, under the statute as now drafted, engaged 'in the sale or distribution of the drugs' (Section 247), or engaged in the business of dispensing narcotics, (Section 247-a), as outlined by the statute, and therefore is not obliged to file an inventory of drugs on hand.

"Perhaps this should be corrected by further legislation."

UNIVERSITY OF CALIFORNIA

A course in first aid and military hygiene was recently established in the California College of Pharmacy. The importance of such work was presented to the students by General Evans, also General Woodruff, both of the U. S. Army. Captain Mudd gave demonstrations before the students, aided by a sergeant and privates in the Hospital Service. Dean Frank T. Green reported that 41 students and graduates were serving in the medical department of the military service. The next regular session will open September 1, 1917.

Purified Wool Fat and Its Preparation

By O. B. SALISBURY, Ph.G.

THE wholesale price of hydrous and anhydrous wool fat has varied greatly since the U. S. patent No. 271,192 dated Jan. 23, 1883, was granted to Brown & Liebreich. The product was first put on the market under the name of "Liebreich Lanoline" by the Lanoline Works, Martinikenfelde, near Berlin, Germany, in 1885 and soon exported into the U. S. to sell at 75 to 85 cents per pound. At the expiration of the U. S. patent in 1900, the Pharmacopoeia made the anhydrous and hydrous wool fat official under the name of *Adeps Lanae* and *Adeps Lanae Hydrosus*. About this time Merck & Co. imported "lanum," or hydrous wool fat, from the *Nordeutsche Woll-Krennere und Kammgarn-spinnere*, Bremen, Germany, to sell at 40 to 45 cents per pound. At the same time Evans & Sons exported British hydrous and anhydrous wool fat from England to sell at 40 to 45 cents per pound for the former, and 45 to 50 cents for the latter. From 1909 to 1912 Merck's "lanum" declined to 20 cents per pound, while British hydrous wool fat sold at 35 cents and the anhydrous at 45 cents per pound. From 1912, to Jan. 1915 Merck's product advanced gradually to 30 to 35 cents per pound. Owing to the British blockade of Germany during the year and the scarcity of spot supplies, the wholesale price of all brands advanced until December 1915 when \$1.65 per pound for the hydrous and \$2.15 for the anhydrous was reached. Since that time wholesalers have been supplied with a satisfactory product by the North Star Woolen Mills Co., Minneapolis, Minn., and other woolen spinning mills at 70 cents for the hydrous and \$1.00 for anhydrous per pound.

The new products, hydrous and anhydrous eucerin, introduced by R. G. Unna and imported by Lehn & Fink in 1912 from P. Biersdorf & Co., Hamburg, Germany, stood at 75c per pound till the supply gave out in Jan., 1916. In the year ending June 30, 1914 there were imported 94,477 pounds of lanolin valued at \$9,622, the rate of duty being 1 cent a pound. The imported refined wool grease amounted to 2,691,591 pounds, with a value of \$121,847 and a duty of a half cent a pound. The crude wool grease amounted to 12,284,248 pounds with a value of \$292,988, and a duty of $\frac{1}{4}$ cent a pound. All the purified fat is retailed by druggists alone or mixed in ointments, creams, or super-fatted soaps for the skin. The most of the crude wool grease is distilled for the fatty acids for oiling wool, and for the candle and soap industries.

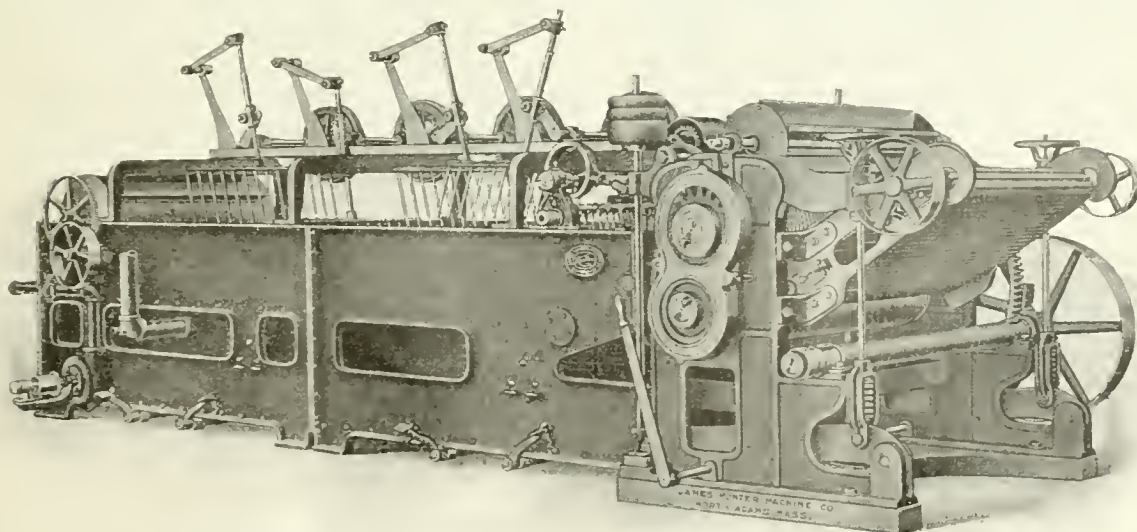
Washing the Wool

The imports of raw wool entered for consumption for the year ending June 30, 1917 were about 350,000,000 lbs.

This amount, added to the domestic clip of 288,490,000 pounds for the season, gives a total of more than 638,490,000 pounds. To wash this enormous amount, a wool washing machine is needed to save time. The form of machine preferred by American woolen mills is a long bowl, 16, 24, or 32 ft long by 3 or 4 ft. wide, equipped with the parallel or crosswise rakes. Usually three to five washing machines are arranged in a row and connected with pipes. Each bowl is partly filled with water and heated by steam to a temperature of 140° F. Now six gallons of liquid potash soap, mixed with a strengthening amount of soda ash and liquor ammonia, or fatty acid, is added to the first tank. Next three gallons of liquid potash soap and a smaller amount of soda ash and liquor ammonia is added to the second tank. Then the wool is fed into one end of the machine by an automatic feed which carries it to the first bowl of the row, where it is immersed by a rotary ducker and drawn through the soapy water by rakes to the other end. There the wool is drawn up the inclined bottom by the carrier to the squeeze rolls and passing between the same, falls on the doffer apron. The movable apron delivers the wool to the second bowl of soapy water, then successively to the third, fourth, and fifth bowl containing pure water, when it falls from the last apron into trucks ready for the drying and burring machines. All the soapy water squeezed by the rolls is collected in a tank beneath and returned to the feed end of the same bowl. The most of the dirt falls through the holes in the bottom of the first and second bowls, while the emulsified grease and potash of the wool remain in the soapy water. When the soapy liquid gets about 3 per cent of fat in the first bowl, and 1 per cent in the second bowl, it is run into a large settling tank for some of the dirt to settle, such as sand and excreta. A higher percentage will cause a retention of the dirt in the fat and fat in the settled dirt. It is held at a temperature of 140° to 200° F. to prevent the growth of bacteria, separation of the emulsion, and manure odor. Lastly, the rinsing water in the third, fourth and fifth bowls is discarded or pumped into the first, second and third bowls and filled for the next operations.

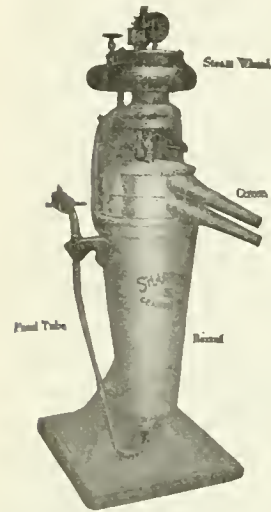
Centrifugal Process

The neutral wool fat is recovered under the expired patent to Braun and Liebreich as follows: After six to twelve hours the warm, fresh, undecomposed liquor in the large settling, is run through the feed tub at a certain rate into the bottom of a Sharpless centrifugal machine, then into a tubular shaped bowl revolving at a speed of



Modern Model Wool Washer with Fork Rake and 48 inch by 16 foot Bowl.

twenty thousand revolutions per minute. It instantly revolves at the same speed as the wings on the inside of the bowl, causing the flow upwards where separation takes place. The dirt is deposited against the wall of the bowl while the two liquids flow up together, the wool fat with



Super-Centrifuge Used in Wool Fat Recovery.

about 5 to 20 per cent of water in the center, and the soapy water containing the natural potash of the wool at the outside column when they enter the upper and lower cover. From the lower cover the fat is discharged into buckets then dumped into a small tank for the final purification. The soapy liquid from the upper cover is conveyed through a tube to a large tank for the final treatment. One centrifugal machine should never handle more than twenty-eight thousand pounds of liquor per day, and never less than seven hundred pounds per hour.

A process for the concentration of wool scouring liquors and the recovering of grease and alkaline salts is covered by U. S. patent No. 1,170,962, dated Feb. 8, 1916, the object of the inventors being to save soap and

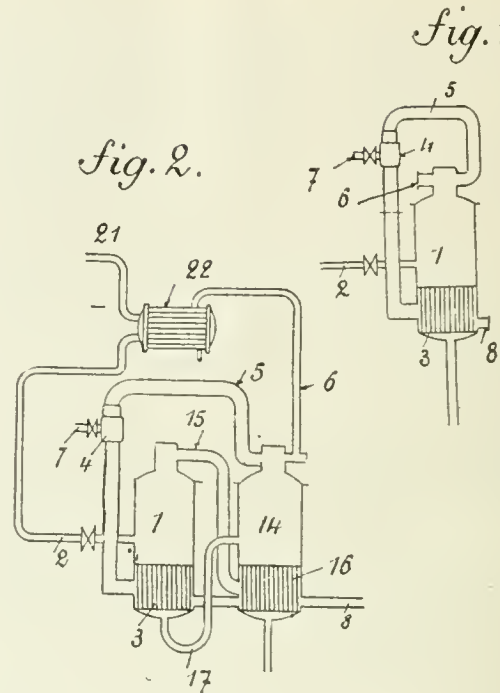
other scouring detergents, the pollution of river water and acid after the first separation. They take the foul liquid from the scouring machine and first separate the sand by settlement and remove the fibre by screening. The affluent is heated to a temperature of about 200° F. to prevent bacterial decomposition and the heated mixture conveyed to a centrifugal machine to separate the grease scouring liquor and dirt. This soapy liquor, freed from surplus grease and in a suitable condition for re-use, is conveyed back to the first scouring machine after each separation until thick and viscous with sufficient soap and added soda to make it fit for use. After the final separation the cleared liquid is incinerated in any suitable type of incinerator to remove the potash and soda in a dry state. When the scouring liquor is too strong with alkaline salts and not suitable for incineration, it is subjected to the action of any suitable reagent, as washed flue gases to effect carbonization.

Evaporation

A process for the evaporation of wool scouring liquors and the recovery of alkaline salts is covered by British patent No. 15,131, dated July 9, 1898. The effluent soap liquor from the large settling tank is passed to a multiple vacuum concentrator to reduce the original volume to one-tenth to one-twentieth of its bulk. About 80 per cent of the evaporated water is also recovered by condensation. The concentrated thick liquor is then heated almost to the boiling point and passed through a centrifugal machine to separate the wool grease, scouring liquor, and dirt. Then the scouring liquor is again concentrated and conveyed to a cylindrical revolving incinerator to recover the potash and soda. The soft distilled water, although slightly greasy, may be used for wool washing, thereby saving from 20 to 30 per cent of soap. For some reason this process has been discontinued by the inventors.

A process for the evaporation of wool washing liquors and the recovery of alkaline salts and fatty acids is covered by French patent No. 475,639, dated Mar. 9, 1914, (Figures 1 and 2). The wool washing liquor is run through pipes 2 and 17 to one or more concentrators (1 and 14), according to the quantity for evaporation. It is heated in chambers 3 and 16 to a temperature above the melting points of the fat, by steam at 103° C. coming, for example, from a compressor 4 (Fr. Pat. No. 380,419, dated Oct. 5, 1906) through pipe 7 and the concentrator 1 through pipe 15. The steam given off in the concentration is passed through pipe 5 to a compressor, while the surplus steam is carried through pipe 6 to a reheater (22).

At the same time the distilled water passes through pipe 8 to the wool washing bowls for the saving of soap. The concentrated soapy liquid is passed through a centrifuge



Chambers for Recovering Alkaline Salts and Fatty Acids.

to separate the dirt, such as sand, feces, and wool fiber. To prevent the retention of odor by the fat the dirt may be separated before evaporation with a centrifuge and run through pipe 21 to the reheater 22, then to pipe 2. The fatty liquid is passed to another centrifuge to separate the wool fat from the soapy liquid. This liquid is pumped into a mixer. Here it is decomposed by carbon dioxide under pressure with heat and agitation, according to French patent No. 475,550, dated Mar. 3, 1914. All the fatty acids are then collected in a receiver and the liquid returned to the scouring bowl or calcined in a revolving incinerator to recover the potash and soda.

Purification

The crude wool fat as obtained by the original inventors, is thoroughly kneaded with suitable machinery in cold flowing water until the water becomes clear. Then it is heated with water, allowed to separate and the fat skimmed off. For further purification, the fat can be treated in the centrifugal machine in a melted condition, or it can be dissolved in ether, ethylated or methylated spirits, or other solvent, and the solution separated from the residue by filtration or other means. The solvents can be removed from the barrel or outside portion and the dirt dumped out for further treatment. Then the wool fat is again passed through the centrifuge to separate the translucent fat from the remaining 5 to 20 per cent of soap water and dirt. The pure fat is discharged into barrels for the wholesaler, otherwise the affluent is treated with chloride of calcium, the fat separated and dehydrated by fusing in the presence of unslacked lime. The fatty acids vary between 1 and 2½ per cent. On cooling, the fat is translucent, tenacious, and possesses a slight peculiar odor which is readily disguised by perfume. To prepare the hydrous wool fat, or lanolin of the U. S. P., it is thoroughly kneaded or triturated with not more than 30 per cent of distilled water for a considerable time, becoming yellowish-white in color.

The soapy liquor and the dirt from the first and second runs of the centrifuge are usually thrown away. If it is desired to free the water of soap and less than 0.1 per cent of wool fat, the liquor can be acidulated with a trace of sulphuric acid, then passed again through the centri-

fuge. The separated fat or degreas is solidified in a press and barreled for the soap maker. The soapy water discharged from the centrifuge is run into the river or calcined in a revolving incinerator to recover the potash and soda. On account of the nitrogen in the dirt from the large settling tank and the centrifugal separator, this product is often sold for manurial purposes.

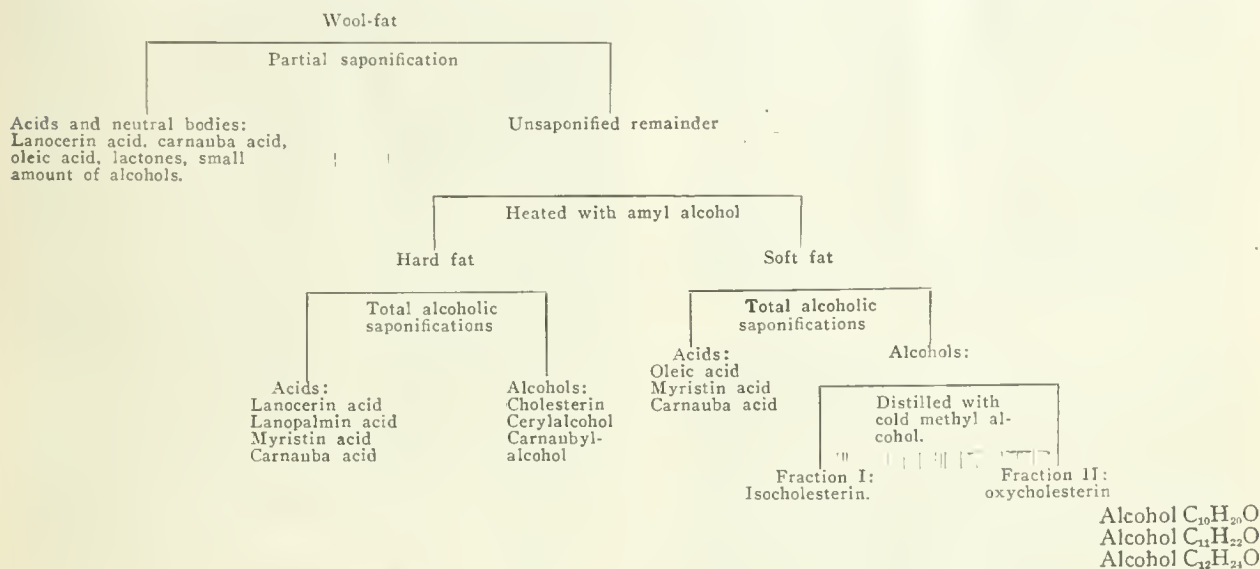
Instead of producing purified wool fat from wool washing water the purified product may be obtained from commercial wool fat by stirring this fat with water containing carbonate of soda or caustic soda or any alkali, or a mixture of these, to form a thin milky solution. This solution is passed through the centrifugal machine and purified in the manner described above.

The composition of purified wool fat or adeps lanæ of the Pharmacopoeia, particularly its most important constituents, the iso- and oxycholesterin group of free alcohols, is shown as follows:

portion of all the acids and alcohols is given by Lewkowitsch as follows:

Volatile acids	1.26 per cent
Insoluble free fatty acids.....	20.22 " "
Uncombined alcohols	6.21 " "
Neutral esters	72.31 " "

The occurrence of volatile acids appears to be due to secondary reactions. The free fatty acids consist chiefly of acids occurring naturally in the wool grease; the remainder is derived from the fatty acids liberated by the decomposition of the waste soaps. The neutral esters are formed by the combined fatty acids (about 45.26 per cent) and the rest of the alcohols (about 27.05 per cent). Sebum contains water, palmitin, olein, palmitic and oleic acids, saponified fats, cholesterol, a casein-like albumenoid, and inorganic salts, such as phosphates and chlorides. To favor the secretion of the skin, certain fats or oils are essential. By the addition of a small percentage of the



Dermstedter, Lifschuetz, and Marchetti have each isolated one of the so-called oxycholesterin alcohols. All the unsaturated alcohols are colorless and odorless powders. To the group of isocholesterin $C_{12}H_{24}O$ and oxycholesterin alcohol belongs the water-absorbing property of wool fat which according to Lifschuetz (*Drug Cir.* July, 1912), diminishes with the degree of purification. It is only contained to about 6.21 per cent in the crude fat. The pro-

solid fat or the iso- and oxycholesterin alcohols, we can combine any fat with an amount of water up to 300 per cent and even more. Normally, wool fat absorbs 200 per cent. Five parts of the iso- and oxycholesterin alcohols or eucerin wax, melted with 95 parts of petrolatum and a certain quantity of distilled water form hydrous eucerin. This ointment is white, odorless, and tenacious, with a bitterish taste.

BOOKS REVIEWED

YEAR BOOK OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 1915. Volume 4, containing the 58th annual report of the progress of pharmacy, and the constitution, by-laws and roll of membership. 8 vo., 541 pages. Cloth. Chicago. Published by the association.

The 58th annual report of the reporter of the progress of pharmacy for the year 1915 appearing in this volume, which corresponds to Volume 63 of the former Proceedings of the American Pharmaceutical Association, is the joint effort of Prof. Henry V. Army, elected reporter at the last meeting of the association, and his predecessor, Prof. J. A. Koch, of Pittsburgh, assisted by various collaborators. Notwithstanding the extraordinary conditions brought about by the war and with which they have had to contend, especially in the lack of accustomed sources of information, as in the failure to receive foreign journals, etc., the average pharmacist will find collated here a vast quantity of material of direct interest to the worker in pharmacy. The value of this information lies in the fact that it is directly available and saves an immense amount of labor in searching pharmaceutical literature. To many members of the association, this alone will appear as sufficient reason why the Year Book should be continued.

MANUAL FOR THE MEDICAL DEPARTMENT, UNITED STATES ARMY, 1916. Corrected to April 15, 1917 (changes Nos. 1 and 2). 8 vo., 395 pages, cloth. Washington. Government Printing Office, 1917.

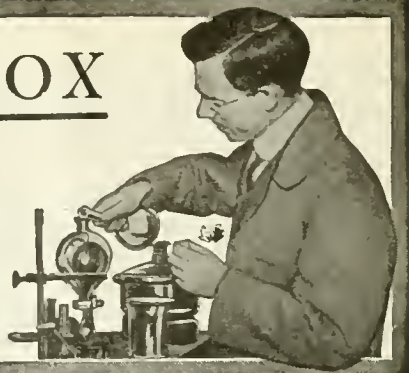
This Manual from the Office of the Surgeon General and published as War Department Document No. 504, is for the information and government of the regular army and organized militia of the United States, but the regulations therein set forth are only a part of the general body of regulations with which the medical officer must acquaint himself. The subject matter is presented under three headings as Part I, General Medical Administration, which covers such subjects as the Medical Department, its organization and personnel, education and training, sanitation, hospital and medical attendance, duties of medical officers, physical examinations, records and reports, supplies and materials; etc., Part II, The Sanitary Service in War, and Part III, Supply Tables, which show the various medicines, antiseptics, and disinfectants that may be requisitioned to supply posts having an official population of 100 up to 1000; dental supply tables, as well as supplies for the medical department under actual field conditions. All of this is most interesting at the present time as showing the possibilities of medical service and what the military surgeon may have to contend with on the field of battle.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



A Mixture of Incompatibles

(H. B.)—"The other day I received the enclosed prescription to be filled. Afterwards I heard a complaint from the doctor that a brown precipitate had formed which he did not understand, and which he said should not be there, for he had had the prescription filled at other pharmacies and had never noticed a precipitate. Is there any way in which the precipitation can be prevented?"

The prescription is as follows:

Corrosive chloride of mercury.....	¼ grain
Podophyllin	1 grain
Solution of potassium arsenite.....	12 drops
Quinine sulphate	30 grains
Ferrous carbonate	20 grains
Aromatic elixir, enough to make.....	4 ounces

Mix and make a solution. Two teaspoonfuls three times a day.

A more incompatible prescription could hardly be written, and there is no method of compounding that will enable the dispenser to make a clear solution. A number of reactions are likely to occur, depending somewhat upon the order of procedure. Corrosive chloride of mercury is converted into mercuric oxychloride when brought in contact with solution of potassium arsenite, the reaction being due to the potassium carbonate in the solution. According to Ruddiman, under certain circumstances, mercuric arsenite is formed and dissolved in a solution of potassium arsenite. Corrosive chloride of mercury is also incompatible with ferrous carbonate and quinine sulphate, while solution of potassium arsenite is incompatible also with ferrous carbonate and quinine sulphate. Just what the prescriber means by ferrous carbonate, without other qualification, is somewhat indefinite. True ferrous carbonate remains so but a very short time, and almost always contains more or less ferric hydroxide, neither of which are soluble in the prescribed elixir. The brown precipitate reported is due to the deposition of this iron compound of itself somewhat suggestive of the well-known arsenic antidote, to say nothing of the mercury or quinine that may be carried down with it.

Decomposition of Calomel

(S. L. B.)—In further reply to your query, page 217, July ERA, a correspondent writes as follows concerning the reactions likely to occur in the following prescription:

Calomel	2 grains
Sodium bicarbonate	2 grains
Powdered rhubarb	1 grain
Powdered pepsin	1 grain
Powdered aloin	1-6 grain
Resin of podophyllin.....	1-6 grain

"In your comments on this prescription, I think you were exactly right about the moisture being the cause of the trouble. I made up 31 different mixtures, taking all the ingredients, with calomel one at a time, two at a time, three at a time, and so on, until I had all six ingredients in. They were weighed off in the proportions given in the formula, using grammes instead of grains, and well ground up, then placed in tightly stoppered bottles for three weeks or more. At the end of that time there was absolutely no change; the powders were not even caked. I then added a couple of cc. of water to each bottle. After about 10 days, mirrors of mercury appeared in all the bottles containing *rhubarb*, no matter what other constituents were present or absent,

in addition to the calomel. In three, however, which contained no sodium bicarbonate, it was a little doubtful whether a mirror was actually formed, but after letting the bottles stand eight days more, these three also developed distinct mirrors, and globules of mercury were plainly visible under the microscope. Evidently the trouble was due to something in the *rhubarb*, probably in conjunction with the alkaline condition caused by the soda, which is favorable to reduction. I tried out two of the principal constituents of *rhubarb*, with calomel and soda; namely, tannic acid, and oxalates, and found that after ten days tannic acid caused a great deal of reduction of calomel to metallic mercury, while oxalates did not affect calomel. I have not tried the action of chrysophanic acid, the laxative constituent of *rhubarb*, as I cannot get any of this substance. (The so-called "medicinal chrysophanic acid" is not chrysophanic acid at all, but chrysarobin, a reduction product of the former, and in all probability a strong reducing agent, but not a constituent of *rhubarb*.) However, as true chrysophanic acid is a highly oxidized substance, I do not believe it would have much reducing action, so that the true cause of the trouble with the capsules seems to be tannic acid in conjunction with moisture, introduced either by faulty handling, or through poor fitting of the capsules. The formula might be improved by dropping the *rhubarb*, which would not be missed, I should say, among so many other similar drugs.

"I have given this account in some detail, so that you might see the "red string" running through the argument, which I could probably not have brought out as well by a shorter statement. Perhaps similar cases may arise in your queries, and the information may be of future use. I cannot find any statement about the effect of tannic acid on calomel in the literature, at least so far as the reduction to metallic mercury goes, so that this interesting fact must be added to the long list of incompatibilities."

We thank our correspondent for the practical manner in which he has worked out his conclusions, the reactions reported being just what might be expected from theoretical considerations.

Dissolving Rosin in Essential Oil

(Ignorance)—"Please publish in your next issue a good and quick method for dissolving rosin in an essential oil, 5-gallon lots?"

Beyond the fact that rosin is stated by the Pharmacopoeia and other standard works to be freely soluble in volatile oils, nothing is said relating to the production of such solutions in lots of any particular quantities. Of course, in making a solution, something would depend upon the grade of rosin employed, as some grades contain a considerable portion of water, the variation in transparency of different lots depending somewhat on the presence of the water, as also upon the thoroughness of the distillation in making the rosin. Hard rosin is very dark in color and is obtained from the scrapings after the crude turpentine has become too thick to run into the "box." The presence of water in the rosin would interfere somewhat with the rapid solubility of the rosin in the oil, and these facts should be remembered when considering the statement of the Pharmacopoeia, the official definition calling for rosin in "translucent, amber-colored fragments." In the absence of specific information on this point we would suggest that you experiment with a small quantity, first powdering the rosin, then transferring it to a container and

adding the desired essential oil. The container should be perfectly dry inside before introducing the rosin, and provided with a stopper so that the mixture can be frequently agitated to assist the liquefying action of the solvent. A record should be kept of the proportions employed as a basis for making solutions of these substances on a larger scale. If any reader of the Era has any definite information on this subject, we should be glad to have him send it to the Question Box Editor for publication in this department. The kind of essential oil is not given in the query, and for that matter, the Pharmacopoeia is no more specific, for it merely states that rosin "is freely soluble in alcohol, * * * * fixed or volatile oils."

Haarlem Oil: Compound Oil of Origanum

(Querist)—Regarding the constitution of the first-named, a note published in the Laboratory Reports of Lehn & Fink, of New York, (1913), stated "the fact that Haarlem oil is essentially a sulphurated linseed oil with turpentine oil, while fully recognized abroad, is disputed here. Three prominent brands, typical, if not of Haarlem oil, then of what is offered for sale in this country as Haarlem oil, have been examined. Summarized, the analytical data indicate that sample No. 1 consisted of sulphurated oil and oil of turpentine, while samples No. 2 and 3 consisted of sulphurated oil, oil of turpentine and crude oil of amber, the last named being present in greater proportion in No. 3 than in No. 2."

MacEwan ("Pharmaceutical Formulas," London, 1911) states that it "is impossible to say what the true Haarlem oil is composed of." After discussing the statements of various writers on the subject, he gives the following translation of directions for making the preparation followed in Denmark and Holland; Mix in an iron vessel large enough to allow some frothing 4 parts of linseed oil and 1 part of sulphur. Heat to a temperature of 165° C., stirring well all the time, until the mixture drops off the stirrer with a glassy appearance. Remove from the fire and add 15 parts (by weight) of oil of turpentine, and agitate until solution is complete or nearly so. Then filter. The liquid should be limpid and of a brownish-red color. Of the variant formulas given by MacEwan, the following is said to closely resemble the original:

- Balsam of sulphur.....1 ounce
- Oil of turpentine2 ounces
- Hnile de cade4 ounces

We know of no standard formula under the title "compound oil of origanum," but take it to be the name applied to one of the various mixtures of oil of origanum used in veterinary practice, for liniments, etc. Of the several types of these mixtures, the following are suggestive:

1

- Oil of origanum4 ounces
- Oil of rosemary4 ounces
- Oil of amber4 ounces
- Oil of hemlock4 ounces
- Oil of turpentine2 gallons
- Linseed oil3 gallons

Mix and color with anchusa root.

2

- Oil of turpentine32 ounces
- Sulphuric acid2 ounces
- Barbadoes tar16 ounces
- Whale oil64 ounces
- Oil of origanum.....2 ounces
- Oil of juniper wood.....1 ounce

Gradually add the sulphuric acid to the oil of turpentine, stirring constantly; when cold, add the other ingredients. The reaction between the sulphuric acid and turpentine is apt to be very violent, and only a very small quantity of the acid should be added at a time under constant stirring, the mixture being allowed to cool somewhat before adding more acid. The operation should be done outside the building so as to avoid any risk from explosion or fire from the heat developed. This formula has been published variously under the name of "oil of origanum compound," "oil of spike compound," etc., as a spavin and ringbone remedy, but just why it should take the name of either "origanum" or "spike" in the title is not apparent. According to the authorities, two kinds of origanum oil are now known commercially; the Trieste oil, of dark color

and high specific gravity; and the Smyrna oil, of lighter yellow color, has a peculiar agreeable, balsamic odor, and color, lower specific gravity; and a milder taste. The oil produced by distillation of *Origanum vulgare* is of yellowish or reddish-yellow color, has a peculiar agreeable, balsamic odor, and a warm and very pungent taste. It is stimulant and rubefacient, and is chiefly employed in the form of liniment. It is also known as oil of wild marjoram, some writers stating that but little of the true is met with in this country.

White Camphor Liniment

(V. D. Co.)—"White Liniment" is the synonym employed by many druggists for "Linimentum Album" of the National Formulary, but this formula contains no camphor. Neither can we find in any of the numerous reference works at our command a formula under the title "white camphor liniment," though a considerable number of formulas are extant for so-called "white liniment" containing camphor. Here are three from the Era Formulary:

Genuine White Oil Liniment

- Ammonium carbonate19 ounces
- Camphor20 ounces
- Oil of turpentine21 ounces
- Oil of origanum20 ounces
- Castile soap19 ounces
- Water, to make20 pints

Dissolve the castile soap in 1 gallon of water and the camphor in the turpentine. Mix. Dissolve the ammonium carbonate in 4 pints of water, add to the mixture, then add enough water to make 20 pints. Shake well.

White Liniment (Containing Camphor)

1

- White castile soap in shavings.....13 drams
- Ammonium carbonate2 ounces
- Ammonia water4 ounces
- Water60 ounces
- Camphor2 ounces
- Alcohol3 ounces
- Oil of turpentine13 ounces

Dissolve the soap in 3 pints of water, and the ammonium carbonate in the remaining 12 ounces of water and the ammonia water. Mix these two solutions. Then reduce the camphor to a thin paste with the alcohol and add in small portions to the soap mixture, agitating briskly after each addition. Then add the turpentine gradually, thoroughly incorporating after each addition and continuing until an emulsion-like mixture results.

2

- Oil of turpentine8 ounces
- Camphor½ ounce
- Yolks of two eggs
- Acetic acid1 ounce
- Tincture of arnica2 ounces
- Water, enough to make.....20 ounces

Dissolve the camphor in the oil of turpentine contained in a 40-ounce bottle, add the yolk of egg and 10 ounces of water; shake briskly. Then add, 2 ounces at a time, the remainder of the water previously mixed with acetic acid and tincture of arnica, shaking well after each addition.

The late Dr. W. C. Alpers, in a note on the characteristics of "white liniment" in general, stated (Era Formulary) that "under this name, which is very popular in England, a great number of liniments are sold. The formulas range from a plain mixture of ammonia water and olive oil to very complex mixtures resembling the acetic turpentine liniment of the National Formulary (Stokes' Liniment). Most of them are emulsions of oil of turpentine and eggs, to which acetic acid and aromatic oils are added. If no formula is given, 'Stokes Liniment' may be safely dispensed."

Paste or Tube Flavoring Extracts

(K. M. K.)—According to a report of the New Hampshire Board of Health, published a few years ago, one manufacturer's line of flavoring extracts on the market, put up in tubes, consists of a mixture of emulsion of the different flavoring principles with glycerin and what

appears to be gum tragacanth so as to form a paste. It is true that a heavy emulsion or paste can be made with most essential oils used for flavoring, especially if they are of the "terpeneless" or so-called soluble type of oils, by using gum tragacanth as the emulsifying agent, a formula recommended being one part of gum to 10 parts of oil, first putting the oil in a dry bottle, then adding the gum, shaking, and finally adding 72 parts of water and agitating vigorously. Water is then added to produce the desired volume or bulk.

For an imitation vanilla flavoring paste, the following formula has been published:

Vanillin	10 parts
Coumarin	1 part
Gum tragacanth	2 parts
Powdered sugar	2 parts
Glycerin,	
Water,	
Starch, of each, sufficient to make a paste.	

Triturate the vanillin and coumarin with the powdered sugar and glycerin, and add sufficient water to make a thick syrupy mixture. Dissolve the gum tragacanth in hot water after it has been softened in cold water for a few hours, evaporate the solution (if necessary) to a thick mucilage, add the vanillin mixture and stir in sufficient starch to make a paste of the desired consistency. The glycerin is used to keep the paste soft. For use in collapsible tubes.

A general method given by H. C. Bradford in the *Druggists Circular* in 1914, contains the following information: A half pound of good, clean gum tragacanth, though it need not be of the highest grade, especially as regards color, is soaked in a gallon of water for three or four days or until it becomes perfectly soft and has absorbed its maximum content of the liquid; the mass is now stirred and strained through a piece of gauze or cheesecloth. Four ounces of this softened gum, 12 ounces of glycerin, and the desired flavoring material are now to be thoroughly mixed, the oil to be added slowly, and triturated thoroughly in a mortar. To the quantity of softened gum just stated add 2 ounces of the oil of lemon, orange, cinnamon, clove, peppermint, wintergreen, or allspice. For nutmeg, 1 ounce, and for almond, ½ ounce of benzaldehyde free from both prussic acid and chlorine, will suffice, and the same is true of celery. For vanilla, the usual plan is to use vanillin and coumarin, in the proportions usually employed for any other extract, say 60 grains of the first and 20 of the second, and it will be found an excellent plan to dissolve these in just sufficient warm alcohol, and then mix the solution with the glycerin. This will insure the smoothness of the product. Mr. Bradford also states that heavy-bodied glucose makes a good base or vehicle for this type of extracts, but as it is usually too stiff to run out of a bottle or jar, it should be mixed with some glycerin. Some experimenting is necessary to produce an extract of just the type you desire.

For other suggestions, see the paper by E. L. Redfern, of the Iowa Dairy and Food Commission, in the May, 1916, *Journal of Industrial and Engineering Chemistry*, entitled "Analysis of Non-Alcoholic Lemon and Orange Extracts."

Bottle Capping Mixture

(S. L. B.)—"Kindly give me a formula for a bottle capping wax like the enclosed sample. Where I have trouble is with the color. I use a body:

White glue	4 ounces
Water	6 ounces
Glycerin	1 ounce
Zinc oxide	4 ounces

"This gives a good elastic wax, but when it comes to color, I am lost. I have tried different reds, but some fade and others turn plum color. What I want is a bright red?"

The usual pigments suggested for coloring gelatin capping mixtures, as the formula given will hardly be considered as a wax, are the aniline dyes, cochineal, vermilion, etc., while some of the cheap dark varieties are doubtless colored with Venetian red or other compounds. We take from our files the following formula which is recommended as producing about the type of capping mixture you describe:

Gelatin	4 ounces
Water	8 ounces
Dry white lead.....	3 ounces
Cochineal	q. s.
Glycerin	½ ounce

Mix according to art.

Still another serviceable mixture is the following:

Soft gelatin or good glue.....	3 parts
Glycerin	2 parts
Water	9 parts

Melt the gelatin in the water and then stir in the glycerin. Any coloring matter can be added, and the bottle necks should be free from grease. A second dip can be given if necessary, and the top can be stamped while soft with a slightly greased metal seal, or warm stereotype (slightly oiled), or an India rubber stamp. According to the author of this formula, the use of this mixture gives a perfect closing, and the top is easily pared off with a knife when the bottle is to be opened.

Another type of bottle capping material is recommended by F. G. Sauer in a foreign journal. The formula calls for crude rubber or gutta percha paper, 50; chloroform, 450; bronze powder, 150 to 300. Instead of bronze powder, other materials may be employed such as aluminum powder or red, green, blue, white, etc., pigments. The rubber is dissolved in the chloroform and the bronze powder added. After mixing the fluid, the tops of the bottles are dipped into it and, after removing, are rotated several times until the excess has dripped off. If the coat or rim is not smooth it may be made so with a sharp knife and the peelings redissolved to be used over again. The capping is absolutely air-tight.

THE SHORTAGE ON SYNTHETIC DRUGS

To facilitate the manufacture of synthetic drugs in this country and thus to relieve the shortage which has resulted from the war, the National Research Council has established a committee on synthetic drugs.

Professor Julius Stieglitz, head of the department of chemistry of the University of Chicago has accepted the chairmanship of this committee. As his associates, Professor Stieglitz has selected Professor M. Gomberg, of the University of Michigan, Dr. Roger Adams, of the University of Illinois and Dr. W. A. Puckner, secretary of the Council on Pharmacy and Chemistry.

A bill before Congress—the Adamson Bill—will make provisions for licensing manufacturers to prepare drugs now protected by patents controlled by enemy countries. The administration of the provisions of the bill will be in charge of the Federal Trade Commission and the new committee of the National Research Council is being organized with the special object of being prepared to put at the disposal of this Commission such scientific co-operation as the Commission may desire to ask for. To this end, the efforts of the committee will extend in two main directions. In the first place, to assemble reliable information as to which synthetic drugs are really hard to obtain or, if obtainable, are sold at an exorbitant price. In the second place, to organize research work, especially in universities, in part to assist manufacturers in working out the problems of the production, on a large scale, of synthetic drugs of a high degree of purity without great delay and, in part, to have preparations such as reagents which would not attract manufacturers, made in university laboratories, if necessary under licenses as is now being done in England.

In order that the committee may concern itself with those synthetic drugs, the manufacture of which is most urgent, it is requested that pharmacists send to W. A. Puckner, 535 North Dearborn Street, Chicago, a list of those important synthetics, which they have found it impossible or difficult to obtain, or for which an exorbitant price is charged. Manufacturers interested in the production of a given product are invited to communicate with J. Stieglitz, University of Chicago, Chicago.

At the recent examination of the Iowa Pharmacy Commission, 25 applicants for registration out of a class of 59 were successful, and were granted licenses to practice pharmacy in the State.

NEWS OF THE ASSOCIATIONS

HONOR MEMORY OF PROF. C. L. DIEHL

Business, banquets, and boat rides featured in the program of the fortieth annual convention of the Kentucky Pharmaceutical Association held at the Hotel Henry Waterson, Louisville, a large part of the opening day being devoted to a discussion of resolutions to be sent to Washington, protesting against the proposed two per cent. tax on medicines, applicable at the source, the sense of the meeting being that medicines should not be singled out for taxation when other articles, less necessary to human life, were permitted to go free. A resolution was directed to be forwarded to the War Department, suggesting that the Army follow the same system as that of the Navy in giving commissions to registered pharmacists who pass an examination for military service. The Stephens price maintenance bill was also approved.

President George H. Worland in his annual address scored the dispensing doctor, the mail order house, and the itinerant vendor as detrimental to the trade, urged co-operation of every branch of the trade during war time, and advised against heavy buying in any line where the prices are subject to rapid fluctuation. Addresses were made by Vernon Driskell, Leon Abraham and Leo Robinson, tribute being paid to the memory of Prof. C. Lewis Diehl and others who had died during the year. Prof. Oscar C. Dilly reported on conditions of the local drug market, stating that misbranding and adulteration of drugs was on the wane. Robert J. Frick discussed the Sunday closing law.

Officers were elected as follows: President, H. B. Montgomery, Caneyville; 1st vice-president, J. C. London, Ashland; secretary, J. W. Gayle, Frankfort; treasurer, J. V. Driskell, Carrollton. The place of next meeting is to be fixed by the executive committee.

At the closing session, Edward Bloomfield, attorney for the State Board of Pharmacy, warned the druggists against carelessness in dispensing narcotic prescriptions, and said that their only security lay in the most strict obedience to the Harrison law.

OHIO HAS 1,000 PAID MEMBERS

About 125 druggists and their families were in attendance at the 39th annual convention of the Ohio State Pharmaceutical Association, held at Cedar Point, Lake Erie, on July 10 to 13. President Selzer opened the meeting, Hon. Harry Dunn delivering the welcoming address. He was followed by Prof. Spease, Prof. J. H. Beal, Thomas H. Potts, Mr. Brokmeyer of the N. A. R. D., and Senators Harding and Deaton.

The treasurer reported a balance of about \$600 in his hands with all bills paid. The secretary reported that 263 members had been dropped for non-payment of dues; 160 members had been taken in, and that about 1000 members out of the total 1200 had paid up for the year. Cleveland led with the largest percentage of members or 18.5 per cent., while Cincinnati ranked second with 11.5 per cent. The percentage of paid up members is now greater than it has ever been, and a continued effort will be made to regain its former prestige of being the largest State association. The organization went on record to co-operate with the board of pharmacy in the enforcement of the pharmacy law.

Garfield March, of Bellefontaine, gave an interesting talk on the development of the camera business. He stated that he would rather have this side line than soda water, cigars or any other line for profit and clean sale. "Sell one camera a day," was the slogan in his store. Mr. Winter presented a short accounting method of keeping tab on stock. Following Mr. Brokmeyer's address, resolutions were adopted favoring the establishment of a pharmaceutical corps in the army and navy, and asking that pharmaceutical interests be represented in the Advisory Commission of National Defense. The association also resolved to afford such relief as may be possible to all of its members in carrying on their business who may be

drafted into the army or navy; it also decided to exempt the annual dues of those who may enter the army or navy, and to hold a mid-year meeting if found by the Council advisable to do so.

Prof. J. H. Beal presented a paper on Public Health Insurance, in which he told what has been done in other countries where such insurance is in force, and warned druggists to use every effort to defeat this compulsory insurance, as its operation would tend to put the druggist out of business. A committee was appointed to investigate the subject and to report before the next meeting. The members appreciated Prof. Beal's able address, and regretted to learn that his visit to this meeting would be the last he would make to the association.

The following officers were elected: President, E. H. Thiesing, Cincinnati; 1st vice-president, J. W. Dylse, Marietta; 2nd vice-president, Charles Krone, Hamilton; treasurer, L. W. Funk (re-elected), Columbus; secretary, Theo. D. Wetterstroem (re-elected), Cincinnati; member and chairman of the Council, E. H. Selzer, Cleveland.

The names of the following members were selected to be submitted to the Governor from which to appoint a member to the Board of Pharmacy; E. C. Davis, Akron; O. U. Cassady, Youngstown; W. E. Ludwig, Toledo; H. P. Hiltz, Sandusky, and W. P. Jenkins, Dayton. E. A. Schellentrager, one of the charter members, was elected to honorary membership in the association. Messrs. Bowman, Selzer and Spease were elected delegates to the A. Ph. A. Mr. Forrest, of Cleveland, was elected president of the Traveling Men's Auxiliary.

The next annual meeting will be held on a boat en route to Mackinac, if proper arrangements can be made; if not, the meeting will be held at Cedar Point.

PHARMACISTS DISCUSS HEALTH INSURANCE

With probably the smallest attendance in its history, the Virginia Pharmaceutical Association held its 36th annual convention at Old Point Comfort on July 10 to 12. President T. Ramsey Taylor, of Norfolk, delivered the annual address. Secretary E. L. Brandis reported the total membership as 435 while more than 100 new members were elected at the meeting, showing that the association is still vigorous and doing good work throughout the State. Resolutions calling upon the United States Government to abrogate the patent rights held by citizens or subjects of countries with which we are at war, and the establishment of a pharmaceutical corps in the army, were adopted.

A communication from Thos. H. Potts, secretary of the N. A. R. D., was read in which attention was called to proposed "health insurance bills," and advised Virginia druggists to look into all such bills very carefully. Mr. Potts was very caustic in his criticisms against such measures. The matter was referred to the legislative committee. Prohibition laws and the maintenance of business during the war, especially the problem of shortage of clerks because of enlistment and conscription, received considerable attention, but no definite action was taken.

The following members were nominated for the consideration of the Governor in appointing a member of the State Board of Pharmacy; W. L. Lysle, Bedford; G. F. Grant, Abingdon; G. F. Farrar, Clifton Forge; J. W. Williamson, Harrisonburg, and W. H. Sheppe, Charlottesville; A. Bolenbaugh, W. E. Rudd and E. L. Brandis were named as editors of the association's journal.

The following officers were elected: President, C. H. Goldsboro, Culpeper; 1st vice-president, G. E. Thompson, Chatham; 2nd vice-president, D. E. Seagle, Pulaski; secretary, E. L. Brandis, Richmond; treasurer, W. F. Rudd, Richmond; local secretary, C. D. Fox, Roanoke; member of the executive committee, W. G. Williams, Charlotte Courthouse; member of the entertainment committee, R. C. Davis, Richmond. The next annual meeting will be held at Natural Bridge in 1918.

OREGON PRESIDENT ADVISES CO-OPERATION

In his annual address to the Oregon Pharmaceutical Association held at Seaside, on July 12 to 14, President Dan J. Fry advised closer co-operation among druggists in business methods, loyalty to the state association and substantial support to the trade journals. He also discussed House bill No. 4280 now before Congress, which, he said if enacted, would raise the price of patent medicines and pharmaceutical preparations and throw the burden on the retail druggist. He also recommended that all dues be paid by the association for members who enlisted in the army. This recommendation was later adopted by the association, as also a resolution commending the *Delineator* and allied papers for their attitude in refusing all "mail order" advertising.

Papers were read by Lee Brandon, of Portland, L. R. Betzel, of Corvallis, and Prof. Albert H. Dewey, of the North Pacific College of Pharmacy. The following names were recommended to the Governor from which to select one for appointment to the Board of Pharmacy; E. A. Robinson, Portland; A. E. Crosby, The Dalles, and D. O. Woodworth, Albany.

The following officers were elected: President, W. Hall McNair, Ashland; 1st vice-president, H. F. Brandon, Portland; 2nd vice-president, E. A. Robinson, Portland; 3rd vice-president, J. C. Perry, Salem; secretary, A. W. Allen, Portland, and treasurer, B. F. Jones, Portland, the two last named being re-elected.

The entertainment program included a card party, a barbecue, a baseball game between the druggists and traveling men, and a Dutch supper on the beach. Four of the visitors were seriously injured in an automobile accident on the last day of the convention. They had started on a trip to Cannon Beach, and on the way the machine plunged into a crab hole, throwing all the occupants out. C. A. Skelton, of Portland, representative of the U. S. Rubber Co. was the most seriously injured, three of his ribs being broken and ects sustained on the head and face.

The Traveling Men's Auxiliary elected the following officers: J. E. Dunne, president; William Willison, vice-president; Guy Ketchinson, secretary, and James Valentine, treasurer.

INDIANA PH. A. SUPPORTS PRESIDENT

At the 36th annual meeting of the Indiana Pharmaceutical Association held at Lake Wawasee on June 19 to 21, resolutions were adopted to petition Congress to create a pharmaceutical corps in the Army, to express the loyalty and devotion of the association to the country's service in this time of need as well as co-operation with the President in defending the Nation, and that it was the sense of the membership that the sales plan of the Miles Medicine Co. should be adopted by the proprietary manufacturers of the country. A number of excellent papers were read, and Dr. J. N. Hurty gave a talk on the "Pharmacist and What He Can Do to Advance the Public Health." Twenty-nine new members were elected.

The following officers were chosen for the ensuing year: President, W. H. Rudder, Salem; 1st vice-president, Dwight H. Hawks, Goshen; 2nd vice-president, Justin Lovett, Huntington; 3rd vice-president, Frank M. Best, Lafayette; secretary (re-elected), William F. Werner, Indianapolis; treasurer (re-elected), Frank H. Carter, Indianapolis; member of executive committee, Bruno Knoefel, New Albany.

LOUISIANA PH. A. ELECTS

At the annual meeting of the Louisiana Pharmaceutical Association held in New Orleans on May 8-10 the convention indorsed proposed legislation that will bring every registered druggist in the State into the organization by amending the present statute with regard to raising the registration fee to \$2 and providing that \$1 of this fee shall go towards paying for membership in the association. In this way every pharmacist in the State would become automatically a member of the association and would result in a membership of about nineteen hundred. The Stevens-Aslurst price-maintenance bill and pre-requisite legislation also were considered by the members.

The following officers were elected: Eugene Daste of New Orleans, president; John R. Taylor, first vice presi-

dent; John T. Baltar, second vice president; George D. McDuff, secretary; Dr. George S. Brown, treasurer; Miss Aurelia B. Kuhn, corresponding secretary. Members of executive board: Joseph P. Walker, Joseph H. Berner, Sidney J. Peters, John E. Gness and John T. Benedict.

IDAHO TO MEET NEXT YEAR AT NAMPA

The Idaho Pharmaceutical Association held its annual meeting at Guyer Hot Springs on July 11 and 12, and decided to raise a special fund of \$1,000 for the purpose of caring for legal and legislative work next year and also making suitable provision for the 1918 convention which is to be held at Nampa. The entertainment features of the meeting at Guyer Hot Springs included a variety of indoor and athletic sports, many druggists from the southern part of the State making the trip to Guyer by auto.

The following officers were elected: President, A. E. Sutton, Caldwell; 1st vice-president, C. O. Ballou, Boise; 2nd vice-president, A. B. Caldwell, Twin Falls; secretary, Vic Stolle, Boise; treasurer, L. A. Harmon, Caldwell.

MONTANA PH. A. POSTPONES MEETING

On account of war conditions, the Montana Pharmaceutical Association has indefinitely postponed its 1917 convention, which was to have been held at Butte in July. It is said that so many drug clerks have enlisted, that it was impossible for the proprietors to leave their businesses, while other druggists are either preparing to go to war themselves or are liable to be called to the colors. Louis Dreibelbis, of Butte is president of the association.

DRUG CLUB AND A. PH. A. BRANCH MEET

The Nashville Branch of the American Pharmaceutical Association and the Nashville Drug Club held a joint meeting recently and elected officers: President, D. J. Kuhn; 1st vice-president, Ira B. Clark; 2nd vice-president, C. C. Young; secretary, William R. White. The committee appointed to co-operate with other organizations in combating mail order houses who are doing business in Nashville without paying any taxes there reported that attorneys had been employed and that a test case would likely be tried soon. The Nashville Drug Club voted to have a boat ride up the river to which local druggists and their friends would be invited.

N. A. D. C. EXPELS ITS PRESIDENT

The National Executive Board of the National Association of Drug Clerks, which held a called meeting at the association's headquarters, 608 South Dearborn street, Chicago, on July 25, announces that several important matters were considered, among them being the expulsion from membership and the removal for misconduct of Patrick J. Coffey from the office of president. To fill the vacancy Vice-president Henry J. Steining, of Lafayette, Ind., was advanced to the presidency, while Second vice-president Frederick J. Killalee, of St. Louis, Mo., was promoted to the office of 1st vice-president, and James K. Wuench, of Chicago was elected second vice-president. The announcement states that President Patrick J. Coffey was given a fair and impartial hearing by the Executive Board.

NAVY ENLISTED MEN ARE WARRANT OFFICERS

Secretary Daniels recently announced the advancement of the following named enlisted men of the Navy to temporary warrant officers in accordance with the act of Congress approved May 22, 1917:

Pharmacists—William F. Bly, chief pharmacist's mate, field hospital, Santo Domingo City, Dominican Republic, born July 5, 1883, Fannin county, Texas; Willie R. Joiner, chief pharmacist's mate, U. S. S. New Hampshire, born December 1, 1888, Starke, Fla.; John J. Lergenmiller, chief pharmacist's mate, naval hospital, Canaco, P. I., born March 26, 1882, Buffalo, N. Y.; Cornelius A. Brinkmann, chief pharmacist's mate, navy yard, Norfolk, Va., born November 26, Reading, Ohio, and Henry C. Maginnis, chief pharmacist's mate, receiving ship at Norfolk, Va., born February 25, 1887, Linwood, Ind., have been advanced to the grade of acting pay clerk.

WOMEN IN PHARMACY

Conventions and Retail Prosperity

By EMMA GARY WALLACE

IT would be saying too much to assert that if you and I do not attend the annual convention of our profession, that we cannot expect to be fully prosperous. Yet it is *not* too strong a statement to make, that if annual conventions are not held and attended by representative people, that the welfare of the profession as a whole suffers materially.

It is not always possible for everyone to attend the great annual "Get-Together" of the State pharmaceutical association, the gathering of the A. Ph. A., the Convention of the N. A. R. D., or the W. O. N. A. R. D., to say nothing of other assemblings of especial interested groups. But the very fact that these meetings are held, the best interests of the calling considered, legislation sought or opposed, and *ideals established*, all go to keep pharmacy in the front ranks of service.

The question has arisen in the minds of some, whether or not it would be wise this year to hold conventions, owing to disturbed industrial conditions, the scarcity of help incident to military duty, the high cost of living, and the rather remote possibility of transportation facilities being inadequate if large numbers of troops were to be moved.

Continuing Normal Activities

However a careful consideration of the matter from all standpoints reveals the advisability of continuing normal activities in a normal manner. In fact as some thoughtful individuals express it, "We need each other now as *never before*."

It has become quite customary for many of the drug people to make attendance at these large gatherings their summer outing or trip, and friendships are made and renewed from year to year, which brighten and enrich the lives of many. Then, too, when these gatherings are held in different places, it makes possible attendance by those who could not for various reasons, travel to a more distant point.

What with the high prices of drugs, the scarcity of some supplies, the intense activities of chemical, research, and experimental bureaus, and the needs of the government, there is all the more occasion for the drug people meeting, discussing their problems, and gaining and giving each other such help as they may.

Patriotic Professional Duty

In fact, it now seems a patriotic *professional duty* that those who can shall attend the annual convention of the gathering which means the most to them. Not only will the delegates or visitors return to work with renewed enthusiasm and broadened ideas for personal service, but practical ideas will be gleaned of how team work may be carried on which will mean much to both the profession, the nation, the allies, and the world.

"Like pebble into water thrown,
Dilates a ring of life."

So it is the influence which you and I extend reaches out and out to the very rim of the universe. Do not think that your coming or going amounts to little. Every one counts. Remember,

"I am but one, but I am one;
I cannot do everything, but I can do something;
What I can do I ought to do and what I ought to do
God helping me I WILL."

WAR AND SUGAR OF MILK

A large percentage of babies are fed on artificial food. Most specialists agree that properly modified milk requires sugar of milk to make it approximate the natural fluid in its constituents.

Cane sugar is liable to make a gassy milk or one which causes colic owing to the tendency to ferment in the digestive tract. Sugar of milk is not added for its sweetening properties but for its nutritive value.

The present high cost of sugar of milk has driven some manufacturers to seek substitutes. Possibly these substitutes will do nicely for some purposes, but for infant feeding, the real sugar of milk should be insisted upon. A child under three or four months cannot digest starch, so tapioca flour, rice flour, or other starchy materials will not fill the bill and may cause serious trouble.

Even at a higher rate per pound, parents should be willing to pay for the small quantity used, and the pharmacist, and especially the *woman pharmacist*, who makes an advertising point of pure sugar of milk, in spite of market and war conditions, should get the infant trade of her district.

CANNING AND PICKLING

This is the time that the druggist, and especially the woman druggist, gets her innings. People who have canned in a haphazard manner before, are now going about it with scientific exactness. Food products are too high to use risky methods in the preparation, and besides what everybody else is doing well, we want to do well.

All of which brings us back to the indisputable fact that the druggist can furnish the finest kinds of supplies. The trouble is that most stores make no effort to get this trade which naturally drifts to the grocer who is on the job every day.

Here are a few of the things you ought to let people know you have—cinnamon, allspice, mace, turmeric, mustard, ginger, celery seed, mustard seed, olive oil, cloves, pepper—red, white, black; pimento, saccharin, curry powder, taragon vinegar.

It is a good plan to get a good pickle recipe from a famous local cook and to have typewritten copies of the same made out, furnishing a recipe with every jar. It is an order of supplies. Devise something to attract attention upon your store at this time. It is a better time to corner the pickling and preserving business.

SEPTEMBER IN THE DRUG STORE

September like every other month, has interests which are all its own. The woman pharmacist will do well to remember these when laying out the campaign for the month. September 30 is Labor Day, the first day of autumn comes on September 23d.

In addition to this, school opens and that always brings returning crowds from mountain and shore. Shutters begin to be opened and families come back to take up their regular activities.

To pay no attention to these things is to lose money. In many places, Labor Day parades are to be shared this year by groups of children who have done their "bit" for the Red Cross in various ways. In one city, every child is to be given a free moving picture theatre ticket for the afternoon, and in the immense gathering of children which will form part of the procession, every child is to wear a white tissue paper hat with a red cross on the front.

What a splendid opportunity to place a moving picture slide regarding pencils, pads of paper, and other school supplies! If churches and organizations make the paper hats, as is to be done in the case referred to, the sale of red and white tissue paper and mucilage alone, will amount to a good deal. Why not get some benevolent individual to present each child with a free soda ticket, for what would a celebration be without something of this kind?

One drug store which does a large business in school supplies in central New York, makes a point of window

attractions the opening week of school, which especially interest the young people. One year it was dancing mice, another year a mechanical contrivance with a fence built of note books and pencils. The success or the failure of the window is attested by the crowds of children in front of it.

People coming back from their summer vacations are sure to want drug store supplies. Just advertise that you have special messenger service and can send orders amounting to fifty cents or more immediately. Let householders know that ice cream can be had by telephoning for it; that you are ready to help them *conserve fall supplies of perishable food* by furnishing pickling supplies, olive oil, etc., etc., of the best kind at the most reasonable price; that insect destroyers are especially in order now after the warm weather has increased their numbers; that fall housecleaning materials are the order of the day; and in short, that you are on the job to *furnish what they need and when they need it!*

AROUND THE CIRCUIT

Milwaukee Chapter, W. O. N. A. R. D., held a card party at Mrs. Herman Lambeck's home on Saturday, July 14. The affair was well attended and everyone had a royal time. The proceeds which amounted to \$22 were given to the Red Cross society. Instead of the business sessions once a month, the Milwaukee members are holding a series of outings during the warm weather.

Dr. John C. Otis, President of the Cincinnati College of Pharmacy, is seriously ill and the attending physicians are alarmed as to results. The many friends of Dr. and Mrs. Otis earnestly hope that recovery will not be far distant.

A romance which began at the Cleveland College of Pharmacy when Miss Agnes Bosetany and Mr. Z. W. Kobylanski studied and worked in the laboratory side by side, culminated in the marriage of the young couple as soon as Mr. Kobylanski graduated in June. The happy couple have the best wishes of many friends.

Mrs. E. Detlefs of Cleveland, had the honor to write the prize winning essay among 800 competitors. The prize was offered by the Inter-Cities Ice Cream Manufacturers' Association during the recent Ice Cream Week celebration in Cleveland and northern Ohio. Her essay was brief, witty and to the point.

The marriage is announced of Miss Eunice L. Turner to Mr. Nicholas Meyer of Oakland, Cal. Mrs. Meyer conducted her father's drug store at Cottonwood, Idaho, for several years.

Cincinnati Chapter, W. O., No. 5, held its June meeting at Phillippi's Grove. The ladies had dinner and a splendid good time afterwards. Games were enjoyed and prizes awarded. Each lady brought a prize to put into the general pool, the cost of which was not to exceed ten cents. Some very handsome pieces of work were donated as the labor was not counted anything. The meeting of July 26 took the form of an outing at Coney Island.

Sympathy is expressed for Mrs. Harry Frieking of Cincinnati, who has recently lost her father.

Grafton B. Perkins, the Baltimore manager of the Resinol Chemical Company, suffered a great shock when his wife who was bathing in Stony Creek was suddenly seized with a cramp and drowned before assistance could reach her. Mrs. Perkins was a Massachusetts woman, well-known and very popular. The creek is a shallow stream of water and not the slightest apprehension was felt by her husband and children who were laughingly watching her from the bank.

Miss Lotts is in charge of the pharmacy of the Union Protestant Hospital of Baltimore.

Mrs. Henrietta Baass of Louisville Chapter, No. 11, is summering at Elkhart Lake, Wis.

Louisville Chapter, No. 11, enjoyed a trip to Carrollton in lieu of its June meeting. The outing included a number of ladies who spent the day with Mrs. Vernon Driskell, one of the Chapter members. A gift was carried to Mrs. Driskell as a special token of appreciation.

Miss Edna N. Follensby was awarded the Professor Smith prize in *Materia Medica* upon the occasion of her graduation in June from the Massachusetts College of Pharmacy.

The Washington State Pharmaceutical Association held its annual meeting at Spokane, June 13th to 15th. Among the interesting papers presented was one on "The Woman Pharmacist," by Mrs. Emily McRae, and "The Ladies" by James Valentine. Mrs. Macrae was elected one of the vice-presidents of the association—a signal honor, as she is the only woman pharmacist on the executive board.

Miss Irene Harrington of the Central Drug Company of Fargo, N. Dakota, has been enjoying a trip through the middle-eastern states.

The officers of the Ladies' Auxiliary of the Wisconsin Pharmaceutical Association for the ensuing year are as follows: President, Mrs. M. J. Kaumheimer, of Milwaukee; vice-president, Mrs. Theodore Bakke, of Milwaukee; secretary, Mrs. Herman Lambeck, of Milwaukee; and treasurer, Mrs. W. E. Porter, of North Milwaukee.

The Rhode Island Pharmaceutical Association held a picnic at Lake Pearl, Wrentham, Mass., July 11. A great many ladies were in attendance and shared fully in the races and games, and bore off many of the prizes. Among the fortunate winners were Miss Marie Erolourd, Miss Charlotte Peck, Miss S. Smith, and Mrs. Stasia Perry.

The Pennsylvania Pharmaceutical held its annual convention at Pittsburgh in June. Among the notable papers read was one on "Mucilage of Sassafras Pith," by Mr. and Mrs. J. C. Peacock. Mr. and Mrs. Peacock have a large store at the corner of Erie and Broad St., both being graduates of the Massachusetts College of Pharmacy. An interesting paper was also read on "Criticisms and Suggestions on Magnesia" by Sister Bertha Mueller; also a third one on the "Manufacture of Elastic Capsules" by Alice T. Harmer.

Miss Margaret Stier is the owner and manager of a drug store at Clifton and Ludlow Avenues, Cincinnati, Ohio.

Miss Fannie Hart presented an interesting paper on "Preparing Charts for Scientific Work," at the New York State Pharmaceutical Association meeting recently held at Richfield Springs.

A garden card party was recently held at the home of Mrs. Benoit Briard, of Oak Park, Ill., in behalf of the Red Cross Auxiliary of the Women's Club of the Allied Drug Trade. A substantial sum was raised.

A number of the members of the Chicago Chapter, No. 2, recently attended a "pound" party given by the Francis Juvenile Home. This Home has twenty-two girl patients ranging in age from three to fourteen. It is the only institution of the kind in the world, and is maintained for the care and education of innocent children afflicted with venereal diseases. The children gave an interesting program and their guests showered them with many gifts and good things to eat.

The Chicago Chapter is very active in behalf of the Red Cross. At the suggestion of Mrs. Riemenschneider, good books and literature are being furnished for the soldiers.

The Chapter held a "Birthday Luncheon" at the home of Mrs. George Merz. The affair was delightful in every way.

Mrs. H. Rademaker of Louisville Chapter, W. O., was a recent delegate to the Kentucky Federation of Women's Clubs.

The Secret of Business Success

Druggist Must Like Work and Believe in Own Abilities

IT frequently happens that when someone has made a conspicuous success of his business his advice is sought on the subject of how others may go and do likewise. Usually, when the interview with the great man is published, it reads rather disappointingly; and the effect is as though he was concealing something—holding back the real "secret of success" which must have guided him unerringly to place and power.

The situation in this respect reminds one of the young man in the story, who was told by his father's will of buried treasure in a certain field which had never amounted to anything. The young man dug into the field vigorously, and turned its earth to the sunlight with such determination, that its crops were wonderfully increased. That was all the buried treasure he ever located there, and he was not at all satisfied, because, like most people, he would rather have found money than earned it.

As a matter of fact, there is no royal road to business success, and no "secret," which, once mastered, will enable anybody to get to the top of the ladder without working. The most successful druggist the writer knows puts in more time at his store than any of his clerks. That isn't because he feels that he is tied to the tread-mill, or anything like that; but he is so intensely interested in the great game of business, and likes his work so much that he gives it all of the time he can spare from his family. And, at that, the family sometimes think that they are getting the worst of it.

Druggist Must Like His Work

This, after all, is one of the things which determines whether or not a man is going to be successful, in the drug or any other line of trade. That is, he must like it. There may be isolated cases where men have gone into certain lines—prospecting for gold, for example—when they had an utter distaste for the work, and were inspired only with the idea of getting rich. Such men, as suggested, may have succeeded in a few instances, but the number is certainly very small compared with the list of the failures who have arrived at that point on account of their lack of liking for and interest in their work.

It isn't simply a matter of dollars and cents. Life is too short, after all is said and done, to justify anybody in spending his days at work which is distasteful to him. The thing to do is to find out what you are best fitted for, and go do that thing. If it means a few less dollars a day or a week than the other thing, let them go: for what is a little money compared with a life-time of enjoyment? The man who is fitted for a certain task, whether it is selling drugs or dry goods, will like it, and the job will grow on him and become a part of himself. If he doesn't like it, his distaste for it will grow, and his work will be a burden hanging around his neck and destroying the delights of living.

There is a cue in this for the druggist who would be successful. He can't be so unless he has able lieutenants and sergeants and privates in the rank; in other words, unless his store is well manned with salesmen who are capable of dealing with his trade in the best possible way. They, too, must like their jobs; and while paying them a sufficient amount of money is one of the surest ways of stimulating interest, that isn't the whole thing.

Visualizing Industrial Forces

The boss can make a store the most interesting place in the world for his clerks, especially the youngsters, if he will but go to the trouble of visualizing for them the mighty industrial forces represented by the stocks which he carries. He can make them see, if he will, the great organizations and the immense mills which have put in their hands the stationery handled so thoughtlessly over his counter. He can suggest to them the significance back of the drugs compounded by the prescription men, the brains and years of toil represented in their production, the organization needed to bring them together from all

parts of the world. He can suggest the wide sweep of trade which has carried the druggist from the position of the apothecary, with a limited field in which to work, to the world's shopping-place, the store to go to for the myriad of small things all carrying the descriptive "indispensable." In other words, the druggist can appeal to the imaginations of his force, instead of letting them think that the business is maybe dull and dry and without the keen interest that attaches to selling automobiles and sporting goods, because of the inherently appealing qualities of these goods.

There is no reason why the druggist who really takes an interest in making his clerks take an interest in the business should not succeed in the big way represented by the creation of an enthusiastic and capable sales force.

A certain successful druggist, who now has the largest store in town, had a chance once to become head salesman for another member of the trade, who later went out of business. At that time "our hero" was hesitating between going into business for himself with the small capital he had accumulated while working in the store referred to, and taking the bigger job in that store. The latter promised more money than he would likely make working for himself for some time to come, and of course was free from the risk and hazard which is always inseparable from a business of any kind. And the small savings of a young clerk, especially one who has his eye on a certain attractive young lady, as this one had, look mighty precious in his sight.

Belief in One's Own Abilities

To his credit, he decided to "bet on himself," as he put it later, and took the plunge. He opened his store, cut loose in the business, backed by the wholesale houses which had been following his career in the other store and knew his ability and popularity, and began doing things. He worked hard, of course, but he was clever as well as industrious, and he soon had a lot of his old trade coming his way to the new store. The final result was that in four or five years he was buying out his old employer, who had been unable to keep up with the procession and had decided to get into another business. And, of course, the wedding bells had rung in the interim.

The point which is impressive here is that this man believed in himself. He did not simply put down in logical array the money needed to carry on the business, the possible amount of trade he could reasonably expect to get, and all that sort of thing; but he measured himself, and ask, "Am I big enough to tackle this job and get away with it?" The answer was absolutely and without qualification in the affirmative, and he did get away with it. Anybody who expects to get some place in life has got to have this firm belief in himself, this confidence in his ability to make good; otherwise, as a business proposition, his case is hopeless.

Lack of Power to Decide

Women insist that they are as good business men as men themselves, and some of them have gone out and proven it. Yet most of them shine in what might be called routine occupations, where one has to make comparatively few decisions, and where one's work is regularly stocked up, without having to be sought out and created. On the other hand, there are druggists, not to mention other business men, who lack ability to decide. And while they hesitate, the opportunity or situation that called for a decision has passed, taking with it the great chance of that individual, and leaving him stranded on a barren shore, metaphorically speaking. Actually, he goes on in the same little old groove, and somebody else is taking the progressive step that he should have made—and must have made to stay in the lead in the business.

Trade papers devote a great deal of space, and properly, to the technique of business: to such things as salesmanship, window displays, stockkeeping, etc. This is part of

the necessary equipment of the business man, and yet, as a matter of fact, knowledge of these things never made anybody successful. They are the minutiae of business, which every business man should know, and knowledge of them will make a successful man more successful, or a failure perhaps less of one; but it is the man himself, the big idea dominating his work, which determines whether he assays 100 per cent in his particular calling.

The successful business man need not look at his bank-book to find out if he has arrived. He knows himself, and he knows whether he has succeeded. Many times a man fails before reaching substantial dollars-and-cents success; but because he knows his business, and because he has the man-power back of this knowledge, and because he is confident of his own ability to grasp the problems of life and overcome them, he is potentially always a success. That kind of man can't be downed.

The drug business is one of great detail. The man who is running a store has got to keep his mind on many items of business, and the danger here is that in thinking of the little things he may forget the big ones. Please don't. It is part of your job to keep your head clear, your brain active and your mind's eye fixed on the big ideal of success represented by the larger things back of the daily routine of business—the things, in short, which make the wheels of business go 'round.

N. W. D. A. PROGRAM

The entertainment committee of the National Wholesale Druggists Association, under the chairmanship of Charles E. Matthews, has been diligently at work for some time arranging a program for the forthcoming meeting of the organization, which is to be held in the Congress Hotel, Chicago, beginning Monday, October 1, and continuing through Tuesday and Wednesday, with a final session on Thursday. A large attendance is predicted, in view of the big questions coming up for discussion. The active and associate membership now numbers over six hundred, comprising the vast majority of the wholesale druggists of the country, as well as manufacturers of pharmaceuticals and allied products.

The headquarters of the association will be at the Congress Hotel. The official program has been arranged as follows: Monday, Oct. 1, 10 a.m., opening session; 2 p.m., second session; 9 p.m., president's reception in Gold Room, Congress Hotel, followed by a dance and buffet supper. Tuesday, Oct. 2, 9.30 a.m., third session; 11.30 a.m., automobile ride, tour of Boulevard system; 2 p.m., luncheon at South Shore Country Club, followed by cards and dancing; 3.30 p.m., fourth session; 7.30 p.m., informal meeting wholesale druggists; 9 p.m., informal dance and buffet supper. Wednesday, Oct. 3, fifth session; 2 p.m., informal meeting wholesale druggists; 2 p.m. ladies' card party; 8 p.m., theatre party; Thursday, Oct. 4; 10 a.m. sixth session; 2 p.m. seventh session; 8 p.m., banquet, with addresses by officers and two invited speakers of national distinction.

Charles E. Matthews, 169 N. Franklin St., Chicago, is the chairman of the committee on arrangements and entertainment.

MILWAUKEE WOMEN AID RED CROSS

The members of the Milwaukee Chapter, W. O. N. A. R. D. are not "slackers." In fact, they are most industrious and interested workers for the American Red Cross.

Besides sewing for the comfort of our national defenders, they have forwarded twenty-two dollars to the Red Cross, the proceeds of a card party. They also donated a Red Cross flag to the Medical Department, 1st Wisconsin Field Artillery, now stationed at Camp Douglas, Wis.

The following resolution was presented by Mrs. S. A. Eckstein at the last meeting:

Resolved,—Because of war conditions and the great need of conserving in many ways, we, the Milwaukee Chapter, No. 19, beg that the ladies of the Entertainment Committee in Cleveland, make the entertainment at the coming convention as simple as possible without incurring extra expense. We are positive we echo the sentiments of all the Chapters in this respect.

Resolved,—That a copy of this resolution be published in the PHARMACEUTICAL ERA.

UNIVERSITY OF MONTANA

Dean Charles E. Mollet, of the School of Pharmacy, University of Montana, Missoula, informs the ERA that the item published on page 222, of the July issue, is not a correct statement of affairs at that school. He writes as follows:

"The University of Montana, as well as other universities, has for many years admitted students without the usual entrance requirements as specials for such work as they are prepared to profit by, and while we have had several students each year enrolled as specials in the department of pharmacy, in which case they are not candidates for a degree, we have never solicited the attendance of such students, but on account of the shortage of drug store help, the University of Montana School of Pharmacy has decided to encourage specials but they must possess all the other requirements for taking the State Board of Pharmacy examination, and in no case will a student be admitted as a regular pharmacy student without being a high school graduate or possess the equivalent 15 units. Hoping that you may be able to make the desired correction in the next issue, I am

CHAS. E. MOLLET, Dean

JOINS FACULTY OF ILLINOIS UNIVERSITY

Maurice A. Miner, formerly professor of pharmacy in the School of Pharmacy of Northwestern University, has been appointed to a similar position on the faculty of the University of Illinois, which recently took over the first-named institution, and he will begin work with the session of 1917-18. He joined the faculty of Northwestern University in 1887, the thirtieth anniversary of the event being celebrated by the Alumni Association of that institution on April 17 of the present year. Prof. Miner is a graduate of the University of Michigan, College of Pharmacy, class of 1871, and from which he received the honorary degree of Master of Pharmacy in 1897. In his early days he was an assistant in pharmacy at Geneva Lake, Wis., and later served for some years as manufacturing pharmacist and chemist for the old house of Morrisson, Plummer & Co., wholesale druggists of Chicago.

ORLEANS PH. A. ELECTS OFFICERS

The Orleans Pharmaceutical Association held its annual meeting recently and elected the following officers: President, Christian Schertz; vice-president, Charles F. Fiederer; secretary, August C. Flach; assistant secretary, R. O. Kelly; treasurer, M. Stolzenheder. Executive committee, George W. McDuff, F. A. Ames, Dr. J. G. Harz, Isaac De Lanzac and George McNulty. The new officers were installed on July 19, the installation being followed by a banquet.

A movement is on foot to secure the annual meeting of the National Association of Retail Druggists for New Orleans in 1919, and the secretary of the Orleans Ph.A. was instructed to get into communication with William Allen of the Association of Commerce relative to extending such an invitation to the N. A. R. D.

ENDORSE HENRY FOR N. A. R. D. SECRETARY

At the August meeting of the Philadelphia Association of Retail Druggists, the following resolutions were unanimously adopted:

WHEREAS the office of secretary of the National Association of Retail Druggists is about to become vacant by virtue of the resignation of the present incumbent, Thomas H. Potts, and

WHEREAS it is desirable that the same high degree of efficiency that has obtained in the office of the Secretary of the N. A. R. D. in the past should be continuously maintained, and

WHEREAS the P. A. R. D. numbers among its members one who by every test of fitness is eminently qualified to fill the office of Secretary of the N. A. R. D., therefore be it

RESOLVED that the P. A. R. D. in regular meeting assembled do and does hereby, urge and endorse the candidacy of Samuel C. Henry for the office of the Secretary of the N. A. R. D., and be it further

RESOLVED that the delegates of the P. A. R. D. to the Annual Convention of the N. A. R. D. are hereby instructed to use their influence in bringing about the election of Mr. Henry.

Mrs. Richard Kring of St. Louis Chapter, No. 8, was a delegate to the Missouri Federation of Women's Clubs which held its annual meeting at Kansas City.

BUYING AND SELLING

DRUG MERCHANDISE

Sundry Hints For Pushing Business

BIDDING FOR THE SOLDIER TRADE

Wherever there is a cantonment of soldiers, there will always be a demand for many specialties that druggists handle. Souvenir cards, toilet articles, knickknacks, brushes and trinkets of all kinds will be called for, and the druggist who caters to supplying these wants will have opportunities such as he never had before. But if he expects to profit by such sales, he should not forget that he has a patriotic duty to perform, and that is to extend to all of the soldiers in his vicinity a warm welcome. Don't take advantage of their purchasing power simply to make money. Give them information and seek to help them in every way you can. Actions of this kind speak louder than words, and they spring from a sentiment that symbolizes love of country and make the citizen soldier feel that from whatever section he may have come, he finds a warm welcome wherever the flag floats.

This spirit of patriotism and hospitality is reflected in a letter recently given out for publication by George W. Lattimer, of the Kauffman-Lattimer Co., wholesale druggists of Columbus, Ohio, and written by F. G. Salter, secretary and treasurer of the Durr Drug Co., wholesale druggists of Montgomery, Ill. It is as follows:

"Gentlemen:—We note with a great deal of pleasure that the Ohio National Guard will be sent to Montgomery for training.

"We will appreciate it greatly if you will give us the names of any relatives or friends of those connected with your company, so that we may look them up and extend them such courtesies from time to time as opportunity offers. It is our wish to make the stay of these troops pleasant and agreeable while here.

"We will be glad to have their names, their regiments and their companies, so that they can be located. We would also like to have their church affiliation if possible. We would thank you to write them a letter extending them a hearty invitation to visit us at our place of business, and to make our store their headquarters while in the city.

"We are anxious to show your soldier boys every courtesy possible, and to extend to them the hospitality of our city."

SPONGES FOR AUTOMOBILES

Automobile owners are awakening to the fact that good sponges are necessary adjuncts to cleaning the painted surfaces of their machines, and that a good chamois skin is the best thing to rub the car with. Experts say that a few minutes' time given to wiping off the car each day will keep it from having to be washed too frequently and make it look like new. Here is a hint for the druggist to handle these materials, and to go after the automobile trade. In sponges the selection and grading is important, but this is not all. A sponge of the best quality if allowed to dry out and become shopworn, loses much of its real value, but if it is properly stored in a warm moist bin, the sponge will preserve its qualities indefinitely.

The automobile owner could be advised not to allow sponges or chamois skins to lie around loose or be kicked around the floor. One can easily make bags out of old curtains or oil cloth large enough to contain the sponges, the bags being provided with flaps or covers that can be buckled or buttoned down. After the sponges or chamois are used, they should be rinsed out and wrung nearly dry, then placed in the bags and hung up out of the way. Each set should be hung separately, where they can be easily reached. This will be found a much better way than of placing them on a closet shelf, where they will surely catch the dust or are likely to have something

spilled upon them. In some localities druggists have swelled their receipts by catering to automobile owners who are in need of such accessories.

CONTRIBUTING TO PREPAREDNESS

"Send the Boys away prepared" is the motto of a leading druggist in New York City. He has hit upon a novel idea for the benefit of our soldiers. A small kit has been arranged containing writing paraphernalia consisting of two dozen sheets of paper, of a very thin quality, one dozen envelopes, upon each envelope being placed a two-cent stamp (making it ready for immediate mailing) several pencils and a pencil sharpener. These articles were conveniently arranged in a small wallet made of khaki material which was tied in a red, white and blue ribbon.

The display which was arranged in the store window was carefully supervised. "Old Glory" hung from the rear and side walls. The kits were arranged on the floor so as to form the letters "U. S.," and several were open, showing the contents. In the rear of the window could be seen the models of an American soldier and his gray-haired mother handing him one of the prepared kits. A large panel was hung near the front of the window bearing the words:

"Don't forget to write home."

It was an "up-to-the-minute" scene and made quite a hit with many whose attention it attracted—some buying the kits for dear ones and others for friends who were going to the front. The demand was so great that the proprietor was forced to hire additional help to arrange the kits and fill orders.

RUNNING A DRUG STORE ON SERVICE

It has been said that in the cheaper stores service competition is frequently more effective than price competition, and that it is becoming more so every year. Service costs money, but frequently it is cheaper in the long run. Just what direction this service shall take, depends largely upon local conditions and the needs of a particular locality. A hint as to how this scheme was worked out by the Ellis Drug Co., of Vandalia, Mo., and how it has tried to meet the people's needs in that city is told by a writer in the August *American Magazine* as follows:

"For the coming harvest season," Ellis said the other day, "we shall start a new service. Farmers have a hard time to get help at that time. With the amount of literature we send out every month we might as well assist them to advertise for help in our monthly store magazine and, perhaps, also arrange to use a bulletin or a register.

"We keep a copy of each of the leading fashion magazines in our store. We advertise that they are for the convenience of our patrons and that we want them to use them. It is surprising how many women come in each month to look over them. We handle a full line of general and fashion magazines also, and don't see that our free inspection plan interferes in any way with their sale. It lets people see them all, and without having to buy; but in many cases they see interesting things in them and buy more than they would without the display."

Out of a class of seventeen applicants who were examined by the Kentucky Board of Pharmacy at Dawson Springs on July 10 and 11, four were passed as registered pharmacists, and five as assistants. The next meeting will be held in Louisville, October 9 and 10.

How to Advertise Your Drug Business *

By SAM P. HARBEN, Richardson, Texas

TO start with, I would give three commandments: 1. Keep the store scrupulously clean; 2. Clothe your clerks with courtesy; 3. See that service goes with every sale.

The first advertising suggestion would be: Window displays; as the eye is to the man, so is your window to your store. Make not less than weekly changes—twice a week is much better. Set the days as Wednesday and Saturday. As soon as the boy has the store cleaned out on these mornings, get busy yourself and fix up the displays. Read your trade journals carefully for ideas for these trims, and above all else, read the ads in the trade journals, and when you find a manufacturer offering to co-operate with you by sending a window trim, write for it at once. In order to get the best results from your window advertising, you should plan your trims at least four weeks ahead. Often it will be necessary to have some cards printed to bring out your display to the best advantage. Have this card ready, then put price tickets on all articles, other than patents, that are shown in your window.

Next I would contract for a yearly space in my local newspaper. You will get your space slightly cheaper that way. Pick out the position you wish to use, then see that your ad appears in that same space each week. For country towns, such as Richardson, 500 to 1,000 population, I would say use ten inches weekly, preferably single column with border, unless cuts are used. Change your copy weekly, and never advertise any patent medicine in this space. Try to arrange your ads to fit the window display that will be put in on Saturdays. This will make both worth more to your store. Buy some cuts to mix with your ads. Have an attractive combination at least once each month. Push specially your toilet line, your fountain, your candies and your sundries in your advertising.

Use Your Mailing List

Then I would suggest that every offer of any manufacturer, whose goods you handle to use your mailing list, be promptly accepted. Keep a real mailing list set. First, one that includes all names of heads of families in your section; second, a list of your young ladies who will be interested in toilet samples; third, a list of matrons who would be interested in more mature advertising; fourth, a list of your stockmen and poultry raisers; fifth, a telephone list of those who take it as a special favor to receive a call over the telephone to "drop in and see" something new you have just received. This last can be made worth more than any of the others, if used properly. See that your name is on the general mailing list so that you will know what is being sent out. Ask the manufacturer to give you a week's notice of his using this list, then make your window help the mailing list. When this matter is being read by your rural patrons, try to have a sample of the remedy or some special advertising to give them.

Remember Children

Cater to the trade of the children of your section. "Children to-day, grown up to-morrow" cannot be disputed. Make your store the place where every child wants to come. Meet them cordially; say something nice to them, and ask them back. Never forget the children. Find something to remember them with during the year. Take special days—Christmas, St. Patrick's, Easter, Fourth of July and Thanksgiving. Spend three or four dollars each time for the little gifts to the children. During the school time their trade can be worth a lot to any business. Give them rulers and book satchels, with your card printed thereon. Offer some little premium for each room—the teachers will be glad to co-operate with you in this. Keep them talking about your store, and that always something nice.

* Read before the Texas Pharmaceutical Association, San Antonio, 1917.

Keep up Your Summer Openings

Your store may be well known in your town and community, but don't let that keep you from an annual "summer opening" of your fountain. The ice-cream manufacturer will be glad to furnish you ice-cream for the opening day, if you will advertise in your paper and in your invitations that his cream is always served at your fountain. Advertise in your paper space about the opening; have special invitations printed, and mail to each woman in your territory, and include with that invitation a ticket entitling each child to an ice-cream cone for that day. If you have never tried this, you will be agreeably surprised at the crowd you will have for that day, and the trade that will follow, if you handle the visitors in the right manner. Keep enough clerks to handle the trade, and you, Mr. Proprietor, personally meet each woman and child that comes. Thank them for coming and see that they are served before leaving. Your advertising should be two per cent of your gross yearly sales. This is enough to spend if you follow these ideas.

If in a small town, such as Richardson, make it known that if anyone is wanted, from the homes of your rural patrons, all they have to do is call your store and they will get them, if they are in town. This often makes sales for us on a phone call from home, and if they are not regular patrons, this is a good way to make them. Nearly always when you bring a man to your store on such an errand, he will buy a cigar and some candy extra, and you will be in good standing in every farmer's home.

Money Back if Necessary

Do all this, then advertise the fact and back it up, that anything bought from you, no matter what it is—patent, sundry or drink—must give satisfaction or the purchase price will be refunded. Make this good by giving back the money just as cheerfully as you took it in, and establish the fact, with the children and women especially, that what comes from your store *must please*, and they will buy without hesitation, and you will have few returns.

Study your trade; make a reputation of *having what is wanted* or a prompt willingness to secure same, then get it if the cost is more than your profit. Don't be afraid to use the old, old "Thank you; drop in again," and if you have religiously kept the first three commandments—*cleanliness, courtesy and service*—you make new customers easily and keep them. I thank you.

MONEY IN SWAGGER STICKS

Boston druggists have discovered that there is a good business in selling swagger sticks. Their use by the great number of military men encamped in or near the city, as well as by the Canadian Kilties in Boston on recruiting duty for British service, has boosted sales. One druggist said he sold 100 swagger sticks in two hours, the first day he got his supply. Women have now started buying them as souvenirs.

CELEBRATE THEIR 65th ANNIVERSARY

The 65th anniversary of the Meyer Bros. Drug Co. was celebrated by the members of the Meyer Bros. Employees Mtnal Aid Association at Ramona Park, St. Louis, on August 12. The affair was an all-day basket picnic, the program including a baseball game between the Imperial Crown and Red Diamond teams in the forenoon, and various athletic and other events in the afternoon, the judges being James Brice and Louis Ehrler. A souvenir of the completion of 65 years of business life, sent out by the Meyer Bros. Drug Co. just previous to the celebration, was in the form of a finely printed brochure giving a brief history of the company, half tone pictures of the officers, and reproductions of many letters of congratulation received from the company's friends and customers in the trade.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

RECORD PRICE PAID FOR PHARMACY

Starting in business more than a decade ago with an indebtedness of more than \$11,000, Z. E. Marvin, former president of the Texas Pharmaceutical Association, has recently sold his drug store at the corner of Main and Akard streets, Dallas, Texas to L. C. Curlin, of Waxahachie, for \$100,000, by some believed to be the highest price ever paid for a single retail drug business in the United States.



Z. E. MARVIN

Mr. Marvin located in Dallas a number of years ago, having begun his career as a pharmacist in Chicago, twenty-six years ago. The Dallas corner that he selected for his store, soon became one of the strategic business points of the city, more people, it is said, passing the corner than at any other point in the city. The business rapidly developed, and the pharmacy became noted throughout

the Southwest for its success.

During his administration in 1916 as president of the Texas Pharmaceutical Association, Mr. Marvin came to the "front" with the slogan "a thousand new members for the next meeting," a rallying call which attracted considerable attention. The number of new members thus sought were not secured, but the increase in membership was satisfactory. The report of the recent meeting of the association at San Antonio at which he presided, as one writer puts it, shows that the meeting was "chuck full of 'pep' from the first gavel knock right up to the motion to adjourn." Mr. Marvin retires from the drug business and will devote his energies to the development of a new venture in manufacturing, that of making paper from cotton-stalks. His successor, Mr. Curlin, has been one of the prominent business men of Waxahachie, where he operated two drug stores.

JACOBS' ATLANTA REMINISCENCES

Joseph Jacobs, dean of Atlanta druggists, in 1884 moved from Athens to Atlanta, Ga., where he bought the business of Walter A. Taylor at the old Norcross corner of the Georgian capital, Willis E. Venable renting the soda water privilege in the store. Since that time Mr. Jacobs has been prominently identified with the drug business in that city, and he gave recently to a reporter of the *Atlanta Constitution* some interesting reminiscences concerning the changes that had taken place in the trade during the last thirty years. Mr. Jacobs states that while some of the old firms have gone out of business, others have been absorbed by new companies which have established branches in Atlanta, and still others have been changed about by being taken over by employees who have long been connected with them.

About 1886, Asa G. Candler, who was conducting a wholesale and retail store near the corner of Auburn Ave. and Peachtree Street, decided to go out of business and to confine himself to the manufacture of B. B. B. preparations and other patent medicines, trading the odds and ends left in the wholesale store to Mr. Jacobs for the latter's stock in the coca cola business as Mr. J. did

not have time to "bother with it." Mr. Candler later acquired the small remaining interests in the stock of coca cola, subsequently making millions. The naming of Luxomni, Ga., and the first use of pennies in Atlanta, are thus told by Mr. Jacobs:

"In the early '80s Mr. Spencer Marsh marketed and largely advertised a new medicine which originated with Dr. Barry, a relative of his. It was called Luxomni (light for all). Among the methods of advertising large wooden signboards were used with the name "Luxomni, for Women," painted thereon. When the Seaboard Air Line was surveyed a location was made near one of these signs and the town was so named, and thus Luxomni, in Gwinnett county, came into existence.

"In the fall of 1884 Mr. J. H. Porter, president of the Merchants' National Bank, ordered \$25 worth of new pennies from the mint at Washington, at my request. These were turned over to Jacobs' Pharmacy, and used in making change. Jacobs' Pharmacy at that time started advertising drugs at the odd cents prices. This was the introduction of pennies into the business of Atlanta."

PROF. KRAEMER GOES TO MICHIGAN

Word comes from the University of Michigan that Prof. Henry Kraemer, of the Philadelphia College of Pharmacy, has accepted the offer of the faculty of that institution to fill the chair of pharmacognosy, made vacant by the death of the late Prof. Julius O. Schlotterbeck. Prof.



PROF. H. KRAEMER

Kraemer has filled the chair of botany and pharmacognosy in the Philadelphia institution for many years, succeeding in that position the late Edson S. Bastin. He has also been director of the microscopical laboratory, and editor of the *American Journal of Pharmacy*, since 1898, when he he succeeded the late Henry Trimble.

Prof. Kraemer has been a voluminous contributor to pharmaceutical and botanical literature, his volumes on "Applied and Economic Botany," and "Scientific and Applied Pharmacognosy," being standard works on these subjects in many

colleges and schools of pharmacy. He is also chairman of the sub-committee on pharmacognosy of the U. S. P. Revision Committee, member of the council on pharmacy and chemistry of the American Medical Association and a corresponding member of the Societe de Pharmacie de Paris. From 1892 to 1895 he served the American Pharmaceutical Association as reporter on the progress of pharmacy.

Dr. Kraemer was born in Philadelphia in 1868, and graduated from Girard College in 1883. A year later he was apprenticed to Dr. Clement B. Lowe, and five years later graduated from the Philadelphia College of Pharmacy. Immediately after graduation he served a short time as assistant to Prof. S. P. Sadtler, and in 1890 was called to the New York College of Pharmacy as instructor in pharmacognosy, a position he held for two years. During his sojourn in New York he completed a course of study in the School of Mines of Columbia College, and in 1895, accepted the chair of botany, pharmacognosy and materia medica in the School of Pharmacy of Northwestern University, with the privilege of spending a year abroad. This plan was successfully followed, and he later graduated from the University of Marburg, receiving his

Ph.D. degree from that institution. It is interesting to note that he was a student under Dr. Arthur at the same time that Dr. Schlotterbeck was a student under Dr. Tschirch at Berne. Prof. Kraemer's work has been that of a master of the subject and the University of Michigan is to be congratulated on securing the services of such an experienced educator and specialist in a highly specialized department of applied knowledge.

RAUBENHEIMER NOW WITH NEW JERSEY C. P.

Dr. Otto Raubenheimer, on June 1 resigned his position as professor of pharmacy and pharmaceutical history in the faculty of the College of Jersey City, and has accepted the chair of dispensing pharmacy in the New Jersey College of Pharmacy, Newark, and will begin his new duties with the opening of the 26th annual session this Fall. Dr. Raubenheimer is widely known as a prescription expert, and a voluminous contributor to pharmaceutical literature.

His activity in association work is equally well-known, particularly in connection with the A. Ph. A., which he has served as a member of the Committee on National Formulary, and Unofficial Standards, and as chairman of the Committee on Recipe Book. He has also been active in the work relating to the present Pharmacopoeia as a member of the Committee of Revision. He is a graduate of the "Blizzard Class" of New York College of Pharmacy, and his classmates say with considerable pride that his work for the advancement of pharmacy is representative of the class since the members left college. His polyglot knowledge of languages and ability to read foreign pharmacopoeias, in connection with his research work in pharmacy, have given him a national reputation as an authority on the various official pharmacopoeias of the civilized world. And as if this were not enough he still finds time to operate and conduct the Verona Pharmacy at 1341 Fulton street, Brooklyn, N. Y. He believes that dispensing is the most important branch of pharmacy and that a mastery and knowledge of the art are what elevate the pharmacist to a professional man in the eyes of the physician and public.



DR. O. RAUBENHEIMER

PERSONAL BREVITIES

—RAY FISHER, former manager of one of the Buck & Rayner drug stores in Chicago, is one of the "258-ers," the men whose number was the first drawn in the draft for the National Army. While he already has enlisted and is a member of Co. No. 1 of the First Regiment, I. N. G., hospital corps, he approves of the suggestion that has been made that one regiment or several regiments composed exclusively of "258-ers" be organized. He said that he would be more than pleased if Uncle Sam could work out some plan for the men drawing this number to fight together. Jay Isaacson, another member of the hospital corps also favors the plan, but it is not likely that the War Department will consider bringing into a single unit men from widely separated parts of the nation.

—HARRY A. ESTABROOK, druggist of Fitchburg, Mass., is the subject of a newspaper man's sketch under the caption "Who's Who in Fitchburg," in a recent issue of the *News* of that city. Besides relating Mr. Estabrook's various activities in organized pharmacy, which pharmacists of the State are well aware of, the writer states that Mr. Estabrook's long service on the school board of Fitchburg has done much to bring the educational system of the city to a high state of perfection. Mr. Estabrook has served as president of the Massachusetts Pharmaceutical Association, and is a trustee of the Massachusetts College of Pharmacy.

—GEORGE J. ELLIOT, a pharmaceutical chemist and a graduate of the University of Michigan, has, according to the *Editor and Publisher*, joined the staff of the *Detroit News*, and will devote himself to the analysis of proprietary medicines which seek admission in the advertising columns of that publication. It is stated that the *News* proposes to assure itself, so far as it is able, that testimonials are legitimate and truthful; that the merits of the medicines are honestly proclaimed, and that the advertising copy will serve and not offend or hurt the reader.

—ANDREAS F. ENGBERG, one of the first volunteers from Spanish Fork, Utah, to enlist when war broke out with Germany, has taken up active duty with a hospital corps in California. Mr. Engberg, who is about 35 years of age, and a native of Utah, completed his education in pharmacy in California, but has been engaged as a pharmacist in Utah for many years. He is brother of A. C. Engberg, proprietor of the World Drug Co., Spanish Fork, while his sister, Miss Agnes Engberg is well-known throughout the State for her musical ability.

—G. W. SIMMONS, a druggist of Utica, Miss., was shot and seriously wounded by Alex. Yates, a merchant of the same place, on July 21. In a statement Yates declared the trouble started when he threw a bucketful of water of water out of a second story window which fell upon Simmons. He said that the act was unintentional and he apologized, but that Simmons refused to accept his apology. The controversy led to the shooting. Yates was arrested and placed in jail at Jackson to await the result of Simmons' wounds.

—WILLIAM HERMAN ARNDT, 24, a pharmacist, was arrested by a deputy United States Marshal on August 3 at Newark, N. Y., charged with high treason for making an affidavit that his sympathies were with Germany, and that he would take up arms with that country rather than against it. He was arraigned and held under \$5,000 bail for further hearing. He is American-born and the son of the Rev. William Arndt, minister of the German Lutheran church in Webster, N. Y.

—J. C. GREENE, president and treasurer of the Greene Drug Co., located in the Empire building, Birmingham, Ala., has sold his interest in the concern to the R. D. Burnett Cigar Co., and has already started plans to open a new drug store in Birmingham. Mr. Greene, since opening the Greene Drug Co. store two years ago, has closely identified himself with the civic and other activities of Birmingham, and his friends are glad that he is to remain in their thriving city.

—WILLIAM L. CARMAN, who for a number of years has conducted the Gray Drug Co., pharmacy at Sixth and Main streets, Benwood, W. Va., and William A. Polley, have purchased the store operated by O. O. Gates on the corner opposite that of the Gray Company for the past eighteen years. The two stores will be consolidated under the name of the Benwood Drug Co., which will conduct the business at the stand formerly occupied by Mr. Gates.

—ROBERT J. PIERCE, a dealer in druggists' sundries, 80 Reade St., New York, committed some time ago to Bloomingdale Hospital, an institution for the insane, on an order of the County Court of Westchester, has been released, a jury in reviewing his case finding him sane. Pierce set up the claim that his wife, two daughters and son were instrumental in having him illegally declared insane and sent to an asylum. He is said to be worth nearly \$200,000.

—WILLIAM H. SWEET, druggist at 1731 Chicago Ave., Minneapolis, Minn., will get a half interest in the \$12,000 estate of his father, the late Edward Sweet, who died at Granite Falls, Minn., last year. In the will the father stated that he had already provided for the son and willed his estate to his only daughter, who asked the court to set the will aside and to permit an equal division of the property with her brother. The court has so ordered.

—ROBERT N. HARPER, who was indorsed by the District of Columbia Druggists' Association to succeed Commission Newman, states that while he feels a personal pride in the fact that his friends in the drug business have recommended him as a candidate for the office of commissioner of the District, his business interests are of a character that would

preclude the possibility of accepting the position even though it might be tendered to him.

—CHARLES S. MARTIN, a former president of the National Wholesale Druggists' Association, and general manager of the Spurlock-Neal Co., wholesale druggists, Nashville, Tenn., has received an appointment as a member of the National Committee of Men and Resources, to serve during the war. Mr. Martin is one of the prominent business men of the South, a deep thinker, and an active worker in whatever he undertakes.

—W. A. RUSS, for the past 25 years a traveling salesman for the Hartz & Bahnsen Co., wholesale druggists of Rock Island, Ill., and widely known to the drug trade in that part of the country, has resigned his position to become president of the Greenfield Brokerage Co., which is soon to move its offices from Greenfield, Ill., to Rock Island. The company will deal in stocks, bonds and securities.

—MAYOR E. B. PATTON, of Waupun, a suburb of Fond du Lac, Wis., has sold his store in that city to Murray M. Hunter, of Milwaukee. Mr. Patton has been in the drug business at Waupun for thirty years, and his store is considered to be one of the finest in that section of the State. Mr. Patton will continue to make Waupun his home, but he is planning to spend the winter with his son in Texas.

—A. VAN HOUTEN, for twenty-eight years with the Hazeltine-Perkins Drug Co., wholesale druggists, Grand Rapids, Mich., has severed his connection with the company to become manager for a wholesale dealer in dairy products, eggs, etc. On the departure for his new position the employees of the Drug Co., presented him with a leather-covered rocker.

—WILLIAM E. CLAYPOOL, druggist, Springfield, Ill., is the only pharmacist in that city who employs women assistants. Miss Lenore DeFrates has been in his employ for a considerable period, which prompts Mr. Claypool to tell an interviewer that he has employed women for the past four years and he has always found them capable and efficient.

—F. M. HEAD, who has been with the Owl Drug Co., for ten years, and was recently manager of one of the branch stores of the company in Los Angeles, Calif., recently went to Fresno where he has assumed management of the Owl Drug Co.'s store. He is very enthusiastic over the business outlook in his new home.

—VICTOR MASSON, for the past 21 years with the firm of P. A. Capdau, Rampart and Elysian Fields streets, New Orleans, La., was recently appointed a member of the Louisiana Board of Pharmacy. He has been in the drug business for 36 years and is prominently identified with various organizations of his city.

—J. P. NOLAN, druggist, 4761 North Clark St., Chicago, has five children in the service of the country, three of his sons holding commissions, while the fourth holds one of the first drawn numbers in the draft. His daughter, Mary C. Nolan, has joined the Red Cross and expects to leave shortly for France.

—JULIUS RANDALL has taken possession of the Tiss Drug Co.'s store at Mason City, Ia., which he recently purchased. Mr. Randall was formerly employed as a pharmacist in the store, but for the last year has been a member of the Stoddard Tire and Supply Co. His home has been near Kensett, Ia.

—CLAUDE WRIGHT, of the firm of Owen & Wright, proprietors of the Crescent Pharmacy, Macon, Mo., has purchased his partner's interest and is now sole owner. Mr. Owen has not determined what he will do, but expects to remain in Macon and may enter some other line of business soon.

—H. A. MOHLER, of Van Wert, Ohio, has been appointed by the Ohio Board of Pharmacy, inspector for the enforcement of the pharmacy laws, until recently administered by the State Board of Agriculture. Helen Hough, of Columbus, received the appointment of stenographer to the board.

—WILLIAM WEISS, GEORGE BETOURNE AND JOHN JACOBS, all registered pharmacists and employed in as many pharmacies of Kankakee, Ill., enlisted at the same time, and

recently received orders to report for duty in the medical reserve corps of the regular army at Des Moines, Ia.

—JOHN D. BELLAIRE, one-time organizer of the N. A. R. D., and later with the Chester Kent Company, of Boston, has recently connected himself with the perfumery house of Lazell, New York, and is representing that concern in the Middle West, where he is widely known.

—F. H. QUIMBY, who formerly conducted the McKinley Square Pharmacy, Adams, Mass., and more recently a drug store at East Pepperell, Mass., has sold his business at the latter place, and will take a rest. He has a camp in Maine and intends to stay there until cold weather.

—WILSON JACKSON, a drug clerk in the employ of Woolley's pharmacy, Streator, Ill., recently passed the examination in Chicago, and is enlisted in the medical staff. He will go to Fort Benjamin Harrison, near Indianapolis for training.

—ANSEL T. WARE, proprietor of a pharmacy at Dallas, S. D., who served as a lieutenant in the Spanish-American war, recently received instructions to appear at Yankton for examination for admission to the officers' training camp at Ft. Snelling, Minn.

—GEORGE MOORE, a druggist of Table Rock, Neb., was badly injured in an automobile accident while motoring nearing Plattsmouth, the car skidding into a ditch. Mr. Moore was badly cut about the face and head, and considerably bruised.

—OTIS R. TYSON, who for a number of years has been a prominent figure in the Western advertising field, has been selected by the Owl Drug Co., San Francisco, to take charge of the company's advertising department.

—HORACE GRANT, of Benton, Maine, a prescription clerk with the Riker-Jaynes Co., Lewiston, Me., has accepted an appointment in the surgical department of the army, and is stationed at Ft. Ethan Allen, Vermont.

—E. R. RAINS, for several years general manager of the Hensel Drug Co., Chicago, Ill., has gone to Toronto, Ontario, where he will join the Royal Medical Corps, which will soon leave for France.

—J. BECK, who has two drug stores in Fillmore Street district of San Francisco, Calif., has been in business fifteen years and is credited with being the official druggist for 34 fraternal organizations.

—CHARLES BOHN, a drug clerk, was arrested recently in Detroit, Mich., charged with taking \$300 from the safe of his employer, Walter J. Bertrand, druggist at 3425 Woodward Ave.

—HAROLD B. POOLE, of the Dakota Drug Co., Valley City, N. D., has received the appointment of sergeant in the Medical Reserve Corps, and has gone into training at Ft. Snelling, Minn.

—ARTHUR ALBRECHT, of Joseph Albrecht & Son, 7102 Central Ave., Cleveland, Ohio, is taking a course at the officers' training camp, Fort Benjamin Harrison, Ind.

—R. E. ESSON, druggist at Sandy, Ore., for the last eight years, left on August 1 for Fort Lawson, Wash. He is a sergeant first class in the Medical Corps.

—IRA DENT, pharmacist in Dean's Union Pharmacy, Douglas, Ga., for several years, has joined the hospital corps of the 17th Infantry at Fort McPherson.

—W. E. HOXSEY, proprietor of the Altamant pharmacy, Spokane, Wash., and Mrs. Frances M. Laughlin, of the same city, were married on July 17.

—FRANK WARD AND CARTER GIBSON, both registered druggists of Hope, Ark., have enlisted in the hospital corps for service in the United States army.

—JAMES CABOT McCORMICK, treasurer of the United Drug Company, Boston, Mass., was married on July 31 to Miss Anna W. Moore.

—RAYMOND HENDRICKSON, proprietor and manager of a store in Chester, Pa., has resigned and will go to Philadelphia with a wholesale house.

—CHARLES A. RILEY, of Stowe, Vt., has sold his big drug store and is going in for extensive farming in a village near there.

—H. L. ROUS, of Connersville, Ind., has purchased a new store from M. M. Erb, and will continue to run the store.

DEATHS IN THE DRUG TRADE

JORDAN W. LAMBERT

Jordan W. Lambert, vice-president of the Lambert Pharmacal Co., of St. Louis, shot and killed himself in that city on August 7. He was 43 years of age, and widely known as an amateur sportsman, belonging to many of the largest athletic clubs of the country. Mr. Lambert was the son of Jordan W. Lambert, Sr., who founded the Lambert Pharmacal Co. in 1880, and a brother of Albert Bond Lambert, widely known as an aviator. He was educated at Smith's Academy, St. Louis, and St. Johns Academy, Salina, Kansas, graduating from the latter in 1895. He immediately became identified with the Lambert Pharmacal Co. Until recently he spent most of his time at the laboratories of the company in Europe and was also active in promoting the sale of its specialties in new territory. His brothers state that he had been in ill health for about two years and was suffering from a nervous breakdown, due to overwork and the difficulties he experienced in obtaining drugs and chemicals as a result of the war. Mr. Lambert was twice married. His brothers Albert Bond, J. D. Wooster and Marion L. J. Lambert are widely known in the business world.

RECENT DEATHS

—GEORGE H. RANSLOW, 39, a former Portland, Me., druggist, who conducted drug stores at Bretton Woods, N. H., Peaks Island, Me., also operated a store in the South during the winter months, and who recently opened a store at Jackson, N. H., to which place he moved his family a short time ago, died suddenly on August 8 at the Waumbek Hotel, Jefferson, N. H., where he was stopping on a business trip to his several stores. He was a member of the Masonic order, the Elks, and the United Commercial Travelers. He is survived by his widow and three children.

—ADAM C. DANIELS, 59, who retired a short time ago after conducting a drug store in Pueblo, Colo., for 37 years, died on July 16, following a long illness. He was one of Pueblo's oldest business men, and one of the oldest members of the B. P. O. Elks Lodge of that city. He was born in Lykens, Pa., and after serving his apprenticeship, entered the Philadelphia College of Pharmacy. After graduating he went to Shreveport, La., and soon moved to Pueblo. He is survived by his widow and two children.

—CHARLES WILLIAM KINDER, who retired from the drug business about ten years ago, died at Auburndale, Mass. He was 79 years of age, and more than 35 years ago established a drug store in Nonantum. He was a graduate of Cambridge University, England, and afterwards became a professor of chemistry there which work he gave up later to enter business in the United States. He is survived by his widow, two sons and two daughters.

—WILLETT E. POST, a lifelong resident and pioneer druggist of Rochester, N. Y., died on July 23 at his summer home in Sea Breeze. He was born in 1847, and after obtaining his education, associated himself with his father and the late Joseph K. Post in the drug business, from which he retired about five years ago. He is survived by his widow and one son, Ruden W. Post, superintendent of the municipal laboratory.

—MRS. AMANDA PELIKAN, a member of the Woman's Organization of the Allied Drug Trade and the Ladies' Auxiliary of the Chicago Retail Druggists's Association, died recently in Chicago. She was an active member and officer in Bohemian Chapter Order of the Eastern Star, her husband, Louis Pelikan being a druggist at 2359 South Kedzie ave., Chicago. Besides her husband, two daughters survive.

—CHARLES OTIS LEE, a pioneer druggist of Manchester, Mass., died on July 20. He was born in Manchester in 1851, and early began clerking for his father who, for many years, conducted a drug store in that city. In 1862 the father put in the first soda fountain in Manchester at

an expense of \$60. Charles O. Lee was at one time a member of the Park Board. His widow survives.

—GEORGE W. DINGMAN, who conducted a drug store in Urbana, Ill., for thirty years, dropped dead in his place of business on July 16. Death was due to heart failure. He had been in poor health for some time, but had so far recovered as to attend to his store part of the time. He was born in Ohio in 1853. He is survived by his widow, one daughter and three sons.

—FERDINAND G. OTT, proprietor of a drug store at Dayton, Ky., and recently elected president of the Ohio Valley Druggists' Association, is dead from an attack of heart failure. He was about 60 years of age. He was a past master of Henry Barnes Lodge of Masons and a director of the Dayton Red Cross Society. He is survived by his widow and one daughter.

—RALPH HENRY BREUNERT, a member of the firm of the Breunert Drug Co., Denver, Colo., died recently after an illness of one month. He was a victim of heart disease. He was 29 years of age, and had lived in Denver all his life. He is survived by his mother, two sisters and one brother, Guy Breunert who was associated with him in the Breunert Drug Co.

—CHARLES E. EBERHART, engaged in the drug business for thirty years, died at his home in Nashville, Tenn., on July 28. He was one of the oldest druggists of the city, and for the past eight years had been located at 14th and Woodland streets. He is survived by his widow, a son, John, who recently enlisted in the navy, and one daughter.

—JOHN N. PRASS, identified with the drug business of Dayton, O., died after an illness of a little more than one day of a hemorrhage. He was 53 years of age, a graduate of the Philadelphia College of Pharmacy, and was employed at Pence Brothers drug store. His widow and one daughter survive.

—DR. J. A. ROEDER, 68, physician and druggist, and at the time of his death proprietor of the Prospect Hill Pharmacy, Omaha, Neb., died from heart disease on July 13. He located in Omaha in 1856. He is survived by his aged mother, one brother and five sisters.

—W. R. RODMAN, druggist of Mound City, Ill., was found dead in his store at that place on July 29. He had been afflicted with asthma for a number of years and suffered frequent coughing spells. He is survived by his widow and two married daughters.

—THOMAS M. ELSTON, 75 years of age, engaged in the drug business until about twelve years ago, died at Simpsonville, Ky., as a result of a third stroke of apoplexy which he had suffered. He is survived by his widow, two sons and two daughters.

—ARCHIBALD MCKAY, 69, a pioneer druggist of Minot, N. D., where he lived until four years ago, died at his home, Forest Grove, Ore., recently, after several months' illness from heart disease. He is survived by his widow and four sons.

—J. H. HART, a former druggist of Martinsville, Ind., who retired only recently, died on August 7. He was born in Pennsylvania in 1852. He is survived by his widow and two daughters.

—ALBERT W. SMITH, 32, head of the A. W. Smith Drug Co., Holyoke, Mass., committed suicide recently by cutting his throat with a razor. He had been despondent for some time, due, it is thought, to illness.

—WALTER WRIGHT, a well-known druggist of Atlantic City, N. J., is dead from cerebral hemorrhage. He was 52 years of age, and is survived by his widow and one daughter.

—C. C. BENNER, 64, proprietor of the Eastwood Drug Store, Long and 21st streets, Columbus, O., is dead of apoplexy. He is survived by his father and one daughter.

—WILLIAM P. TAYLOR, 41, druggist of Alexandria, Va., died on July 16, following an operation. He leaves a son.

NEED OF A PHARMACEUTICAL CORPS URGED IN REPORT TO GEN. GORGAS

Health of the Army Should Not be Entrusted to Non-Professional Men—Fatalities from Poisoning in British Army—Corps Easily Organized.

George M. Beringer, president of the National Pharmaceutical Service Association and Joseph W. England of the Committee on National Defense, American Pharmaceutical Association have made a report to Gen. Gorgas, surgeon general of the army on the proposed pharmaceutical corps.

The report was submitted as the result of a conference held on July 24 at Gen. Gorgas' office between a board of army medical officers composed of Col. George E. Bushnell, Majors E. P. Wolf, F. F. Russell and Stewart Maguire, and a committee of pharmacists, at which was discussed the proposition that a pharmaceutical corps be established as a branch of the Medical Department of the army. In part, the report states:

"American pharmacists hold a prominent position in the world development of their profession. The United States pharmacopoeia ranks as the peer of any national pharmacopoeia. The other legal authority for medicines, the national formulary, has been prepared entirely by a committee of the American Pharmaceutical Association. It is inconceivable that the War Department should ignore this important branch of the medical profession and to-day has not commissioned in its service a single eminent pharmacist.

"Those in the military service of the nation are entitled to the very best medical attention that the Government can procure. The dispensing of potent remedial agents, whether in civil practice or in the military service, should be restricted entirely to those who have been especially educated and trained as compounders and dispensers of medicines.

"The army medical supplies necessarily include such poisonous drugs or their preparations as aconite, atropine, belladonna, cocaine, colchicum, hyoscyamus, morphine, nuxvomica, opium and strophanthus. The dispensing of these in the army is not only 'done by non-commissioned officers of the Medical Department, but quite commonly by those whose lack of education and training would preclude them from the examinations of any board of pharmacy. Surely the soldier is entitled to pharmaceutical service and protection equal at least to that which his State provides for him in civil life.

"Unfortunately, the United States has copied the methods of the British Army Medical Department, whose service has been denounced at home as 'obsolete,' 'incompetent' and 'inefficient.' Great Britain and the United States are the only two prominent nations whose army medical service does not provide for an organized pharmaceutical corps. The *Pharmaceutical Journal and Pharmacist* of London in a recent editorial states: 'The British Pharmaceutical Council has already been compelled to report several cases of poisoning that had occurred in hospitals because of untrained dispensers.'

"The investigations of the causes of the failure of the British expedition in Mesopotamia present a most harrowing account of a horrible calamity. The intolerable suffering of the soldiers through the lack of medical attention is not only deplorable, but it is inexplicable that in a modern army, existing under the present status of medical knowledge, such a condition could possibly have occurred. Upon the insufficiency of the medical provisions and the inefficiency of the Medical Department much of the blame for the collapse of this unfortunate expedition is now officially placed.

"The statement has been officially made that 'the pharmaceutical preparations of the army, especially in time of war, are for the most part in tabloid form; the pharmacy is therefore a matter of dispensing rather than a compounding of preparations.' This indicates that pharmacy as practiced in the United States Army is very elemental, indeed, and that even the very basic ideas of professional pharmacy are ignored. The most serious evil resulting from this 'ready-made medicine' and tablet dosage is that too often the patient is made to fit the tablet on hand in-

stead of a remedy being prescribed to fit the needs of the patient. There can be no question as to the superiority of the individual treatment over this method of 'treatment en bloc.'

"No one has, as yet, estimated the percentage of mortality in the army resulting from improper and inefficient medical service. The statistics that have been compiled, however, show that in the past wars, the number of men dying from disease was many times that killed by the enemy.

"In the present world war, Germany reports that 87 per cent of her wounded are returned to the service. This remarkable conservation of life is very properly attributed to the efficient service of her highly trained medical corps and accounts very largely for the ability of the Germans to keep up their vast armies on all the war fronts. It is reasonable to assume that a due share of the credit for this efficient hospital service is due to the German Army Pharmaceutical Corps.

"In the United States Army, we have no pharmaceutical corps whatever. We have no pharmacist supervision of medicines and hospital supplies. We have no governmental manufacture of medical supplies for the army under the supervision of trained pharmacists. We have no specially trained pharmacists to attend to the dispensing and compounding. We have absolutely nothing that bears any semblance to a modern army pharmaceutical corps.

"We have it officially stated that in the United States army 'the dispensing of drugs or compounding of prescriptions is done by the non-commissioned officers of the Medical Department.' Many of these, as pointed out, could not qualify to practice pharmacy in civil life. Can the United States afford to have an Army Medical Department and service that is inferior to that of Spain or Japan?

"An order has just been published by the Adjutant General for the reorganization of the Army of the United States in conformity with the organization of the French army. If we find the French models for the line troops worth following, it is reasonable to suppose that we should likewise follow their organization in the sanitary service, including the medical and pharmaceutical corps.

"In the absence of any attempt in the past to organize the pharmaceutical service in the army the duties that might be assigned to a pharmaceutical corps can only be tentatively outlined. The provision of the various foreign army pharmaceutical corps will furnish excellent models for the duties of such a corps. These have been very generally followed in the fairly comprehensive line of duties stated in the bill introduced by Congressman Edmonds entitled: 'A Bill to increase the efficiency of the Medical Department of the United States Army, to provide a Pharmaceutical Corps in that department, and to improve the status and efficiency of the pharmacists in the army.'

"No doubt the experience of other nations will be duplicated in that the duties assigned to the pharmaceutical corps will rapidly increase, and with such increase of duties the corps will grow in usefulness and importance. Eventually it may be placed in control of not only the providing, manufacturing and distributing of pharmaceutical and hospital supplies, but also, as in foreign countries, of the various hygienic, chemical, analytical and research laboratories of the army.

"The proposed formation of a pharmaceutical corps in the Army Medical Department does not contemplate any radical changes or reorganization of the department. By a readjustment of the regulations the medical corps can be relieved of its burden of non-medical duties, records and accountings. The pharmaceutical corps should be promptly organized to take up its various duties and to co-ordinate its work with that of the medical, dental, veterinary and nurse corps of the military service."

McPIKE DRUG CO. ADDS NEW BUILDING

The McPike Drug Co., wholesale druggists, Kansas City, Mo., recently begun the excavation for a five-story brick and stone building as an addition to its present building at the northwest corner of Seventh and Wyandotte add materially to the room needed by the company. It is expected the building will be completed by September 1.

WORKING FOR ARMY PHARMACISTS

Permanent Organization to Secure From Government Adequate Recognition For all Branches of Pharmacy—Text of Bill Introduced.

The first concerted action for securing commissioned rank for pharmacists in the Government service was taken recently at Philadelphia, when representatives of the Philadelphia Branch of the American Pharmaceutical Association, Philadelphia Association of Retail Druggists, Philadelphia Drug Exchange and the Philadelphia College of Pharmacy met and formed a permanent organization for the express purpose of securing adequate recognition for all branches of pharmacy. Much progress has been made since this first meeting and it seems as though the fruits of the labor of those who have been charged with the work of this Association are about to be realized.

The permanent organization which was formed was called the National Pharmaceutical Service Association and the following officers and executive committee were elected: President, Geo. M. Beringer, Camden, N. J.; vice-president, Charles H. LaWall, Philadelphia; secretary-treasurer, Robert P. Fischelis, Philadelphia. Executive Committee: Jos. W. England, Walter B. Smith, Ambrose Hunsberger, Eugene G. Eberle, Samuel C. Henry, J. C. Peacock, W. D. Robinson, F. E. Stewart, and the officers of the Association.

Copies of the constitution and by-laws of the newly formed Association and an announcement as to its objects have been mailed to representative pharmacists all over the United States, as it is the object to enlist as many members in the cause as possible so as to present a strong united front to the authorities.

On July 24th, Surgeon-General Gorgas of the United States Army granted representatives of the Association an interview in his office in Washington. President Beringer, Jos. W. England, Prof. E. G. Eberle and S. L. Hilton represented the pharmacists on this occasion and the Surgeon-General appointed a committee of Army surgeons to carefully consider the matter presented. The pharmacists were asked to present their request in writing after the conference had been held.

In the mean time, the Executive Committee of the National Pharmaceutical Service Association has drawn up a bill for presentation to Congress, authorizing the formation of a pharmaceutical corps in the Army, presided over by a Major who must be a pharmacist, and other supporting officers who must likewise possess pharmaceutical qualification. The bill if passed, will permit those now in the hospital corps who have had pharmaceutical training to rise to commissioned rank after a term of service and upon presenting proper qualifications.

It is hoped that the response to the request for more members who are willing to support this movement will be sufficiently great to carry on the work which is necessary to send this bill through Congress. The text of the bill, which was introduced in the House on July 25 by Mr. G. W. Edmonds, of Philadelphia, is as follows:

Text of Bill Introduced

To increase the efficiency of the Medical Department of the United States Army, to provide a Pharmaceutical Corps in that department, and to improve the status and efficiency of the pharmacists in the Army.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That hereafter there shall be attached to the Medical Department of the United States Army a Pharmaceutical Corps, composed of citizens of the United States, to perform the duties defined in this Act and such related duties as may be prescribed, from time to time, by the Surgeon General.

SEC. 2. That the Army Pharmaceutical Corps shall consist of one pharmacist director, with rank of major, who shall be chief of the Pharmaceutical Corps, five deputy pharmacist directors, with the rank of captain, and such number of pharmacists, with the rank of lieutenant, and of pharmacist apprentices, as may be needed for the service.

SEC. 3. That the Army Pharmaceutical Corps shall be charged with the following specific duties: To procure by purchase or manufacture all supplies of medicines, drugs, chemicals, pharmaceutical apparatus, and hospital and surgical dressings necessary for the Medical Department of the Army; to determine the quality and purity of such supplies; to have charge of the medical supply depots of the Army and the storage and safeguarding of such supplies; to provide for the issuance and distribution of such supplies and the dispensing of medicines in the various hospitals, dispensaries, infirmaries, trains, the camps of the Army; to properly care for, regulate the dispensing, and systematically account for

all spirituous liquors and habit-forming drugs purchased for the department; to procure by purchase or manufacture such drugs, chemicals, reagents, tests, and biologic products as are used in the laboratories and the medical and surgical practice of the department for the purposes of diagnosis, prophylaxis, or treatment; to account for all moneys received from sales of medical supplies, in accordance with the provisions of the Army regulations or disposal of by order of competent authority; to inspect the department's stores and supplies of drugs, medicines, hospital dressings, reagents, tests, and biologic products and determine their deterioration and fitness for use; to co-operate with the other branches of the department in rendering first aid and wound dressing and in the making of diagnostic and chemical tests; to establish and maintain a systematic course of study and training, including advances made in medicine, pharmacy, and sciences allied thereto, to be pursued by the members of the Army Pharmaceutical Corps who are seeking promotion in the corps.

SEC. 4. That the pharmacist director shall be a graduate of a reputable school of pharmacy, have had not less than five years of pharmaceutical experience, and have established a creditable record in the profession of pharmacy.

Duties of Pharmacist Director

The duties of the pharmacist director shall include the following: To have supervision over the Army Pharmaceutical Corps; to see that discipline is maintained and duties are efficiently performed; to formulate rules and regulations, subject to the approval of the Surgeon General, for coordinating the work of the Pharmaceutical Corps with the duties of the other branches of the Medical Department; to approve all contracts for supplies procured by the corps; to inspect, either in person or by deputy, all deliveries of supplies and pass upon the purity and quality thereof, and compliance with specifications and the acceptance or rejection; to have the authority to inspect the manufacture of such supplies, and to direct their manufacture in any factory or laboratory that may be taken over by the Government, or that may be established by the Government, for their production; to establish standards for supplies of non-official drugs, chemicals and preparations, and, where feasible, prescribe the methods of assay for these; to publish, with the approval of the Surgeon General, formulas for nonofficial preparations, reagents, and tests used in the Army Medical Department, and all formulas so published shall be authoritative in the Army Medical Department; to recommend alternates or substitutes for proprietary, expensive, rare, or unobtainable drugs or preparations; to prepare specifications and estimates for Army medical supplies; to pass upon requisitions for supplies; to provide regulations for the storage, safeguarding, and preservation of Army medical supplies; and the distribution and issuing of such supplies; to see that accounts of the receipts and disbursements of all supplies are properly kept, with special records of the purchases and disposition of spirituous liquors and habit-forming drugs; to have inspections made of the medical supplies, and recommend appropriate disposition of condemned, deteriorated, or unreliable supplies; to preserve the files, correspondence, and official records of the corps; to prepare a syllabus covering a systematic course of professional study to be followed by members of the Pharmaceutical Corps; to cooperate in the professional examinations of applicants for enlistment in the pharmaceutical service, or for promotion within the corps; to recommend transfer of members of the Pharmaceutical Corps and promotion for service or special recognition for distinguished service. He shall outline a course of instruction for pharmacists if an Army pharmacist training school is established.

In the absence of the pharmacist director a deputy pharmacist director shall be named as acting pharmacist director. The various duties specified above as within the province of the pharmacist director, with the approval of the Surgeon General, may be distributed or assigned to the deputy pharmacist directors.

The deputy pharmacist directors shall be pharmacists of unquestioned professional repute who are graduates of reputable schools of pharmacy and have had not less than five years pharmaceutical experience.

Any American citizen, graduate of a reputable school of pharmacy, of good moral character and between twenty-one years and forty-five years of age, both inclusive, who can pass the usual physical examination required for appointment in the Medical Corps and the professional examinations, which shall include tests of skill in practical pharmacy and of proficiency in the usual subjects of a standard school of pharmacy course, may be appointed as a pharmacist in the Pharmaceutical Corps.

An original appointment as pharmacist under this Act shall entitle the appointee to the rank and commission of second lieutenant. After the expiration of the first five years of service, with honorable discharge, the pharmacist may reenlist at any time within six months from the date of expiration of such prior service, and he may then apply for examination for promotion, and if his physical examination and the professional examination in subjects of advanced pharmaceutical education are satisfactory, he shall be eligible for promotion to the rank and commission as first lieutenant, Pharmaceutical Corps. After fifteen years of service in the Pharmaceutical Corps a pharmacist with the rank of first lieutenant, Pharmaceutical Corps, may apply for examination for promotion. If he successfully passes the necessary examination in postgraduate pharmaceutical studies, and if in the opinion of the pharmaceutical director such promotion is merited, he shall be promoted to the rank and commission of captain, Pharmaceutical Corps.

Any citizen of the United States between seventeen years and thirty-five years of age, both inclusive, who can pass the necessary physical and preliminary educational examination prescribed by the Secretary of War may enlist as a pharmacist apprentice. Pharmacist apprentices shall act as assistants to the pharmacists and to the Hospital Corps. After serving for one year in this capacity the pharmacist apprentice may, with the approval of the pharmacist or the surgeon under whom he has served, apply for examination for promotion; and if he passes the examination in

preliminary education and the elementary pharmaceutical branches, he shall be promoted to the grade of pharmacist apprentice, first class, with rank as sergeant. After five years of service, with honorable discharge, the pharmacist apprentice may reenlist and may apply for examination and promotion to the grade of pharmacist with commission as second lieutenant: **Provided**, That after two years of service the Secretary of War, upon recommendation of the pharmacist director, may grant to a pharmacist apprentice sufficient leave of absence from the service to permit the apprentice attending a school of pharmacy to fit himself for advanced rank in the Pharmaceutical Corps. Such leave of absence shall be without pay, but shall not be deducted in computing the length of service.

Professional Examinations

The Secretary of War is authorized to appoint boards of three examiners to conduct the professional examinations herein prescribed: **Provided**, That at least one member of each of the boards so appointed shall be a pharmacist.

That, whereas there are now in the service of the War Department a number of pharmacists and druggists ranking as master hospital sergeants, hospital sergeants, sergeants first class, and sergeants, all such shall be eligible to transfer to the Pharmaceutical Corps created by this Act and to the service, rank, pay, and promotion in rank as provided herein, and that the time already spent as pharmacists in the War Department shall be computed as part of their service in the Pharmaceutical Corps.

That in emergencies the pharmacist director, upon the recommendation of the Surgeon General and with the approval of the Secretary of War, may appoint as many contract pharmacists as may be necessary, at a compensation not exceeding \$150 each per month, and provided that the age limit and professional examination may be waived in the case of any contract pharmacist whose character, experience, and professional education is deemed by the pharmacist director to be satisfactory. The temporary appointment of a contract pharmacist shall not carry commission or right of retirement in accordance with the Army Regulations.

SEC. 5. That all appointees authorized by this Act shall take rank and precedence in the same manner in all respects as in the case of appointees to the Medical Corps of the Army, and shall not exercise command over persons other than those in the Pharmaceutical Corps and such enlisted men as may be detailed to assist them by competent authority.

That all officers of the Pharmaceutical Corps shall receive the same pay, awards, and allowances as the officers of corresponding rank and length of service in the Medical Corps of the Army and shall be eligible to retirement in the same manner and under the same conditions.

That pay of the pharmacist apprentice shall be \$33 per month and that of the pharmacist apprentice first class, with rank of sergeant, shall be \$37 per month, and for each reenlistment in this service they shall receive the usual increase allowed in the Army for honorable discharge and reenlistment.

SEC. 6. That all laws and parts of laws inconsistent with the provisions of this Act be, and the same are hereby, repealed.

ALCOHOL IN SOUTH DAKOTA

Secretary E. C. Bent of the South Dakota Board of Pharmacy has recently mailed a circular letter to the registered pharmacists of that state in which he says that he has been instructed to inform the druggists that as the Federal Government permits them to handle intoxicants in small quantities when said use is in conformity with Federal laws without a government license or special tax, the Chief Sheriff has ruled that there is nothing in the State law to prevent a retail druggist from having in his possession alcohol to be used exclusively for compounding and manufacturing medicines and that it will not be necessary to have a permit to thus use it. Mr. Bent also gives the following information:

"The Board of Pharmacy at its last regular meeting, April 20, instructed the Secretary that in case the Chief Sheriff gave the above as his opinion, to convey to the registered pharmacists of the state the recommendation of the board that we refrain from taking out permits, for the following reasons: 1st. The people of South Dakota have enacted a so-called Bone Dry Prohibition Law. 2. That the entire burden of the machinery of the law as to sales is placed upon the retail druggists, with exceedingly heavy penalties for the slightest infringement of the provisions of the law. 3rd. As far as can be ascertained the medical profession almost in entirety will not take out permits, and will not be burdened as the law provides; and 4th. That all legitimate needs of intoxicants can be supplied by both pharmacists and physicians in potable medication recognized as such by the Federal government and the state prohibition law. 5th. As alcohol can be denatured and sold without license or permit to meet all demands for external use as a medicine, why not accept and follow the board's recommendation?" The Chief Sheriff states that in his opinion alcohol denatured so as to render it unfit for a beverage, may be sold without regard to any of the provisions of the prohibition law.

STATE NARCOTIC LAW EXPLAINED

Department of Health Issues Bulletin Regarding Opium and its Derivatives and the Duty of Physicians and Druggists Under Chapter 431, Laws of 1917.

The State Department of Health has issued a statement regarding the new state narcotic law, explaining the provisions of Chapter 431 of the laws of 1917. The statement reads:

"This statement deals exclusively with the provisions of Chapter 431 of the laws of 1917. It does not deal with the provisions of section 1746 of the penal law regulating the sale or possession of alkaloid cocaine or its salts, or alpha or beta eucaine, or their salts, or compounds or mixtures thereof. Nor does it pretend to deal with the provisions of the Federal drug act commonly known as the Harrison law. Chapter 431 of the laws of 1917 is in addition to the Harrison act. Many things are required of physicians and others under both acts. Some are required by the State act, but not the Federal act. In every case both acts must be complied with whether this rule causes duplication or not. A later memorandum will cover these other laws.

"The law applies to opium and its salts, alkaloids and derivatives, and to any compound or preparation of any of them. It does not apply to preparations or prescriptions containing not more than two grains of opium or one-quarter grain of morphine, or one-eighth grain of heroin, or one grain of codeine, or their salts, in one fluid ounce, or, if a solid preparation in one avoirdupois ounce; nor to plasters, liniments, ointments for external use only, provided that such excepted preparations shall contain other active drugs in sufficient proportions to confer upon them other and additional properties than those possessed by the unmixed drugs specified in the act.

"No person, whether a druggist or otherwise, shall sell or give away any of such drugs, except either on the prescription of a duly licensed physician, dentist or veterinarian or on presentation of an official order blank as hereinafter described. Before even filling such prescription, however, provided it calls for more than four grains of morphine, thirty grains of opium, two grains of heroin, or six grains of codeine, it is the duty of the druggist or other person to verify the signing of the prescription by telephone or otherwise. The prescription must be filled out immediately upon its presentation and cannot be filled out if it is presented more than ten days after its date. No copy of the prescription is to be given away or sold. The original prescription is to be retained by the person dispensing the drugs and cannot be refilled. The prescription to be signed by a physician, dentist or veterinarian must contain:

"1. The full name of the physician, dentist or veterinarian.

2. His office address.

"3. The name, age and address of the person to whom it is issued, and, if such person is being treated as an addict under the provisions of the act, a statement to that effect.

"Druggists must keep a separate file of each such prescription, showing:

"1. The file number given by the druggist to each such prescription.

"2. The name of the physician signing the same.

"3. The name and address of the person for whom the prescription is made out.

"4. The name of the person to whom the drugs were delivered.

"He shall place on the package containing the drugs a label or with the drugs deliver a certificate. The label or certificate shall state:

"1. The name and address of the person selling or furnishing the drugs.

"2. The name of the physician prescribing the drugs.

"3. The date of the sale.

"4. The name of the person to whom the sale was made.

"No druggist or other person shall sell any hypodermic syringe or needle to anyone other than a physician, dentist or veterinarian, without a written order from a duly

licensed physician, dentist or veterinarian. He shall enter in a book to be kept for that purpose:

- "1. The date of the sale.
- "2. The name and address of the person to whom sold.
- "3. Description of the article sold.

"A physician may issue the prescription hereinbefore outlined but he cannot issue any prescription, or give or sell any drug except after a personal physical examination of the person for whom the prescription is made out. A physician is allowed in good faith to give to, or treat with drugs any addict for the purpose of curing the same or relieving the physical pain on the part of such addict. But such action can only be had after a personal physical examination of the addict. The prescription in such cases outlined above must contain a statement that it is for an addict. The physician shall keep separate records of prescriptions or treatment of addicts and report to the State Department of Health on the first of each month all the facts in reference to such treatment during the past month, and must keep a copy of such report. The physician shall also keep a record containing the name and address of each person to whom any drug is dispensed or given, whether an addict or not, and the quantity so dispensed.

"In so far as relevant, the provisions that apply to physicians apply to dentists, except that dentists are only allowed to administer drugs as incidental to the treatment of cases under their immediate care.

"The requirements as to veterinarians are, in so far as relevant, the same as those applying to physicians and dentists, except that veterinarians are forbidden to prescribe for or furnish drugs to human beings.

"A drug addict may apply to a local board of health for commitment to a hospital and if the hospital consents the addict may be received therein on a commitment by the local board of health in the same manner as if the commitment were made by a magistrate. A local board of health is further authorized to prescribe and furnish drugs to addicts pending treatment. The State Department of Health must prescribe the regulations under which such prescription or treatment by local boards of health shall be undertaken.

"The State Department of Health shall furnish each duly licensed physician, dentist, pharmacist, druggist, veterinarian, and wholesale dealer and jobber in drugs, and each hospital, college, scientific and public institution reporting to the State Department of Health as hereinafter outlined, with official order blanks. No drugs shall be purchased or given away for the use of any physician, dentist, pharmacist, druggist, veterinarian, hospital, college, scientific or public institution, or wholesale dealer or jobber in drugs, unless ordered on such official order blanks as provided for in the act. The person desiring the drug must fill out and sign in triplicate the official order blank for the same. One copy is kept by the person ordering the drugs. One copy is delivered to the seller, who must keep a separate file showing the date of the sale and the name and address of the purchaser. One copy must be filed immediately with the State Department of Health, except in cities of the first class, in which case it must be filed immediately with the local health department.

"Every person having drugs in his possession shall file with the Department by July 10 of each year a detailed statement, showing the amount of drugs on hand on July 1 of that year. No person shall keep, sell or dispense any drugs unless by July 10 of each year he shall have filed with the State Department of Health a report showing his name, residence, age and occupation and the place where he has been in business or practicing for two years immediately preceding. Each person having in his possession drugs shall keep a record of the name and address of each person to whom drugs are sold or given, and also a record of such other disposition of the drugs as may have been made.

"All records and reports, or copies thereof, required to be kept by any person handling drugs by this chapter must be kept by such person for a period of two years before they are destroyed.

"No person other than a druggist, dealer in drugs, hospital, physician, dentist, etc., can have in his possession any drug unless by virtue of a physician's prescription.

He must also have the certificate or label required to be given by the druggist when filling the prescription. In order to justify the possession of a hypodermic needle or syringe, such person must have, in addition to an order from a physician, a certificate from one stating that the possession of the instrument is necessary for the treatment of a disease suffered by such person. In the case of a nurse such certificate must state that the instrument is for professional purposes."

INDIANAPOLIS BRANCH ELECTS OFFICERS

At the recent meeting of the Indianapolis Branch of the A. Ph. A. held in the Indianapolis Chamber of Commerce, F. H. Carter, President, presided. C. R. Eckler of Eli Lilly & Co., spoke on the pituitary body, taking up first the early notions held in regard to its function and importance. One early notion was that the pituitary secreted the mucus which lubricates the nose. The early studies of the internal secreting glands were mentioned, leading up to and including the recent surgical work of Cushing, Bell and others, illustrating the modes of operation. The pituitary is essential for life and proper development. Complete extirpation is always followed by death. The loss of the anterior part is responsible for this fatal result.

The position of the pituitary in the cranial cavity, its bony and membranous protection, the comparative size of the body in different animals, the two lobes and their comparative size and relations were demonstrated on the human skull and on carefully dissected out brains of several different animals. The genesis of the organ was explained, the posterior lobe developing from one of the ventricles of the brain, the anterior lobe from the roof of the primitive oral cavity. Drawings of histological sections showed the cellular structure of the two lobes and also the intermediate part—a thickening of glandular tissue about the neck and stalk of the posterior lobe, developed from the anterior lobe, and probably furnishing the secretion distributed by the posterior lobe. The conditions of hypopituitarism and hyperpituitarism were discussed and illustrated with plates. The suggested relationship and hypopituitarism and hibernation was mentioned.

Injection of anterior lobe extracts or the feeding of desiccated lobe has not been followed by decisive results. The injection of posterior lobe extracts apparently slows and strengthens the heart, increases the tone of involuntary muscle quite generally except for that of the blood vessels of the kidney, and increases the function of a number of glands such as the mammary, kidney and liver. Finally, the uses of posterior lobe extracts in medicine were considered, and the physiological methods of testing such extracts were outlined, and illustrated by photographs and drawings.

The following officers were elected: F. H. Carter, president; C. R. Eckler, vice-president; F. E. Bibbins, secy-treas.; Committee: C. W. Watkins, A. D. Thorburn, E. W. Stucky, M. P. Schwartz and J. W. Stokes. Delegates to A. Ph. A. are E. W. May, H. W. Rhodehamel and F. B. Fisk.

STEARNS' EMPLOYEES ENJOY OUTING

More than 1600 employes of Frederick Stearns & Co., Detroit, Mich., celebrated their annual outing with an old-fashioned picnic on Saturday, August 4. The steamer "Britannia" was chartered for the beautiful twenty mile "voyage" down Detroit River to Bob-lo (Bois Blanc Island); the entire plant was closed, and each employe was given full pay and two tickets, along with an invitation to "bring the folks" and share in what proved to be a most enjoyable outing. The program of events included a baseball game between the office and laboratory forces, the latter winning by a score of 5 to 1, while a sideshow exhibiting a mysterious amphibian species christened Hyka-lookas but known scientifically as the frog, aroused much curiosity among persons who ought to have known better. Prizes for the man and woman present who had been in the Company's employ the longest were won by Frank Breban and Miss Jennie Hamilton, both of whom had seen more than 35 years of service.

Credit and Commercial Decisions

By GEORGE H. MURDOCH, NEWARK, N. J.

To "sign" a document is to affix a signature thereto, to ratify by hand or seal, or to subscribe in one's own handwriting.—*In re Manchester's Estate*, 163 P. (Cal.) 358.

The maker or holder of a note cannot change the time of day at which it shall be payable, and at which its maker shall be in default for nonpayment by merely delivering it to a bank for collection nor can the time when notice of dishonor may be given be thus advanced.—*Smith v. Hirst*, 163 P. (Cal.) 334.

An individual who has sold his business and the use of his name to a corporation can be restrained from thereafter engaging in the same business in that locality under his own name, or by a corporation organized by him with a name similar to that of the corporation to which he had sold his former business.—*Wheeler Syndicate, Inc., v. Sheeler*, 163 N. Y. S. 817.

Under Negotiable Instruments Law (Rev. Laws, c. 73.) §§ 46, 101, making an accommodation indorser liable although the holder knew him to be such and giving the holder immediate recourse against the indorser upon nonpayment, the payee may sue an accommodation indorser before realizing on security obtained from the maker.—*Miller v. Levitt*, 115 N. E. (Mass.) 431.

Where fire policy provided that it would be void if the insured thereafter procured any other contract of insurance whether valid or not, the action of the insured in thereafter procuring another policy of insurance on the same property worked a forfeiture of the first policy.—*Camden Wholesale Grocery v. National Fire Insurance Company of Hartford, Conn.*, 91 S. E. (S. C.) 732.

Where the seller is consignor and consignee, and indorses the bill of lading with drafts on the ostensible purchaser, and the real purchaser pays the draft, and the goods are delivered to him, he, as the party beneficially interested, is the proper plaintiff to sue the carrier for injury to goods.—*Nashville, Chattanooga & St. Louis Railway v. Abramson-Boone Produce Company*, 74 So. (Ala.) 350.

Defendants may be convicted of conspiracy to receive the property from a bankrupt after bankruptcy, with intent to defeat the Bankruptcy Act, though the evidence shows that the property was taken out of the bankrupt's possession two days before the petition in bankruptcy was filed, since the final agreement may not have been made until thereafter, and the property continued to be the property of the bankrupt.—*Knoell v. United States*, 239 F. (U. S.) 16.

Where plaintiff directed an insurance company's employee to refer her fire insurance application to his superior, paid three dollars premium and he told her she "was covered," and a fire occurred five months later with nothing further done and thirteen dollars arrears in premiums, the verbal contract afforded no protection since a reasonable time for securing a written policy had expired.—*McQuaid v. Aetna Insurance Company*, 115 N. E. (Mass.) 428.

A "chattel mortgage" is something more than a mere security, being a conditional sale of the thing mortgaged, and transferring legal title to the mortgagee, to be defeated only by full performance of the condition, nothing short of actual payment before a foreclosure or sale being sufficient to revest the legal title in the mortgagor, so that on breach of the condition the mortgagee may, so far as the legal rights of the parties are concerned, treat it as his own.—*People v. Scudder*, 163 N. Y. S. 739.

Where the president of a trading or business corporation is given general management and control of its property, he is an agent as to third persons, and the corporation is *prima facie* bound by contracts made by him, in its name, within the apparent power of the corporation, and third parties entering into such contracts are not bound by secret limitations of his authority, or to inquire whether the act is advantageous or disadvantageous to the corporation.—*Aetna Explosive Company, Inc., v. Bassick*, 163 N. Y. S. 917.

Under an indemnity policy providing that, if suit is brought against assured on account of an accident, the insurer will at its own cost defend the suit unless it shall elect to settle it or pay the insured the indemnity provided by the policy, the election by the insured to defend the suit of the person injured, rather than to settle, does not subject the insurer to the full risk of the litigation, where the judgment recovered exceeds the indemnity provided by the policy.—*Kingan & Company v. Maryland Casualty Company*, 115 N. E. (Ind.) 348.

Where the principal stockholder of a bank, by means of forgeries and fictitious notes, depleted the bank's funds so that it became insolvent, and officers of the bank went to the stockholder's wife, who, understanding from what they said, though no actual threat was made, that her husband's prosecution would ensue, unless his defalcation was made good through her assistance, executed certain notes to make good the defalcation, such notes were void or at least voidable at the wife's option.—*Rostad v. Thorsen*, 163 P. (Ore.) 423.

Where a medical company sends to a wouldbe agent or local dealer a contract of agency or right to sell, which includes an assumption by such dealer of the debt of a third party, and requires him to sign the same and to obtain the signature of sureties thereto, who, in consideration of the sum of one dollar to them in hand paid by the same medical company shall and do agree to become such sureties, the guaranty obtained will be deemed to be a direct contract with said medical company and the dealer to be its agent in obtaining the same.—*Dr. Koch Medical Tea Company v. Poitras*, 161 N. W. (N. D.) 727.

Under Personal Property Laws, N. Y. (Consol. Laws, c. 41) § 62, providing that all conditions in a conditional sale contract, accompanied by delivery of the goods reserving title in the vendor, shall be void as against subsequent purchasers, pledgees, or mortgagees in good faith, unless recorded, an unrecorded conditional sale contract is valid against the creditors of the buyer so that the trustee in bankruptcy acquires no rights thereto under Bankr. Act July 1, 1898, c. 541, § 47a2, 30 Stat. 557, as amended by Act June 25, 1910, c. 412, 36 Stat. 840 (Comp. St. 1913, § 9631), providing that trustees in bankruptcy shall be vested with all rights, remedies, and powers of a creditor holding a lien.—*Mergenthaler Linotype Company v. Hull*, 239 F. (U. S.) 26.

A fire policy provided that assured should, when store was not "actually open for business," keep his books in a safe or other place secure from fire, and that in case of loss unless books were produced policy would be void. While assured was home for dinner, and while the store was locked, it and the books which were not in safe were burned. A doctor and storekeeper close by, who had keys for store, had agreed to open store for customers while assured was home. *Held*, that assured's failure to place his books in a secure place avoided policy, since at time store was burned it was not "actually open for business."—*Merchants' & Bankers' Fire Underwriters v. Foster*, 192 S. W. (Texas) 811.

Where a fire insurance policy covering a business building and a stock of merchandise contains a clause reciting that the assured agrees to make an annual inventory and to keep a set of books showing a complete record of the business transacted, including purchases, sales, and shipments, and that such inventory and books shall be securely locked in a fireproof safe at night, and at all times when the store is not open for business, and that on a failure to produce such inventory and books for the inspection of the company, the policy "shall become null and void, and such failure shall constitute a perpetual bar to any recovery thereon, a failure to keep such inventory and books in a fireproof safe at night, whereby they are destroyed by fire, will ordinarily bar a recovery on the insurance policy."—*Crandon v. Home Insurance Company*, 163 P. (Kans.) 458.

PATENTS & TRADEMARKS

PATENTS

Granted July 24, 1917

- 1,234,109—John Alberti, assignor to International Cork Co., Brooklyn, N. Y., Process of manufacturing bottle closures.
 1,234,199—Franklin D. Newberry, Jamestown, N. Y. Tooth-brush holder.
 1,234,373—John C. Miller, Canton, Ohio. Bottle washing and sterilizing machine.
 1,234,380—Josef Patek, Karlshorst, near Berlin, Germany. Method of manufacturing hydrogen peroxid.
 1,234,406—James H. Steele, Pendleton, England. Machine for the manufacture of glass bottles, jars and the like.
 1,234,457—Walter Glaeser, assignor to George T. Bishop, Cleveland, Ohio. Process of making window-glass and hydrochloric acid.
 1,234,611—Richard F. Beutlich, assignor to The 20th Century Machinery Co., Chicago, Ill. Bottle-soaking machine.

Granted July 31, 1917

- 1,235,025—Walter Glaeser, Brooklyn, N. Y. Process of making dicalcium phosphate.
 1,235,142—Sarkis A. Ichilian, Washington, D. C. Syringe.
 1,235,146—Robert Magrane, assignor to Anchor Cap & Closure Corporation, Brooklyn, N. Y. Sealing-machine.
 1,235,179—Otto K. Zwingenberger, Perth Amboy, N. J. Medicinal composition containing oil.
 1,235,198—Alfons Gams and Berthold Schreiber, Basel, Switzerland, assignors to Society of Chemical Industry. Highly active vitamin preparation freed from inactive ingredients.
 1,235,278—Albert D. Barr, McHue, Ark. Medicament and process of producing the same.
 1,235,285—Robert V. Brown, assignor to the Sherwin-Williams Co., Cleveland, Ohio. Insecticide or fungicide and method of making same.
 1,235,342—Otto Liebknecht, Frankfurt-on-the-Main, Germany, assignor to the Reessler & Hasslacher Chemical Co., New York, N. Y. Process of and apparatus for manufacturing prussic acid.
 1,235,395—Adolph Storm, Thompson, Iowa. Filter.
 1,235,426—Georg Bredig, assignor to the firm of Rudolph Koepf & Co., Oestrich-On-the-Rhine, Germany. Production of formic acid.
 1,235,429—Harry M. Brown, assignor to Spring Stopper Company, Brooklyn, N. Y. Bottle-stoppering machine.
 1,235,450—Frank R. Eldred, Francis E. Bibbins and Ray N. Reed, assignor to Eli Lilly & Co., Indianapolis, Ind. Process of preparing coca extracts.
 1,235,507—Konstantin Tarassoff, Dobroslobodsky, Moscow, Russia. Manufacture of the products of condensation of phenols with formaldehyde and the like.

Granted August 7, 1917

- 1,235,552—Howard F. Chappell, assignor to Mineral Products Corporation, New York, N. Y. Process of producing ammonium fluorids.
 1,225,571—Aage Jensen, Long Island City, N. Y. Sterilizer and drier.
 1,235,638—Louis E. Barton, assignor to The Titanium Alloy Manufacturing Co., New York, N. Y. Process for obtaining oxid of titanium from materials incorporating other substances.
 1,235,664—Henry A. Doerner, assignor to The Chemical Products Co., Denver, Colo. Method of producing hydrogen peroxid.
 1,235,953—Raymond F. Bacon, assignor to Metals Research Co., New York, N. Y. Production of hydrogen sulfid.
 1,236,070—Henry G. Dusenbury, Jr., assignor to Richard Hudnut, Container.
 1,236,085—Richard A. Hudnut, assignor to Richard Hudnut, New York, N. Y. Bottle-display stand

Granted August 14, 1917

- 1,236,570—Louis C. Jones and George N. Terviez, assignors to the Solvay Process Company, Solvay, N. Y. Process of producing chlorin gas.
 1,236,597—Leo Nussbaum, Marion, Ind. Eye-cup.
 1,236,610—William I. Sherwood, assignor to Cordley and Hayes, New York, N. Y. Carrier for bottles.
 1,236,619—Michael T. Steele, Brooklyn, N. Y. Stopper for water bags, bottles and the like.
 1,236,662—Kristian Birkeland, assignor to Norsk Hydro-elektrisk Kvaestofaktieselskab, Christiania, Norway. Manufacture of concentrated nitric acid.
 1,236,853—Ralph H. McKee, Ridgefield Park, N. J. Fixation of nitrogen.
 1,236,878—Andrew J. Salvas, Franklin, N. J. Fountain tooth-brush.
 1,236,903—Frank G. Breyer, Palmerton, Pa. Recovery of potash.
 1,236,917—Marc Darrin, assignor to H. Koppers Co., Pittsburg, Pa. Method of recovering resins from benzol-plant residues.
 1,236,929—Louis C. Hauck, Covington, Ky. Bottle-holder.
 1,236,978—Gustav Pistor and Heinrich Reitz, assignors to The Firm of Chemische Fabrik Griesheim-Elektron, Frankfurt-on-the-Main, Germany. Manufacture of calcium hypochlorite.
 1,236,996—Henri Terrisse, Geneva, Switzerland, assignor, by direct and mesne assignments, of sixty one-hundredths to the Indestructible Paint Co., Ltd., London, England, and forty one-hundredths to Ellis-Poster Co., Montclair, N. J. Esterified fossil resin and process of making same.

- 1,237,076—Oskar Matter, Cologne, Germany. Method of manufacturing Polyvalent alcohols.
 1,237,079—Valdemar G. Mellgren, Tombstone, Ariz. Water distiller.
 1,237,128—Walter Weber, and Friedrich Noll, assignors to Henkel & Cie., Dusseldorf, Germany. Manufacture of sodium percarbonate.
 1,237,197—Walter Glaeser, assignor to George T. Bishop, Macedonia, Ohio. Process for rendering available the potash of feldspar and similar materials.
 1,237,228—Oscar Westover, U. S. Army. Sanitary bottle-cap.
 1,237,244—Maria Louisa Cobb Von Hafner De Vessey, Washington, D. C. Medicament container.

VISIT PLANT OF PFAUDLER CO.

Thirty-one members of the American Ceramic Society who included Rochester, N. Y., in the itinerary of their annual summer meeting visited the plant of The Pfaudler Company, in Lincoln Park, July 20, and were conducted through the works by Dr. W. J. Zimmerli, chief chemist, and other officers of the company, accompanied by F. L. Craddock and R. B. Kilmer, of the New York and Chicago offices.

The Pfaudler plant was of particular interest to the visitors for the reason that the Pfaudler Company is credited with having originated the process of fusing "glass" enamels into large, steel tanks; their Rochester plant is said to be the largest in the world devoted to such work. Its present activities reflect the great strides made by the chemical industry of this country during recent years in the fact that the production of acid-resisting kettles, mixing tanks, stills and similar apparatus for corrosive work now predominates over that of the large sectional storage tanks upon which the company previously had specialized.

After a trip to the Taylor Instrument Companies' factory, the visitors were again the guests of The Pfaudler Company at a luncheon served at the Powers Hotel. E. G. Miner, president and general manager of the company, acted as host, assisted by N. G. Williams, vice-president and general sales manager; A. I. Jones, superintendent; E. J. Bayle, production engineer; Dr. Zimmerli, and others connected with the company. After a visit to the plant of the Pennsylvania Feldspar Co. the party disbanded.

NEW CHLORAZENE SURGICAL POWDER

Chlorazene Surgical Powder is a new antiseptic just placed on the market by The Abbott Laboratories. It contains 1 per cent of Chlorazene in a base of zinc and sodium stearates. It is a fine, impalpable powder, free from grit and irritant substances, powerfully antiseptic, and may be dusted freely over denuded or abraded areas, cuts, wounds, and skin eruptions. It may also be used as an antiseptic powder of general utility following surgical operations, while it may be applied with satisfactory results to the sensitive skins of young children. It is a worthy associate of Chlorazene tablets, powder and Chlorazene Surgical Cream.

FOUNTAIN PENS AS GIFTS FOR SOLDIERS

With an eye to the possibilities of these military times, The Conklin Pen Mfg. Company, Toledo, Ohio, have provided dealer newspaper electros and moving picture slides addressed exclusively to the soldiers and to the friends of soldiers. The slides attractively bring out the selling points and are being received with enthusiasm everywhere. The soldier gift field is a broad one, the harvest is ripe, and there is no better way to put your fountain pen stock before the public than through the local newspaper and movie house. These newspaper ads and slides will be furnished gratis to all Conklin dealers throughout the country.

BONTA MERGES WITH WALES ADVERTISING CO.

C. L. Bonta, who has been conducting an advertising agency at 437 Fifth Avenue, New York City, has merged his organization with that of the Wales Advertising Co., 110 West 40th Street, New York City, where he will continue to specialize in drug, medical, chemical and pharmaceutical advertising and merchandising. Mr. Bonta's wide experience, gained as a successful salesman, and in handling the advertising and merchandising problems of not only over 1300 retail stores, but also that of large national advertisers, particularly fits him for association with the Wales Advertising Co., which has also successfully specialized in the same field.

THE DRUG MARKETS

ALCOHOL ADVANCING IN PRICE

Proposed Tax on Distilled Spirits a Disturbing Factor —Mid-Summer Quietness Pervades Market and Consumers Holding Aloof from Purchasing at the High Prices.

NEW YORK, August 24—With few exceptions the mid-summer quiet pervades all branches of the market, trading in drugs and chemicals being restricted to small quantities, and consumers showing a continued disinclination to buy at the high prices. Quotations on most articles have been more or less fluctuating since our last report, but the number of real price changes is comparatively few.

Among the articles that have attracted the most attention during the past few weeks is alcohol, a strong tone pervading the market and distillers advancing prices, owing to the ruling recently issued by the United States Food Administration that all processes in the production of spirits for beverage purposes must cease at 11 o'clock p.m. on September 8, and the further fact that the Senate Finance Committee has proposed to raise the revenue tax on distilled spirits from \$2.30, as agreed upon in the House, to \$3.20 per gallon. Immediately upon receipt of this information, distillers began to advance their prices, with jobbers following suit. A firmer market is noted for opium, morphine, cocaine, with relatively higher prices being asked for each, while among the declines in prices are acetphenetidin, benzoic acid and benzoates, glycerophosphoric acid, arnica flowers, camphor, Roman and Belgian chamomile, cocculus Indicus, extract of male fern, oil of bitter almond, and zinc phenolsulphonate.

OPIUM—The market is firm and stocks of druggists' quality of Turkey opium are in scanty supply, a revision of quotations showing an advance, as follows: Natural, \$24 @ \$30 per pound; granulated, \$32 @ \$34 per pound; U.S.P. powdered, \$30 @ \$32 per pound. Advices from London indicate a shortage of druggists' quality of opium in that market, and as no permits are allowed, wholesale druggists and manufacturing chemists are practically without supplies for making tinctures or other opium preparations. Persian opium in the New York market is quoted around \$25 per pound, according to quality.

MORPHINE—Owing to the uncertainty surrounding the supply of crude opium, manufacturers of morphine recently advanced their prices, with the result that jobbers revised their schedules for the alkaloid and its salts as follows: Alkaloid, pure, ½-oz. vials, \$18 @ \$18.10 per ounce; acetate, ⅛-oz. vials, \$14.30 @ \$14.55 per oz.; hydrobromide, ⅛-oz. vials, \$14.30 @ \$14.55 per ounce; hydrochloride, ⅛-oz. vials, \$14.30 @ \$14.55 per ounce; meconate, \$15.50 per ounce; sulphate, 1-oz. vials, \$12.35 @ 14.30 per ounce, in ⅛-oz. vials, \$12.60 @ \$14.50 per ounce.

CODEINE—Has reacted and quotations are considerably lower, jobbers offering as follows: Alkaloid, \$12.90 @ \$13.15 per ounce; hydrochloride, \$11.65 @ \$11.90 per ounce; nitrate, \$11.60 @ \$11.90 per ounce; salicylate, \$9.80 @ \$10.05 per ounce; phosphate, \$9.80 @ \$10.05 per ounce; sulphate, \$10.40 @ \$10.65 per ounce.

QUININE—A firm undertone is reported, but prices remain unchanged at last month's quotations of 85 @ 86c per ounce for bulk in 100-oz. tins, 90 @ 93c in 5-oz. cans and 95c @ \$1.00 in 1-oz. cans.

MENTHOL—Quotations have fluctuated somewhat during the month, jobbers now offering at \$3.25 @ \$3.40 for crystals. Recent cables from Japan indicate a firmer market there. Before the war, about half the menthol crystals exported from Japan were sent to Germany, but since the war, according to U. S. Consul Hitchcock at Yokohama, this country has become the largest purchaser, followed in order by Great Britain, France, and British India. Recent improvements in the processes of manufacture have kept the price within reasonable limits in spite of a considerable increase in the demand since the beginning of the war.

ALCOHOL—For the reasons stated above, prices have been advancing rapidly and the end is not yet in sight. Jobbers quote \$4.52 @ \$4.54 per gallon for Cologne spirit, 95 per cent U.S.P. in barrels, and \$4.75 @ \$5 per gallon for less than barrel lots; \$4.55 @ \$4.60 for commercial, 95 per cent U.S.P. in barrels, and \$4.70 @ \$5 per gallon for less; denatured, \$1.20 @ \$1.40 per gallon in barrels or less.

GLYCERIN—In sympathy with the high prices for fats, the market continues firm, and stocks are in light supply. C. P. in bulk, drums and barrels added, is held at 68½c @ 69c per pound; cans, 69½c @ 71c and less, 77c @ 80c per pound.

BENZOIC ACID—Continues to decline owing to increasing facilities for domestic manufacture and better supplies. Jobbers quote \$4 @ \$4.25 per pound for acid from toluol. Sodium benzoate has been correspondingly reduced, and is now quoted at \$3.75 @ \$4 per pound.

SUGAR OF MILK—Manufacturers find it difficult to meet the increasing demand, and prices have been advancing steadily for a considerable period. Powdered is offered at 52c @ 54c per pound for both bulk and in 1-lb. cartons.

ACETPHENETIDIN—U.S.P. is being offered at \$1.70 @ \$1.80 per ounce, the decline being attributed to increased supplies, and a lack of demand.

TANNIC ACID—Medicinal is in better demand and higher prices are asked, jobbers quoting \$1.65 @ \$1.85 per pound; powdered, \$1.75 @ \$1.90 per pound.

ANTIPYRINE—Scanty supplies and considerable demand have developed a strong tone to the market and prices have been marked up to \$1.90 @ \$1.95 per ounce.

ARNICA FLOWERS—Are in better supply and prices are tending downward, ranging from \$2.65 @ \$2.75 for whole, \$2.80 @ \$2.90 for powdered, and \$2.75 @ \$2.85 for ground.

BAY RUM—Porto Rican has been advanced to \$2.48 @ \$2.50 per gallon in barrels and \$2.65 @ \$2.85 per gallon for less.

CAMPHOR—A seasonable demand is reported, and jobbing prices are somewhat lower than those quoted a month ago. Refined is held at 82c @ 87c per pound in bulk and 83c @ 88c in ¼-lb. squares. Powdered is 90c @ \$1 per pound and Japanese 84c @ 88c. It is reported that unfavorable weather in Formosa has caused a reduction in the output of crude camphor.

CHAMOMILE FLOWERS—Notwithstanding reports that genuine Hungarian chamomiles are in scanty supply, quotations show a downward revision, \$1.50 @ \$1.80 being asked.

COCCLUS INDICUS—Is easier at 18c @ 20c per pound for whole, and 28c @ 30c for powdered.

GRAINS OF PARADISE—Are scarce and high, jobbers quoting \$4.50 @ \$4.75 for whole, and \$4.60 @ \$4.85 for powdered.

DRAGON'S BLOOD—Reeds are in scanty supply and quotations are tending upward, \$2.50 @ \$2.60 being asked. Extra powdered is held at \$2.15 @ \$2.25.

GAMBOGE—In common with other Eastern gum resins, all varieties of gamboge are higher, \$3.10 @ \$3.25 being asked for blocky, \$3.15 @ \$3.20 for powdered, and \$3.05 @ \$3.15 for select, bright, pipe.

DIACETYLMORPHINE—Alkaloid has been advanced to \$16 @ \$16.50 per ounce, and hydrochloride to \$15.20 @ \$15.80.

LYCOPodium—Importations are scanty, and unsettled conditions in Russia, the country of production, are not reassuring as to the future. Jobbers have advanced their prices to \$1.90 @ \$2 per pound.

MALVA FLOWERS—Blue, small, continue to advance, and \$3.20 @ \$3.30 per pound is quoted.

MERCURY—A revision of quotations shows a lower range, \$3.25 @ \$3.40 being quoted.

ESSENTIAL OILS—The leading features in the essential oil situation are the strong values attributed to oil of peppermint as a result of the backwardness of the crop, and the lower prices for bitter almond oil, the last named having been marked down to \$14.50 @ \$15 per pound, and \$15 @ \$18 per pound (without acid). Oil of cloves has advanced to \$3 @ \$3.25 per pound, mustard, both natural and artificial, to \$2.25 @ \$2.50 per ounce, and peppermint,

New York, to \$3.60 @ \$3.65; Western, \$3.40 @ \$3.80 per pound. Oil of lavender flowers is higher at \$6 @ \$7 per pound.

CASTOR OIL—Crushers are reported to be well sold up, nitrate, crystal being held at 65c @ 70c per ounce, and per pound for American. Reports from India state that owing to the decrease in the production of castor seed exports from that country have dropped below those of any previous year.

COD LIVER OIL—Quotations are unchanged, at \$123 @ \$125 per barrel for Norwegian, \$3.40 @ \$3.50 per gallon being asked for Newfoundland. The situation as to the future arrival of supplies of this season's production from Norway is obscured by rumors of various sorts, one being that the Norwegian government has declared an embargo on exports of this product. The returns from the fisheries show a falling off in the production, due to the uncertain conditions surrounding the fishing, great parts of the fishing districts lying inside of the German danger zone.

LINSEED OIL—Prices for both raw and boiled have been advanced, the former to \$1.33 @ \$1.43 and the latter to \$1.34 @ \$1.44 per gallon respectively.

POTASSIUM SALTS—All of these products are in demand, prices, generally speaking, ruling firm. Chlorate in a jobbing way is slightly lower, 58c @ 62c per pound being asked for both crystal and powdered. Nitrate is held at 35c @ 45c; powdered, 36c @ 46c. Prussiate is scarce and higher at \$3.75 @ \$4.25 for red, and \$1.60 @ \$2 for yellow. Offerings of permanganate have been fairly steady, U.S.P. being held at \$4 @ \$5.50 per pound.

SACCHARIN—There is a steady demand for export and prices are tending upwards, jobbers quoting \$3.40 per ounce. Advices from London report abnormally high prices ruling there, and dealers here are inclined to advance their quotations.

SANDARAC—Gum is advancing in price and 65c @ 75c per pound is asked.

SENEGA ROOT—Unfavorable crop reports have influenced an upward tendency and the market is firm at 95c @ \$1 per pound.

SILVER NITRATE—The sharp advance of the basic metal has caused manufacturers to advance their prices for nitrate, crystal being held at 65c @ 70c per ounce, and fused cones at 80c @ 85c per ounce. Metallic silver is now selling at 88¼c per ounce, more than double the ruling price before the war. It is in great demand for coinage purposes.

TIN CHLORIDE—The scarcity of metallic tin, due to war conditions, has caused an advance in all tin compounds, pure chloride being held at \$1 @ \$1.05 per pound, and oxide at 80c @ 90c per pound.

JOHN T. MILLIKEN & CO. IN NEW HOME

John T. Milliken & Co., St. Louis makers of pharmaceutical supplies, recently moved into their new administration building, which is of the daylight type, six stories in height, and has a tower 300 feet above the ground from which the name "Milliken" in electric lights on three sides can be seen when lighted at night for many miles. The company has also taken possession of the recently completed absorbent cotton building. It is said that the company under the guidance of U. S. McClellan who has been general manager for the last four years has trebled its business each year. It has 60 salesmen, and does a business of several million dollars a year. John T. Milliken millionaire broker, is the chief owner of the business.

TO HAVE COMPLETE DRUG DEPARTMENT

The General Store's Corporation with headquarters at Ypsilanti, Mich., on Aug. 1 filed articles of corporation under the laws of that State, the incorporators being Dwight E. Hand, of Toledo, O.; G. L. Hand, H. A. Hand, William C. Fisk, C. F. Coon, and Lee N. Brown, of Ypsilanti. The company will conduct a complete drug department in a new 50 x 120 two story and basement building it is erecting in Ypsilanti. Dwight E. Hand, organizer and president, is with the B. F. Wade & Sons Co., of Toledo, printers, stationers and office outfitters, in the capacity of store manager and buyer, while C. F. Coon will be in charge of the drug department. The company's temporary office is No. 12 Savings Bank Building, Ypsilanti, Mich.

SHAVING CREAM UNDER YOUR OWN LABEL

The Sheffield Dentifrice Co., New London, Conn., advance some very cogent reasons why it is essential that any preparation the druggist may sell under his own label should be of the best quality obtainable, if he is to compete successfully with advertised products. Appearance and quality are characteristics that every successful manufacturer tries to put into his goods, for he knows these constitute the determining factors that guide buyers. Toilet articles, especially, should conform to these acknowledged requirements, and the Sheffield Dentifrice Co., state in their advertisement in this issue of the ERA why you should sell "Your Own Shaving Cream" under your own label. They are the oldest manufacturers of toilet products in pure tin tubes in the United States, making and decorating their own tubes, as well as manufacturing a Shaving Cream that is guaranteed to keep perfectly in any climate for a period of not less than a year from date of shipment. You will be interested in their proposition, for by selling such an article under your own label you can to a large extent solve the cut-rate problem.

NEW JERSEY C. P.'s DISPENSING LABORATORY

With the acceptance of the chair of dispensing pharmacy by Dr. Otto Raubenheimer for the coming 26th annual session, the New Jersey College of Pharmacy announces the installation, at an expense of more than \$3,000, of a dispensing laboratory on the ground floor of its handsome three-story building at 509-511 High Street, Newark, N. J. The laboratory contains eight individual, complete and modern prescription counters of hard wood, with marble tops and plate glass shelves. Each counter is supplied with an up-to-date torsion prescription balance, a set of lettered shop bottles containing liquid and solid galenicals, and the necessary utensils and equipment for compounding. The student who is getting his training will find it a pleasure to work with this modern equipment, which will at the same time serve to instill into him more love for professional pharmacy. With this department and a prescription expert like Prof. Raubenheimer at its head, the students of the New Jersey College of Pharmacy are sure to receive a course in prescription compounding *par excellence*.

MULFORD BIOLOGICAL PRODUCTS

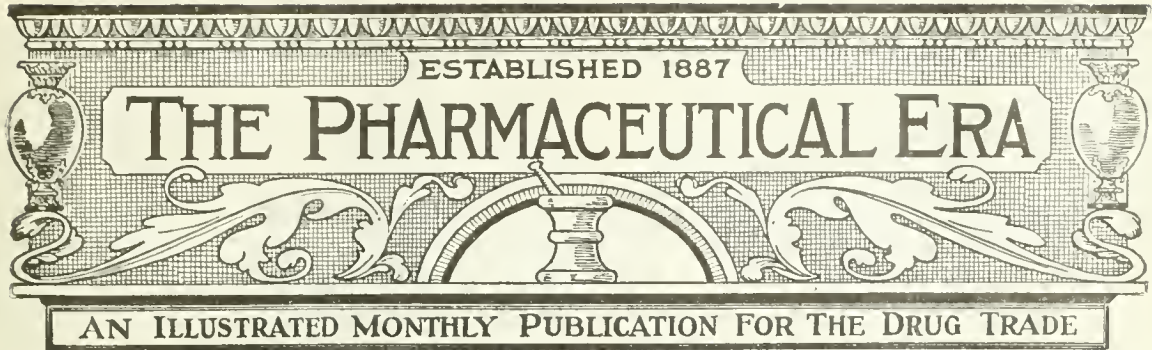
The demand for antitoxins, serobacterins, bacterins and vaccines is most active in the Fall and early Winter months, and no druggist should allow his stock of these products to become short. The H. K. Mulford Company, manufacturing and biological chemists, Philadelphia, are leading producers in this line of remedies, and want druggists to get their share of the biological business. The Mulford Antitoxins, Serobacterins, Bacterins and Vaccines are standard products, and the manufacturers have up-to-date literature showing how the druggist may take full advantage of their advertising and sales work. Their special proposition is well worth writing for, and it will pay you to send an order for a complete assortment of their biological products.

CORRECTION IN PRICE

In the advertisement of The Remiller Co., 230 West 17th street, New York, appearing on page 15 of the August issue of THE PHARMACEUTICAL ERA, the prices quoted on "Red Feather" Liquid Soap are given as "25c and 40c." These are in error; the line should read "Liquid Soap, 40c and 75c."

SOME SUGGESTIONS FOR FALL

In their September advertising to the medical profession Parke, Davis & Co. are concentrating on a number of products that are particularly applicable to the season. Prominent among them are Antidiphtheric Serum, Typhoid Vaccine (Prophylactic) and Typhoid Phylacogen. These agents are being brought to the attention of physicians all over the United States, not only through the medium of the medical press, but also through the corporation's detail representatives, who cover every section of the country. Druggists will do well to prepare for the demand which will follow as a logical sequence.



THE PHARMACEUTICAL ERA

PUBLISHED ON THE FIRST OF EACH MONTH

D. O. HAYNES & Co. . . . *Publishers*

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	With Era Price List	1.50 a year
To Canada postpaid.....	Subscription	1.50 a year
	With Era Price List	2.00 a year
To Foreign Countries in Postal Union	Subscription	2.00 a year
	With Era Price List	2.50 a year

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THE A.P.H.A. AT INDIANAPOLIS

The conditions under which the members of the American Pharmaceutical Association met at Indianapolis for the annual meeting this year were of a different character than those which obtained when the organization met there in 1906. Then the country was at peace and the trend of most of the speakers who took part in the proceedings gave credence to the belief that the cause of scientific pharmacy was tending upward, while the attitude of the medical profession toward the calling was denominated as "most encouraging." True, there were some druggists present who complained that their businesses were unsatisfactory, and that competition in many places was excessive, profits small and expenses heavy. The old question of whether store apprenticeship should precede or follow college training was still a favorite topic of discussion, but in none of the deliberations was shown great depth of thought, or appreciation of the possible effect on the future of any action that might then be taken.

The tone of the deliberations at the meeting this year was different. The pharmacists realized that they were facing a period when the future of the country was unsettled, that the nation was already taking part in a great world war, and that it was up to them as an association to be sure of their action and to do nothing which in their best judgment would jeopardize their interests as pharmacists or as citizens. There was also in evidence the common thought that now was the time for pharmacists to combine their interests and, as President Wulling said in his address, to enlist themselves "in constructive activity." His appeal for the proposed federation of pharmaceutical organizations showed the necessity for a united effort in this direction, while the objects to be obtained were of importance to all branches of the trade—retail, wholesale and manufacturing. The need of a federation of all pharmaceutical organizations was the key note of the address, and the conclusions of the retiring President left no doubt in the minds of his hearers that the drug trade as a whole should organize for co-operation and "the common welfare of themselves and of what they represent."

The establishment of a pharmaceutical corps in the United States army and the improvement of

the status of pharmacists in the Government service generally, as well as representation in the Council of National Defense, were also recognized as subjects of far-reaching importance, and the endeavor to attain such recognition for pharmacy received the unqualified indorsement of the association. Taken as an entirety, the meeting was most successful, and although the attendance was not as large as that reached in some of the previous years, the work really accomplished will rank in importance with any the association has effected.

WHY YOU SHOULD JOIN

Druggists of the Empire State can thank the New York State Pharmaceutical Association for its quick and effective work in securing the passage of the amendment to the liquor tax law which permits railroads and express companies to make deliveries of alcohol in "dry towns" to licensed pharmacists, who are also permitted by the amendment to have in their possession alcohol to be used as a preservative or solvent in the manufacture and compounding of drugs or that may be necessary for any manufacturing process. The securing of this amendment is a concrete example of what organization can do for druggists and a positive reason why every pharmacist in the State should do his share by joining the association. By contributing to help all pharmacists you help yourself. Experience proves that union and co-operation are the only practical safeguards of the druggists of the country.

CHEMISTS AT THE BOSTON MEETING

The program of the 55th annual meeting of the American Chemical Society, held last month at Boston was largely devoted to a discussion of war topics, particularly as to what the chemical industry had done to meet the demands made upon it in the mobilization of our country's resources. The story of these accomplishments was so astonishing that a distinguished French chemist, the guest of the society, was moved to say that American chemists had accomplished in three months what European chemists had taken years to perform. This chivalrous comment is what one might expect from the modern representative of Lavoisier with whose country we are now so closely allied, but better still, it carries with it an encouraging note which tends to show that chemists, whether research workers or men of business, are united in their efforts to bring the present world contest to a successful issue.

Another angle of vision is also afforded in the symposium of experiences presented by the chemists at the Boston meeting. The immensity of the field in which the chemist is called upon to labor is reflected in the roll of membership of the society which now numbers about 10,000. Select any industry that you may wish and the chances are that the chemist has studied its special features and contributed to its present advances. To this omnipresent investigator the world owes a large number of the processes of daily living, to say nothing of the economy and efficiency with which these processes are carried on. He has taught manufac-

turers how to utilize wastes and how to make by-products valuable, a veritable genius of production, while his methods of standardization and control have pushed the rule of thumb into the discard, thereby bringing into operation the element of certainty and uniformity which has done so much to make the manufacturer a world power in modern life.

The American Chemical Society has a right to feel proud of the showing its members have made. With a membership greater than any other similar organization in the world, and representing fully as many diversified industries; with its thousands of specialists in many divergent fields and the boundless opportunities and necessities of the present pressing them forward, the members of the Chemical Society are sure to make further history, both for the United States as a nation and the development of that most wonderful science—Modern Chemistry.

THE SCARCITY OF DRUG CLERKS

The loss to pharmacy that is likely to develop through the diminution in numbers of students in colleges of pharmacy on account of the war time conditions is an unknown problem, but the fact is known that calls for enlistment and the application of the conscription act have made a great dearth in the supply of drug clerks throughout the country. On account of this scarcity, proprietors are encountering conditions they have never before experienced in all of their business career. That they should seek some method of relief is a natural corollary of the difficulties they have encountered.

Under the existing laws of all states, a certain proficiency and technical knowledge are required on the part of those who practice pharmacy, and the question naturally arises, who are to serve the public as pharmacists if those who have been already trained or are in training to meet the examinations exacted are to be withdrawn from that service? Within the conscription ages are to be found most of the men from whom pharmacy is recruited, as also within this range are to be found the greatest number of clerks who outside schools of pharmacy are qualified to practice. That this condition of affairs is intimately connected with the scarcity of drug clerks is positive and certain. Some assistance may be obtained by the greater employment of women, but the number of those who are qualified is limited, and very frequently they would not fit into the jobs made vacant. From the present outlook the demand by pharmacists for competent help during the coming year is likely to be further intensified.

To adjust the practice of pharmacy to the conditions imposed by the war, calls for serious consideration. Remonstrances against boards of pharmacy continuing to exact full requirements and compliance with existing standards in the examination of applicants for registration have already arisen, while some proprietors have gone so far as to intimate that the bars should be sufficiently lowered to allow less qualified clerks to enter in the belief that such individuals might partially relieve the situation. In Oregon, the State Board of Pharmacy has already decided as a war measure

to issue temporary permits to apprentices, which for a period of six months will permit unregistered persons to be left in charge of a drug store in the temporary absence of a registered clerk. It is especially provided, however, that such persons shall not be permitted to fill prescriptions or to sell poisons, the move being designed to relieve the situation of druggists who find it necessary to leave the store for short periods, the rule to be in effect only while the war shortage of clerks continues. Whether such an arrangement can be made to apply generally throughout the country is problematical. In the small store where prescription compounding is limited, such a provision will doubtless help, but in pharmacies where professional pharmacy predominates, the proprietor is sure to experience most of the hardships entailed by the scarcity of drug clerks.

PROGRESS IN PHARMACEUTICAL RESEARCH

The Report of the establishment of a fund for pharmaceutical research by the American Pharmaceutical Association at the recent meeting of that organization in Indianapolis, and the news that the University of Iowa has engaged a research assistant to discover processes that are commercially possible for the manufacture of certain chemicals which are extremely expensive or unprocureable on account of the war with Germany, is evidence that greater interest is being taken in scientific pharmaceutical investigation generally, a character of work that heretofore has not received the attention of institutions or organizations to any great extent. It is true the Pharmaceutical Experiment Station of Wisconsin University has done and is doing good work in its particular field, but colleges of pharmacy have not taken up such investigations in any definite and continued manner, if at all.

The conditions of the past three years have caused far-seeing men to recognize the value of research work. Dean Teeters of the University of Iowa College of Pharmacy writes us that the Board of Education of his State realizes the exceptional opportunity that now exists for research work along the lines of organic chemicals that were heretofore received in the main from Germany, and for that reason a research assistant in his institution was provided.

Unquestionably, if an exceptional opportunity for doing research work in pharmacy was ever presented, it is at the present time. There are many problems awaiting solution and which need the attention of the thorough and patient investigator. Funds are needed to attract capable men to this field of labor. The results of such investigations, if they are worth anything at all, are worth much to the calling as a whole and to the world at large. More particularly at this time the results to be obtained from such work mean much to a country depending upon its own resources. All indications point to the present as a great opportunity, and colleges of pharmacy throughout the country should do their "bit" in this direction as a patriotic contribution to the Nation's necessities.

COMPARATIVE PRICES OF DRUGS

During the past three years tables have been frequently published comparing prices of drugs and chemicals at the time with the prices which obtained before the beginning of the European war. These tables of comparisons have been useful and illuminating in bringing home to the druggist the conditions under which he has been doing business, as also the fact that if he is to steer his craft through the troubled waters of disquietude, he must have knowledge, not only of the cost of his stock, but of its present value and the expense of its replacement when necessity requires.

In this issue of the ERA we print a contribution from our London correspondent which attempts to show the advances that have been recorded in that country since the early days of the war. The causes which produced the price advances are comparable to those which have been in evidence in this country. As the war progressed, stocks gradually became depleted, while, from causes well known and incidental to the war, values of all commodities advanced in some instances to unprecedented heights. For many drugs, especially synthetics, we, like Great Britain, were dependent upon foreign supplies, and as stocks of these were depleted, the commercial situation became more acute, a condition that was immediately reflected in the upward direction of prices. Efforts at domestic production, which in time helped to supply the needed demands, could not be carried on as cheaply as had been done under the old peace conditions, while the increased cost of raw materials, the expense of equipping plants, the questions of shipments and freight rates, brought into being new problems which, experimentally at least, had to be solved before a stable basis of operation could be definitely settled by the manufacturer. Any one who has followed the history of these conditions and experiences will have little reason to wonder why drug and chemical prices have advanced.

Conditions are far from settled at the present time, and no one can pretend to predict with any degree of certainty what the market prices will be in the months to come. The lesson the knowledge of these conditions brings is that the druggist should, as best he can, keep his finger on the pulse of the market and revise his costs from time to time. Definite knowledge of current values is absolutely necessary, while with such information must be co-ordinated a knowledge of selling prices that will enable the druggist as a successful merchant to realize on his stocks. With the increased cost of doing business occasioned by the imposition of war and special taxes, higher salaries for clerk hire as a consequence of the scarcity of labor, and the general advance in the cost of all proprietaries and ready-made articles, the druggist will need to devote more time to the commercial aspects of his business than he has ever done before.

Cignoline (1: dioxyanthranol) is a yellow powder, soluble in fat, alcohol, acetone, benzene, and white vaseline. It is being prescribed in Germany as a substitute for chrysarobin—(Schweiz. Apoth. Ztg., through Pharm. Journ.)

COLLEGES OF PHARMACY AND THE WAR

Opinions expressed by various delegates of colleges of pharmacy in attendance at the recent meeting of the American Conference of Pharmaceutical Faculties in Indianapolis, together with partial reports from a considerable number of colleges, indicate that the attendance of students at such institutions during the school year just begun will be much below that of the average attendance of the years in the past decade. The reason for this cut in enrollment is due, of course, to the war time conditions and the fact that our country is now engaged in the giant undertaking of raising armies the raw material for which is composed in large part of the young men who have either prepared for college or who have completed in part the academic or technical course preparatory to entering upon their life work.

This experience of colleges of pharmacy is identical with that of the higher educational institutions generally. From statistics already furnished by secretaries of universities and colleges in the Eastern and Middle Western States the effect of the war upon the student enrollment indicates that the loss in some institutions will approximate as high as 50 per cent., and that but few if any of the colleges will maintain the average attendance reached in other years. Considered in a general way this news has been construed to show how quickly the flame of patriotism has leaped up among the young men of the country, as it also shows that the drain upon the student body is disproportionately greater than upon any other separate set or class of young men.

The loss to pharmacy that is likely to develop in this diminution of students, although recognized, is one that can scarcely be fully appreciated at this time. Trained and educated men are needed and will be needed to solve the great problems created by the war, and the necessity of providing a steady supply of such workers for the future is so imperative that it has already brought out remonstrance, or at least words of apprehension, from those in educational institutions charged with the duty of meeting the demands and calls for trained pharmacists, yet cognizant that these men must contribute of themselves their proportionate quota to the military forces of the nation. It may be that the future will not be as dark as some have painted. Institutions, like communities and states, have found the true spirit of regeneration in periods of greatest adversity and peril, and the difficulties encountered have served to spur them on to greater endeavor. That those in charge of colleges of pharmacy are alive to these great lessons of history is evident, and the demands of the time call for intensive application on the part of those who will be left to carry forward the educational heritage bequeathed to us from the past, and in which pharmacy occupies no mean place.

District boards of appeals in numerous claims for exemption have quite uniformly held that the drug business is not necessary within the meaning of the selective service act, nor does it contribute to the maintenance of the military establishment

of the United States. On the other hand it has been held that fishing, the production and distribution of milk, and the operation of telegraph lines are essential to the interests of the nation in the present emergency.

The Sanitation, Medicine and Red Cross Department of the Pennsylvania Committee of Public Safety has declared war on waste of drugs, chemicals and biological products, and by means of pledge cards is enrolling retail druggists throughout the State to work for the elimination of conditions which threaten to create a serious shortage of supplies. Druggists are advised not to stock any product in excess of reasonable requirements, especially antitoxins and serums which are subject to deterioration and which, when once outdated, are of no use whatever. Fluidextracts of ergot, digitalis and strophanthus are also prone to change on keeping, and these should be ordered in quantities to last for not longer than six to twelve months. Doctors, veterinarians and dentists are being asked to practice drug conservation and to urge it publicly. If he has never done it before, the druggist should proceed to acquaint himself with what the Pharmacopoeia has to say on the preservation and storage of official substances and then act accordingly.

Silver nitrate is gradually advancing in price, following the course of the white metal, which recently touched \$1.06½ per ounce, emphasizing the fact that supplies are falling behind the demand. The chief increase in demand for silver is said to be due to enlarged use of the metal for world coinage caused by the withdrawal of gold from circulation and the substitution of silver for it.

Soapstone is a massive rock so rich in talc as to have a soapy feel. It is more extensively quarried and used in the United States than in any other country. Its most important application, depending on its resistance to heat, acids, and electricity, is in the manufacture of laundry tubs, laboratory table tops, tanks, sinks, fume hoods, and switchboards, and in general insulation, besides many smaller uses growing out of its slow radiation of heat. Most of the entire output of the United States in 1916 came from Virginia, the total yield for the entire country being 19,652 short tons.

Oil of dende or palm oil is extracted from the outside kernel of the fruit of a large thorny cocoa tree which grows in Brazil and Africa. The most valuable of the fruits are those which contain the largest amount of oil and produce the French "huile de palme" or English "palm kernel oil." The fruit produces two different oils. From the pulp and outside kernel "azeite de dende" is obtained, and from the inside kernel "oleo de dende." The oil from the outside is a thick liquid of orange color with a sweet flavor. It is largely employed in cooking, as well as in the soap and candle industries. It is also largely used as a liniment for rheumatism. The fruit produces from 65 to 70 per cent of oil; the inside kernel from 35 to 40 per cent.

Lithium is a silver-white, very soft metal, which forms the oxide or a salt on exposure to the air and which decomposes water, forming the hydroxide of lithium; for these reasons metallic lithium does not occur in nature. According to a recent bulletin of the U. S. Geological Survey, the chemical products derived from lithium minerals have found application in military affairs.

Compulsory Health Insurance*

By HARRY B. MASON

COMPULSORY health insurance would be the severest blow the American druggist has ever had to face.

At one stroke it would rob him of three-fourths of his business in medicines and supplies for the sick. But even this is not all. In addition it would compel him to pay 40 per cent of the cost of insuring his own employees. And in the third place, as a citizen of the State and the nation, it would double or treble his burden of taxation. To no one, indeed, would this visionary and socialistic scheme of legislation prove more disastrous than to the druggist and it is not exaggerating the possibilities in the slightest degree to say that with many hundreds and perhaps thousands of pharmacists who operate on a slender margin of profit compulsory health insurance would mean the difference between success and bankruptcy.

But, some of you hasten to reply, if this form of State insurance is a public necessity, and if it will inure to the greatest good of the greatest number, it is no argument against it that it may threaten the success and even the very life of any one class of men in the community. This is true, but I believe you will agree with me that compulsory health insurance, while exhibiting some attractive features, is like one of those European harbors that present a smiling surface but are thickly laid with mines.

First, however, let us ask ourselves: "What is compulsory health insurance anyway, and who are its proponents?"

Down in New York state a group of teachers, socialists, sociologists, and reform workers combined, drew bills which were introduced two years ago in three legislatures, and last winter in no fewer than ten or more. Paid lobbyists appeared everywhere in behalf of these measures. Paid orators mounted the platforms of public meetings to spread the propaganda. Literature was distributed broadcast, and it cannot be doubted that the whole movement will continue to be pushed with great vigor and determination during the next few years. We shall make a fatal mistake if we dismiss it as a chimera which cannot possibly become realized in fact.

Real Meaning Disclosed

What does the project law provide?

It insures the health of every manual laborer in the country regardless of his wage, and of every other type of worker earning \$1,200 or less annually.

Let us take the case of a single individual and see what measure of protection it is proposed to give him:

If he becomes sick, or is disabled by accident, he will receive two-thirds of his wages during absence from work, and this generous payment will, if deemed necessary, be continued as long as twenty-six weeks in any one year. In the meantime he will be granted free medical service, free surgical and nursing attendance, free medical supplies free dental work, and free hospital accommodations whenever necessary. If he dies, the actual expense of his funeral is to be paid up to an amount not exceeding \$50. More than all this, the same services will be given to such of the members of his family as are dependent upon him. Whenever, too, his wife undergoes the interesting experiences of maternity, "all necessary medical, surgical and obstetrical aids, materials and appliances" are to be provided. If the woman is herself a worker, and therefore insured, she receives the foregoing maternity benefits and also two-thirds of her wages for a period of two weeks before delivery and six weeks thereafter, meanwhile remaining at home.

It can readily be seen that these remarkable benefits mean an enormous outlay and that in every state millions of dollars must be raised.

Where will the money come from?

Waiving the case of those whose wage is very small, it may be said in general that the employer will be charged with 40 per cent of the cost, the employee with 40 per cent, and the State is to make up the remaining 20 per cent,

Enter the Druggist!

Of this burden the druggist, as already intimated, must indeed carry a heavy portion. First of all he is involved as an employer. All his employees, unless paid more than \$1,200 annually, would inevitably be made beneficiaries, and he must therefore, pay 40 per cent of the cost of "carrying" them. In the second place, as a tax payer, the druggist must pay his portion of the burden borne by the State, and I may add that this will be no slight figure.

It has been estimated by conservative experts that compulsory health insurance in the State of New York would raise the annual tax levied against real and personal property from \$20,000,000 to \$41,000,000. In Ohio the tax would jump from \$3,300,000 to \$10,400,000 and in Indiana, where we are now gathered, the figure would be increased from \$1,600,000 to \$5,200,000.

And this, mind you, is only 20 per cent of the estimated cost of compulsory health insurance!

Where the druggist is most immediately and threateningly involved is in the competition that he must face from the State. In the early days, when the proponents of this scheme were feeling out sentiment they declared that in all the larger cities, and wherever in fact it was feasible, medicines would be supplied at dispensaries organized by the local "funds" or "carriers." This would mean public drug shops operated by the insurance societies in direct competition with the druggist. Later on, thinking that so honest an avowal would arouse opposition, nothing more was said about dispensaries and no reference was made to them in the bills introduced last winter in the various legislatures. This was in perfect harmony with the policy of keeping out of the measure anything that would be likely to provoke attack, thus rendering it easier for such legislation to be secured.

Beware Next Step

But don't let anybody think that because certain things are not mentioned in the bill, they will not be achieved afterwards. The measure provides that the whole scheme is to be supervised by a state commission of three. Among other things this commission will have the power to frame regulations for the enforcement and application of the law, and the adroit expectation is that the regulations will contain such features of the plan as it is thought wise and politic to keep out of the law itself.

But suppose, for purposes of argument, that the dispensary feature were not adopted in some cities. What then? There is only one alternative. In Section 7 of a specimen bill it is declared that every "carrier" must provide for its insured members certain things, among which are medical and surgical supplies. How is the "carrier" to provide them? Either by means of a controlled dispensary or hospital on the one hand, or on the other hand by a special contract with one or more druggists in each locality. If a contract is entered into with one or more druggists, it takes the business away from all the others, and those who get the contract will find that it isn't worth anything because prices will be screwed down to the limit.

This has been the actual experience of "chemists" in Great Britain. There a fixed schedule of prices has been established, but the prices are so low that, when the cost of labor and the expense of doing business are considered, the profit more than disappears. An absurdly low advance on the net cost is allowed on each individual item entering into a prescription, and the druggist is permitted a dispensing fee of four cents for all mixtures up to 8 ounces. Think of it!

The British "chemist," unlike his American cousin, operates at a very low expense, and this is particularly true in the smaller towns. Frequently living in connection with his shop, keeping only one boy or none at all, having large stretches of leisure on his hands and paying far less for rent and every other expense, he is able in some instances to take this insurance business and make a small profit from it. But it can well be imagined what would happen to the American druggist under the same

* Read before the section on Education and Legislation of The American Pharmaceutical Association, Indianapolis, August, 1917.

conditions. Every prescription so filled would be dispensed at a loss, and the greater the business the greater the sacrifice! This is precisely the experience of the large and successful pharmacists in Great Britain—the men who know what their expenses are, and who realize what they must do to make their business yield them a profit.

Hospitals Linked Up

Hospitals form an important part of the scheme, and it cannot be doubted that in the cities of any size all medicines would be furnished either by the hospital dispensaries or by the special drug dispensaries. Now what does this mean for the druggist? It must be remembered that three-fourths of all wage-earners and their dependents are to be made beneficiaries of this insurance. Three-fourths of the druggist's business in drugs, prescriptions, and medical supplies, therefore would leave his store and be deflected to public dispensaries.

Does the druggist want to lose three-fourths of his pharmaceutical business on the one hand, and on the other be made to pay three times his normal taxes?

Doesn't this whole plan mean, indeed, that large numbers of druggists would no longer be independent business men, but would revert to the status of clerks and employees in these public dispensaries and hospitals?

Either that, or else the drug stores of the land, like Hamlet played without the Prince, would cease to be drug stores in fact, with most of their drug business gone, and would in effect become general stores competing with other merchandising shops of which there are already far too many. The prospect is scarcely a rosy one. The druggists of America will not, I assume, give up their independence without a fight.

Against Public Policy

I have so far discussed this whole question more or less exclusively from the standpoint of the druggist. But of course, as already intimated, if this movement is to be defeated, it must be defeated because it is against public policy, and not because it may wipe the drug stores of the country out of existence.

Is it against public policy?

It certainly is.

And for reasons so numerous that I cannot hope to discuss them all in a brief address. In the first place, it is almost enough to say that the beneficiaries themselves are for the most part to be found arrayed against the proposition. The scheme has been devised ostensibly for the protection of the American laboring man, but the American laboring man doesn't want it. Here and there a labor association it is true, has supported the idea, but the great majority of such organizations have declared themselves against it. The American Federation of Labor, which speaks authoritatively for union labor, is particularly opposed to the scheme, and Samuel Gompers himself has time and time again declared himself in no uncertain terms.

As a matter of fact, the laboring man sees a great menace concealed behind this adroit and ingenious suggestion. He is instinctively afraid of the political machine that will be developed in every State to take care of compulsory health insurance. He realizes that what protection he gets will cost him far more than it is worth, and that waste and extravagance will accompany the whole business at every step. He senses the vital fact, too, that employers of labor, once they must carry this great burden, will see to it that it is reduced as much as possible and that employment is given only to the young, the fit and the strong; men who are likely to become expensive risks will go vainly from one factory to another in search of work and will find it nowhere. And lastly, the American laboring man, like every other American, wants to have the free and unrestricted right of choice left to him, and doesn't want to be compelled to do anything against his will.

Robs Pay Envelopes

One of the greatest arguments against the plan, indeed lies in its compulsory element. The proponents of the idea insist that it will be a failure if it is not made compulsory, and yet, when it is made compulsory, it becomes un-American to the last degree. Three people out of every four in the community are involved and they must pay for this insurance whether they want it or not—whether they can afford it or not. They must patronize certain physicians whether they prefer them or not. They have

no choice in the matter. The money is taken from their pay envelopes.

This represents one side of the proposition, but there is another side as well. Not only are three people out of every four compelled to accept such protection more or less against their inclinations, but the fourth individual in every group of four persons must largely contribute toward the protection forced on the other three. In other words, one-fourth of the population, not beneficiaries because not manual laborers or because earning more than \$1,200 annually, must dig down in its pockets in order to have the other three-fourths provided with something that they may or may not want. Some of us are to have charity forced on us, and others of us are to contribute this charity against our wills.

Does this sound like American liberty, or is it European paternalism run mad?

Here, too, is one result of compulsion as it has worked out in Great Britain. I know personally of a manufacturing establishment employing something like seven hundred intelligent people the great majority of whom are beneficiaries of the plan. They are compelled to stand their portion of the expense. But do they use the panel physicians and do they avail themselves of the inferior drugs which are provided by the administrators of the act? The majority do not. They continue to consult their own private physicians and to purchase drugs in which they have confidence. I am informed that this same situation exists all over the country, and thus we have presented to us a picture of the poor working man compelled by the State to pay twice for what he gets.

Pass Along the Tax

Furthermore, it is an idle dream to suppose that this great burden of expense is going to be nicely and accurately divided—40 per cent paid by the employee, 40 per cent by the employer, and 20 per cent by the state. You and I know exactly what will happen. The employer will pass along his tax to the consumer as he does every other tax. He must contribute 40 per cent of the cost of protecting his own employees, and he must also contribute his portion of the 20 per cent carried by the State. The sum total he will consider as an addition to the expense of doing business, and he will increase the selling price of his products accordingly. The consumer will pay the tariff as he always does, and in the last analysis, therefore, compulsory health insurance will hark right back to the average man. He is supposed to get something for nothing, but will he?

He will find himself paying three prices for what little protection he secures!

Advocates of compulsory health insurance frequently refer with gratification to the conditions in certain European countries where state health insurance has obtained for some years. Now nothing is more common than the ease with which half a dozen theories may be proved from the same set of facts. Not only do fifteen or twenty religious cults, differing more or less vitally from one another, draw evidence of the accuracy of their philosophy from the same Bible, but even a mental vagary like Christian Science is made to rest on the same foundation. Desiring, if possible, to avoid this common error, and to get at the real truth of conditions in Great Britain, I wrote to an unprejudiced and impartial observer in London who I thought would brush away all misleading facts and figures and give me the heart of the situation.

A Foreign Opinion

He writes me that the national insurance act of Great Britain was originally framed as a vote-catching move, pure and simple. It was put through for that special purpose at a particular time, and with no financial provisions whatever. Once enacted, all interest in it was suddenly dropped by the promoters, and for some years it has been more difficult to get the act mentioned in Parliament than to get a camel through the eye of the traditional needle. Moneys for the practical application of the law have not been forthcoming in sufficient measure, and the whole business has been hampered at every step. The promises originally made in connection with the bill still remain unfulfilled after several years of experience.

More seriously yet, my informant tells me that Great Britain has experienced what was inevitable in connection with socialistic legislation of this sort. A host of ad-

ministrators were required, and at once the vast majority of them set about seeing what they could get out of the situation at the expense of anybody and everybody. The poor insured person entirely escaped consideration in every instance.

Now this is the view of a student who has observed conditions with a neutral eye from the very beginning. It is possible to take isolated facts and figures and to arrive at the conclusion that the national insurance act in Great Britain has been most salutary in its effects, but I prefer to accept the opinion of an able observer who is familiar with all the conditions and who knows what he is talking about.

Britain's Limits Are Small

Now let me reason by analogy. In Great Britain the benefits provided are very much smaller than are proposed in this country. Only those earning less than \$800 annually are beneficiaries, whereas here the figure is \$1,200 for office help while every manual laborer is included regardless of his wage. In Great Britain the maximum cash benefit a week for men is \$2.40 and for women \$1.80. The maternity benefit is limited to \$7.20 exclusive of medical attendance. The amount paid for drug supplies and for medical service is also small in comparison, and it may be said in general that the benefits there are not more than 20 per cent of what is proposed here. If, nevertheless, with benefits relatively so small, graft of every sort could arise in an old and well-established government like that of Great Britain, what would happen in the United States with spoils made available four or five times as great?

Isn't it plain that we should build up a political machine that would magnify all the evils with which this country is now afflicted—a machine that would use the cloak of charity to conceal its nefarious designs? Millions upon millions of dollars would be wasted annually, and the chief beneficiaries would be the army of politicians who desire nothing quite so much as to fatten themselves at the public trough.

Of course plausible and moving pleas have been made for compulsory health insurance. Some very excellent people are heartily in favor of it. Humanitarian sentiment seems to rest at the bottom of it, and people with large hearts and generous impulses want the ills of humanity relieved as much as possible. But theory often has a habit of running away from facts, and the glamor which surrounds many reforms will not stand the cold light of reason. Moreover, many of the advocates of this panacea are in it for what they can get out of it. Much of the sentiment which flows so eloquently from their lips is made to conceal the hope of profit which regulates their desires.

In the medical profession opinion is divided. Some medical associations have declared for the proposition; others have declared against it. Within the last year a number of physicians, some of them members of the American Pharmaceutical Association, have declared the movement a public spirited one and have argued that druggists should support it though it drives us into the sea. We should be willing to sacrifice ourselves on the altar of humanity.

Hits At Physicians

But it is easy for the physician to assume this lofty position. The medical profession is very efficiently organized, and in the event that compulsory health insurance obtains in any State the doctors will be strong enough to force recognition for themselves. Already, indeed, they have had written into the bill certain features which afford them ample protection. They are assured of proper compensation in the event of success, and one reason why so many physicians favor compulsory health insurance is that it will greatly increase the earnings of the rank and file of the profession. The average income of American doctors is about \$900, and it has been estimated that this figure would jump to about \$2,000 if compulsory health insurance became a fact.

Now there are a great many objections to be urged against compulsory health insurance as it is proposed at the present time. I won't trespass upon your patience to enumerate them all. Probed to the bottom, the whole scheme is nothing but socialism—pure, simple and unadul-

terated. It would put the state into the field now occupied by private enterprise. Is this what we desire? Is there any more reason for the state to sell health insurance or drugs or medical service than for it to sell shoes or groceries or clothing? Do we want to encourage this entering wedge? Do we want the state to take over business activities one by one? Are we anxious to destroy the individual initiative, the business genius, which has made America great? Are we desirous of sacrificing and discarding private enterprise and becoming wards and paupers of the nation?

And this thing is worse than almost any other form of state business would be because it is made compulsory. We must take it and pay for it whether we want it or not.

We have no choice in the matter. Isn't this the worst possible form of oppression?

Isn't it autocracy instead of democracy?

Backers Rosy Plea

The fathers of the idea say that sickness is a public evil and that compulsory insurance would lessen it. But it hasn't been lessened in Europe. They say that the cost of health protection would be lowered. But it hasn't been lowered in Europe. They argue that the poor man, unable to protect himself, must be protected by the state. But the man who most needs protection won't be protected at all by this plan.

Who is this man? Is it he who is employed at a good wage and has a steady position? No. He can take care of himself. Who is it, then? It is the man who, once compulsory insurance goes into effect, loses his job, either because he is too old, too sickly, or has habits which make him a bad physical risk. Employers, in self defense, are going to get rid of all such men, and once they lose regular employment they are no longer beneficiaries of the scheme. For it is notorious that what are called "casual workers" and men without jobs are left out of the reckoning. What, then, becomes of the claim that the plan protects those who most need protection?

I repeat that the whole proposition is full of objections—so full that hours would be required to discuss them all. It would tend to destroy individual enterprise. It would start us on the uncharted sea of socialism. It would pauperize the very people who became beneficiaries of it, while failing to reach those most in need of protection. It would substitute governmental oppression for personal liberty. Heralded as an economic measure, it would waste millions of dollars annually. Presented as a specimen of efficiency, it would do more than anything else to fasten upon this country a reign of graft, incompetency, and malfeasance in public office.

Sounds Strong Warning

My purpose today is to issue a warning against this vital danger. If we do not organize against it, we shall certainly live to rue the day. If compulsory health insurance becomes a fact, it will not only be a public menace but it will be the greatest blow ever suffered by the drug trade of America. I am speaking of the plan in its present form. If it can be so modified and improved as to become a public benefit instead of a public danger, and particularly if the compulsory feature can be eliminated, druggists and other public-spirited citizens will desire to support it. The National Drug Trade Conference and the American Drug Manufacturers' Association have declared their opposition to the movement until time could be afforded for a more careful study of the situation, and this is the attitude that should be taken by the American Pharmaceutical Association and by all other branches and divisions of the trade.

In the meantime, as these bills present themselves in the different State legislatures next winter, and succeeding winters, they should be opposed with all the vigor at our command. In fighting them to the last ditch we shall not only be rendering a public service but we shall be protecting our own calling from the danger of partial if not complete extinction.

The Los Angeles Retail Druggists Association held its annual picnic on August 24 in the Santa Monica canyon, about 500 druggists, drug clerks and their friends being in attendance. A big barbecue was given on the beach, three steers being roasted. Surf bathing, field athletics and dancing were a part of the day's festivities.

Sandalwood Exports and Production *

By LUCIEN MEMMINGER, United States Consul at Madras, India

The value of the exports of sandalwood from the Madras Presidency to all countries in 1916-17 was \$440,905 as compared with \$398,080 in 1915-16 and \$545,697 in 1913-14 a pre-war year, which, however, was a record year. In 1916-17 the United Kingdom and the United States received \$245,272 and \$177,789 worth respectively. In 1913-14 the exports were \$271,875 to Germany, \$104,468 to United Kingdom, \$99,601 to United States, \$47,043 to France and \$23,035 to other countries.

The fact that the Mysore State which is the world's chief source of supply of sandalwood has established a factory for the distillation of the oil at the rate of about 2,000 pounds a month has brought about a new situation with respect to the export trade in this article as it is said that if the factory is successful part of the Mysore sandalwood if not all will be reserved for local distilleries.

In Madras the total annual output of sandalwood is only about 240 tons but in Mysore the quantity of sandalwood extracted during 1912-13 from dead, fallen, spiked and over mature trees was 2,883 tons. Inclusive of the previous year's balance of rough wood the total quantity available for preparation for market was 3,746 tons, of which 2,883 tons were worked up yielding 2,259 tons of good wood and 321 tons of white chips, the rest having been lost during conversion.

At the end of the year there was a stock of 863 tons of rough wood, the total quantity of sandalwood sold during the year having amounted to 2,418 tons and the revenue realized including the sale of 334 tons of white chips was \$736,012. The average price was \$305 a ton against \$173 the previous year and \$148 the average of the ten years ending with 1909-10.

The cost of collecting 2,883 tons of rough wood and of preparing 2,259 tons of good wood amounted to \$21,615. In 1913-14 the quantity of rough wood collected was 2,944 tons and of wood prepared 2,287 tons.

War Broke up Market

Upon the outbreak of the war in Europe the market was greatly affected as France and Germany had been until then among the best customers of Mysore sandalwood. The total quantity of wood sold in 1914-15 only amounted to 367 tons and the revenue derived therefrom was \$111,040 exclusive of 180 tons of white chips which were sold for \$128. The auction sales which usually take place in November and December were postponed to the month of March following, at the request of the merchants trading with Europe to enable them to take stock of the situation arising out of the war. The sales proved abortive but there being a limited demand for sandalwood required for ceremonial purposes in India inquiries were made by some merchants after the sales asking for lowest quotations while some others went so far as to submit tenders offering low rates.

With a view to maintaining the high level in rates which had only been built up after patient and persistent endeavors extending over a number of years, it was decided to sell the wood at fixed rates which while making due liberal allowance for the abnormal conditions of the time were intended also to effectively safeguard the permanent interests of the sandalwood market. It was at first intended to keep open these special sales till the close of the official year but the period was subsequently extended up to September 15, 1915 as offers for fairly large quantities of wood began to come in both from European and Indian merchants as things began to settle down. The exports of sandalwood in the fiscal year ended March 31, 1916, were valued at \$398,080 of which the United States and United Kingdom received respectively \$268,631 and \$114,201, thus partly clearing the accumulated stocks in the Mysore forests.

Disposal of Wood a State Monopoly

As the disposal of sandalwood in Mysore is a State monopoly and an important source of profit to the State the collapse of the market in 1914 resulted in serious attention being paid to the possibility of developing the

State's own factory for manufacturing oil in order to preserve this revenue under all circumstances. The extraction of the oil from sandalwood is not permitted to private persons in Mysore State; but the industry is to some extent carried on round the borders of the State especially in the South Canara district. It is also largely manufactured at Kanauj in the Punjab, where the oil is principally used in preparing sweet scented essences.

So long as the State was enjoying a steadily increasing revenue from its sandalwood monopoly it was considered undesirable to disturb the existing arrangements and the export trade consisted entirely of billets of wood. About half a dozen leading European firms controlled the trade.

Building New Factory

The users of sandalwood oil in Europe and America either distill their own oil or purchase from chemical firms of repute. Oil of Indian manufacture has heretofore been unsaleable abroad because of the defective methods used in the distillation and the tendency to adulterate with innocuous cheap oils. As a preliminary to the proposed setting up of sandalwood distillation in Mysore the whole question was referred to two experts of the Indian Institute of Science and for a year or more the matter was under experimental investigation and the results obtained were considered of a sufficiently satisfactory character to warrant the establishment of an experimental factory where the oil will be manufactured on a commercial scale. The estimated cost of the new factory is about \$33,000. Owing to the impossibility of obtaining machinery or plant from Europe the same is being made in the country. The bulk of the oil turned out thus far has been sold locally at very favorable prices and it is said that the oil sent to England has been declared to be of excellent quality and obtained equal prices with oils made in Europe. Locally the oil has been selling at \$5.84 per pound whilst the price paid in the London market is as high as \$7.30 a pound. To pass the test to which the oil is subjected in Europe the directors of the factory consider that complete chemical control will be necessary and it is expected that every consignment of oil sent out from the factory will be subjected to an examination and a certificate as to its quality issued. In this way the directors state that they hope to be able to overcome the prejudice against the sandalwood oil manufactured in India.

Meanwhile the annual auction sales of sandalwood will still continue and the new factory will purchase sandalwood from the Forest Department at the same prices as paid by outsiders, but if the industry proves profitable it is under contemplation to establish a distillation plant of sufficient size to deal with the whole annual output of sandalwood in the South of India.

Area Under Sandalwood

The sandalwood—*santalum album*—is found sporadically throughout Mysore, Coorg, the Ceded districts and the Carnatic but it does not anywhere form a considerable portion of the forest in which it occurs. In fact, it is commonly found in very open forests, in hedgerows, and along the borders of cultivation. The total area of the sandalwood belt is about 5,540 square miles of which a belt in Mysore about 240 miles long by 16 broad runs from the north-west to the south-west of the State. Research in recent years has proved the tree to be—in the later stages of its growth—a parasite on the roots of other trees; a fact which accounts to some extent for its sporadic appearance, for the failure of all attempts to form sandal plantations, and for very considerable variations in the value of the wood. It is susceptible to a curious disease known as "spike." It is only the heartwood of the sandal tree that is of great commercial value. In a small way it is used for wood carving, especially in India for making small carved boxes and for inlaid work; but the high prices which the wood brings are due to the fact that it yields an oil very largely used for medicinal purposes and in the preparation of perfumery.

For distillation of oil chips of heartwood from the roots are preferred.

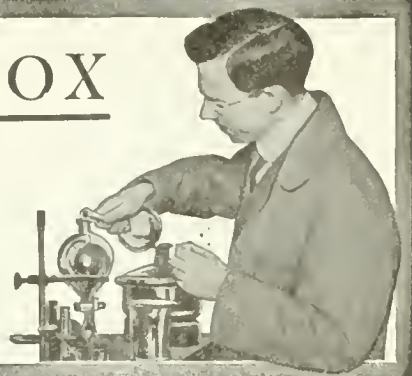
* Specially transmitted to the PHARMACEUTICAL ERA.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Action of Picric Acid

(F.M.C.)—Picric acid (official under the title trinitrophenol) is seldom used internally, although it has been prescribed in malaria and exophthalmic goitre, and as an antipyretic. As a local application it has been used in the treatment of erysipelas and burns. According to Autenreith, it is quite an active poison, and taken internally it produces a striking yellow pigmentation first of the conjunctiva and then of the entire skin, usually designated as "picric acid icterus." The author named states that "picric acid and its salts like most nitro-compounds decompose the red blood corpuscles, forming methaemoglobin. Consequently it is a blood poison. At the same time it irritates the central nervous system and causes convulsions. Finally it exercises its power of precipitating proteins in acid solution. This is especially noticeable in those organs of the body, for example, the stomach and kidneys, which, owing to necrotic tissue changes, have an acid or only a faintly alkaline reaction. The organism reduces picric acid to picraminic acid, which does not so readily precipitate protein. By thus changing picric acid the organism rids itself of the poison. In picric acid poisoning the urine has a marked red color owing to formation of picraminic acid. Some picric acid passes into the urine unchanged. Elimination is slow. In one case after administration of a single dose of 1 gram of picric acid, its presence in the urine could be recognized for six days. The urine was ruby red, clear, acid and free from albumin and bile-constituents. Picric acid was also easily detected in the feces." Like most other organic nitro-compounds, picric acid is very explosive, and it forms, with alkalis, well defined salts, which are also extremely explosive.

Picric acid is used in the form of a saturated aqueous solution, as a hardening agent in microscopical work, and is also employed in urine analysis to detect and estimate glucose (Johnson's test), and for the approximate determination of albumin (Esbach's test). Stains on the skin made by picric acid may be removed by a solution containing 1 per cent each of boric acid and sodium benzoate.

Foam Producer for Soda Water

(C.E.P.)—The substance other than saponin employed to increase the gas-retaining or foam-holding properties of soda water, are gelatin, gum arabic, Irish moss, albumen, etc. Gelatin may be used by dissolving by means of heat about ½ ounce in the water used for making a gallon of the syrup. To use gum arabic, make a mucilage, using 8 ounces of the gum to 16 fluid ounces of water, then add a sufficient quantity of the mucilage directly to the syrup, an ounce or so usually being sufficient. Irish moss—Thoroughly wash 1 ounce of Irish moss to free it from salt, and then boil it with 16 fluid ounces of water for 5 minutes (or heat with the same quantity of water on a waterbath for fifteen minutes), then strain through flannel. Used in the proportion of 2 to 4 fluid ounces to 1 gallon of syrup.

To use albumen, add the white of one egg to 16 fluid ounces of water, stir well and strain. Or, replace one-half of the water with simple syrup. This mixture decomposes very quickly, and should be preserved on ice, or preferably, prepared only as required. By incorporating the white of egg with a mixture of equal parts of glycerin and distilled water, instead of water or syrup, a better

keeping preparation will result. About ½ fluid ounce is sufficient for ½ gallon of syrup. The use of soap tree bark (saponin) preparations is prohibited by the Federal authorities and most boards of health.

Cleaning Prescription Mortars

(Dispenser)—The method to employ in cleaning a mortar depends somewhat on the character of the material that has been triturated in the mortar. Greasy substances, ointments, etc., are easiest removed by scrubbing the mortar with sawdust, although some operators use paper for the same purpose, the mortar whether cleaned with sawdust or paper, being finally rinsed out with a solution of potassa, or washed with soap and water. For cleaning Wedgwood ware, a solution of lye or potassa is about as effectual as anything, while the most difficult parts to clean may be rubbed with sand soap or a little pumice stone. Or a stiff paste is made with powdered pumice stone and strong commercial sulphuric acid, and applied fairly thickly to the inside of the dirty mortar, which is then set aside for a few hours. On washing the mortar with water a clean surface will be left.

For stains from aniline dyes, fuchsine, marking ink, etc., use a solution of tartaric acid. For deposits of fluid magnesia, Parrish's syrup, Easton's syrup, etc., use hydrochloric acid. For most organic extracts and vegetable resins, use a solution of potassa; tincture of cannabis indica, old paint, and grease stains may be removed by chloroform. In practice we have found the application of a little of the old fashioned sodium dichromate battery fluid (N. F. III) a splendid medium for clearing up the appearance of a badly stained Wedgwood mortar.

Zinc Oxide Ointment for Burns

(R.F.H.)—While it is likely that the official ointment of zinc oxide is as satisfactory as any that can be suggested, we take the following formula from a contribution in the *Journal* of the A.Ph.A. in 1915, as also the criticism that zinc ointment made with the official basis, benzoated lard, goes granular on keeping. It is suggested that white petrolatum should be substituted for benzoated lard, and since the ointment is somewhat soft, hardened by the addition of wax, as follows: Zinc oxide, 200 grams; white wax, 150 grams; white petrolatum, 650 grams. Rub the zinc oxide, which must be free from gritty particles, with an equal weight of melted white petrolatum until smooth and add to this the remainder of the white petrolatum which has been previously melted with the white wax. Strain the ointment while warm and stir thoroughly until it congeals. The strength of 20 per cent the author considers to be unnecessary, and that a 10 per cent ointment is sufficiently strong.

As a "special burn ointment" containing zinc oxide, the following has been recommended:

Phenol	1 gram
Thymol	1 gram
Camphor	1 gram
Menthol	1 gram
Ichthyol	2 grams
Balsam of Peru.....	2 grams
Starch	20 grams
Zinc oxide	20 grams
White soft paraffin.....	152 grams

Liquefy the first four ingredients by trituration in a mortar, and then add the next two, and mix thoroughly. Now incorporate the zinc oxide together with the soft paraffin. Lastly, add the starch in fine powder. The ointment is sometimes prepared half strength.

What is "Oil Bubulum"?

(C.&B.)—"What is oil bubulum?"

Although the query presents a mixture of languages, there can be no question but that "oleum bubulum," the Latin title for neat's foot oil is meant, the world *bubulum* being derived from the Latin word *bos*, an ox. It was formerly official in the U. S. Pharmacopoeia and was used in the preparation of ointment of mercuric nitrate. It is obtained from the feet of cattle by boiling with water, the oil after rising to the top of the water being skimmed off from time to time by suitable skimmers. On a large scale neat's foot oil is obtained as a by-product in the centers of the meat packing trade, such as the Chicago stock yards and in the South American establishments. As described by Lewkowitzsch, neat's foot oil is pale yellow and has a bland taste. Properly prepared oil contains only a very small amount of free fatty acids. On standing the oil deposits "stearine," while the glycerides contained in the oil consist of palmitin, stearin, and olein. The same authority also states that it is largely adulterated with vegetable oils, such as rape oil and cottonseed oil, fish oils (blubber oils, whale bone oil), mineral oils being also used for the same purpose. It is largely used in the leather industry, in which practically the total quantity of neat's foot oil made is consumed as "fat liquoring" for the treatment of hides and skins for the manufacture of the more delicate grades of leather (gloves, etc.). It has also been employed in medicine as a substitute for cod liver oil, but because of its disagreeable odor and tendency to cause diarrhoea it is rarely prescribed. The dose is from 1 to 2 fluidrams.

What is Slug Shot?

(C.&B.)—"Kindly answer the following question through the Era Question Box department: What is 'slug shot'?"

According to Farmers' Bulletin No. 146, "Insecticides and Fungicides," published by the United States Department of Agriculture in 1902, "an analysis of this substance shows that it is composed almost exclusively of crude gypsum with a small amount of arsenious acid and copper oxide added, probably in the form of Paris green. The amounts of these two substances in a sample recently examined were only 1.58 per cent. arsenious oxide and 0.58 per cent. copper oxide. It is needless to say that an article containing as little arsenious oxide and copper as the above will do little or no good as an insecticide, while 5 cents per pound is a large price to pay for a sample consisting of nearly 100 per cent of gypsum." The Bulletin quoted also stated "that the compound is very extensively sold because of its cheapness."

Cement for Joining Leather

(S.G.S.)—Various formulas for making cements for joining leather have been published, the following being typical:

(1)

Soak equal parts of glue and isinglass, in sufficient water to cover them, for ten hours. Heat until just boiling, then add tannic acid until the whole becomes ropy, or appears like the white of egg. It is necessary, in order to get perfect union of the parts, that the surfaces of the leather should be free from grease. This may be done by laying a cloth upon them and applying a hot iron for a time, or by the use of benzine or petrol. The cement is then applied to both pieces, the surfaces brought together, and pressure applied until the joint is dry.

(2)

Mix 10 parts of carbon bisulphide with 1 part of oil of turpentine, and then add enough gutta percha to make a tough, thickly flowing liquid.

(3)

Soak 100 parts of glue in cold water for ten hours; pour off the surplus water, and melt on a water-bath. Add 2 parts of glycerin and 3 parts of potassium bichromate. Use this mixture as hot as possible, making only what is

required at a time. Apply to the clean, grease-free surfaces, and keep the joint under pressure for a day or so. The first formula given is for cementing leather straps for machinery and it is said to make a joint as strong as the leather itself. The best effect is obtained by buffing the grain off the leather where the cement is to be applied hot; the joint surfaces should be rubbed solidly together. When left to dry for a few hours, the strap is ready for use.

A cement for leather and cloth like that needed for uniting the parts of boots and shoes, or for joining the seams of articles of clothing, may be made according to the following formula from the Era Formulary; Gutta percha, 1 pound; India rubber, 4 ounces; pitch, 2 ounces; shellac, 1 ounce; linseed oil, 2 ounces. Mix the ingredients, melt together, and use hot.

Ferro-Saline Mixture

(F.S.M.)—The original formula prescribed under the title "Mistura Ferro-Salina" is said to be that employed by Prof. R. Duglison, which is as follows:

Magnesium sulphate	1 ounce
Potassium bitartrate	1 dram
Dried ferrous sulphate.....	10 grains
Water, enough to make.....	32 ounces

Dissolve. Dose, one wineglassful.

The salts employed must be chemically pure and the iron sulphate perfectly green, while the water used should be previously boiled to expel oxygen, and then allowed to cool, hot water favoring oxidation.

Dry Cleaning Cleanser

(W.G.H.)—We are not familiar with the preparation you name, but the "Scientific American Cyclopaedia of Receipts" gives this information under "dry cleaning soaps"; "Soaps soluble in benzine are employed for the dual purpose of assisting the cleaning process and to minimize the risk of fire. The following quantities give satisfactory results (parts by weight); Oleic acid, 5; caustic potash, 1; dissolve in methylated spirit, 4. These quantities are arranged to provide a slightly superfatted soap freely soluble in benzine. By increasing the quantity of oleic acid the solubility of the soap in benzine is increased. For brushing on the slab, an ordinary hard oil soap may be used, green olive oil soap being perhaps the most satisfactory. A brush dipped in benzine, and rubbed on a bar of this soap, dissolves enough to produce a plentiful lather when brushing the goods. When a solid or semi-solid benzine soap is employed, e.g., saponine—it is usual to make a stock solution (a 5 or 10 per cent solution by weight), and to add the necessary amount of the stock to the machine. For use in the Barbe process, neutral soaps must be employed, those containing free acid being found to attack the galvanized fittings at the temperature to which the machine is raised."

A formula for a cleaning fluid of the "non-inflammable, evaporating" type, is the following, taken from the Era Formulary:

Benzine (petroleum ether).....	3 fl. ounces
Carbon tetrachloride	17 fl. ounces
Oil of lavender.....	30 minims

This formula has been variously exploited under the names of "safety benzine," "carbon tetrachloride cleaning fluid," etc., the original formula being brought to notice by Prof. Otto Raubenheimer, of Brooklyn, N. Y., who claimed for the preparation the following advantages; It does not injure the texture of the finest and lightest fabric, nor the most delicate vegetable, mineral or aniline color; it leaves no odor, will entirely evaporate, and leaves no marks around the edges of the spots. It does not remove stains caused by red wine, fruit, iron and rust, tannin, albumen, glue, sugar or syrup, but will remove any other stain, even a very old one.

The Utah Board of Pharmacy examined nine applicants for registration at the meeting held in the State Capitol, Salt Lake City, on July 17. Of these seven were successful, one of them being Miss Mildred D. Ludden, of Salt Lake City.

A. Ph. A. Meets in Indianapolis

Federation of All Drug Organizations Proposed

Officers of the A.Ph.A. For 1918

President, Charles Holzhauser, Newark, N. J.; 1st vice-president, Alfred R. Dohme, Baltimore, Md; 2nd vice-president, Leonard A. Seltzer, Detroit, Mich.; 3rd vice-president, Theodore J. Bradley, Boston, Mass.

General secretary, William B. Day, Chicago, Ill.; treasurer, Henry M. Whelpley, St. Louis, Mo.; reporter on the progress of pharmacy, H. V. Army, New York; editor of the Journal, E. G. Eberle, Philadelphia; honorary president, W. L. DeWoody, Pine Bluff, Ark.

Members of the Council, Frederick J. Wulling, Minneapolis, Minn.; George M. Beringer, Camden, N. J.; J. G. Godding, Boston, Mass. (to succeed the late Thomas F. Main); C. A. Mayo, New York (to succeed W. C. Alpers deceased). Dr. Joseph Diner, New York, in place of H. V. Army, already an ex officio member of the Council.

Council Officers; Chairman, L. C. Hopp, Cleveland, Ohio; vice-chairman, S. L. Hilton, Washington, D. C.; secretary, Joseph W. England, Philadelphia.

NOMINATIONS

Nominations

The Committee on Nominations reporting at the second general

session placed in nomination the following members, three names for each office to be filled, the tickets containing them to be submitted to members who will vote by mail to fill the several offices named;

Nominee for president, J. A. Koch, Pittsburg, Pa., Charles H. LaWall, Philadelphia, and Leonard H. Seltzer, Detroit, Mich.

Nominee for first vice-president, F. W. Nitardy, Denver, Colo., E. A. Ruddiman, Nashville, Tenn., and Jacob Diner, New York.

Nominee for 2nd vice president, T. J. Bradley, Boston, Mass., W. W. Stockberger, Washington, D. C., and H. C. Christensen, Chicago, Ill.

Nominee for 3rd vice president, Frank Schachleiter, Hot Springs, Ark., L. C. Lewis, Tuskegee, Ala., and F. C. Hemm, St. Louis, Mo.

Nominees for Members of the Council (three to be elected); Charles Holzhauser, Newark, N. J., W. J. Teeters, Iowa City, Ia., C. B. Jordan, Lafayette, Ind., Caswell A. Mayo, New York, R. A. Lyman, Lincoln, Neb., Chas. E. Caspari, St. Louis, Mo., O. F. Claus, St. Louis, Mo., G. F. Payne, Atlanta, Ga., and John C. Wallace, New Castle, Pa.

The need of a federation of all the pharmaceutical organizations of the country was the leading topic of President Wulling's address before the 65th annual meeting of the American Pharmaceutical Association held at the Claypool Hotel in Indianapolis, August 28 to Sept 1 inclusive. Other subjects which received much attention were those relating to the status of pharmacists in the Government service, the association indorsing the bill now before Congress to establish a pharmaceutical corps in the United States Army, and approving the recommendation for the appointment of a representative of pharmacy on the National Council of Defense. Other questions which aroused considerable discussion were those growing out of the reading of Mr. Mason's paper on compulsory health insurance, and the report of the special committee appointed at the Atlantic City meeting to consider the presidential address of the late Dr. William C. Alpers, read by Chairman J. H. Beal. After much consideration, the association voted to receive the report, which was ordered to be filed with President Alpers' address in the archives of the organization, so that should occasion require these could be consulted, but under no consideration were they to be printed.

The program for this meeting was arranged somewhat differently from those that had been provided in previous years. The association held three general sessions, the third closing the annual meeting, while the various sections held their gatherings between the general sessions, sometimes two or three of the sections meeting simultaneously, with the result that the member had to pick out those subjects in which he was most interested, and let the rest go, as one member expressed it, again demonstrating the utter impossibility of a person trying to be in two places at one and the same time.

At the closing general session Chicago was selected as the place for next year's meeting, the exact date to be selected by the local committee.

FIRST GENERAL SESSION.

The association was called to order by President Wulling, who stated that no clergyman was present and as it had always been customary to open the meeting with an invocation he would call on Prof. J. U. Lloyd to officiate in this duty, which he did in a short address, feelingly alluding to the strenuous times in which we were living, invoking the aid of Deity in all of our work.

President Wulling then called Vice-president L. E. Sayre to the chair and then proceeded to deliver his annual address, an abstract of which is as follows;

President Wulling's Address

The central theme of the address is the need of a federation of all pharmaceutical organizations. The calling of pharmacy is a trust in the keeping of a current generation which received it from the previous one and hands it down to the next, each generation administering upon the trust according to its abilities

determined largely by the ideals and aims of its leaders. As holders of such a trust the present generation of pharmacists are most responsible custodians, upon whom rest the responsibilities of timely administration. Among the first and most insistent duties of the individual is cooperation with his fellows and this cooperation must be done through organization. All those active in any division of pharmacy constitute the body-pharmaceutic and as members of that body are definitely related. This relationship is not sufficiently organized and is not adequately represented and expressed in pharmaceutical organization because the past has failed to organize sufficiently the inter-relation and interdependence of the various divisions of the body-pharmaceutic and hence each division has organized itself for the furtherance of its own domestic interests, thus emphasizing too greatly lines of division which soon become more apparent than they really are. It was and is proper and beneficial that these divisions be represented by separate organizations, but the desirability and necessity of organizational bonds to unite them into a larger whole has thus far been overlooked. The writer recommends most earnestly the Association's serious consideration of the advantages of an affiliation of all national, state, county and local associations into a union or federation.

President Wulling suggested as a possible starting point the organization of the entire body-pharmaceutic into one great whole and the division of this into a number of major divisions and each of these into minor divisions in such a way that every pharmaceutical interest, the greatest and the humblest, would be included and safe-guarded. The great whole, the writer would call the American Pharmaceutical Association and the major divisions as follows:

- I. The Division of Practice
 1. Professional Practice) Now represented by this Association, the National Association of Retail Druggists,
 2. Commercial Practice) the National Association of Drug Clerks, etc.
- II. The Division of Wholesaling, now represented by the National Wholesale Druggists Association and similar bodies
- III. The Division of Manufacturing, now represented by the National Association of Manufacturers of Medicinal Products, American Association of Pharmaceutical Chemists, and similar bodies.
- IV. The Division of Education, now represented by the American Conference of Pharmaceutical Faculties.
- V. The Division of Regulation of Practice and Legislation, now represented by the National Association of Boards of Pharmacy and possibly the Committee of Revision of the U. S. Pharmacopoeia.
- VI. The Division of Associations, now represented by the several state, county and local organizations.

Each division could maintain its own independence, elect its own officers with a chairman in place of present presidents and administer upon its own domestic affairs, having regard however of its responsibility to the Association, which latter ought to have its separate and paramount set of officers to be elected by the votes of the members of all of the divisions or by their electors and to be governed by an administrative council to be equitably representative of each division. Membership in the division ought to carry membership in the Association. Membership could consist of three kinds: 1. Individual; 2. Firm or Corporate; 3. Associational.

In this relation President Wulling says: "This proposed organization of the entire body-pharmaceutic should have for adequate administration a building and able officers, including at least one who would give his entire time in the capacity of general manager. Such a building should be sufficiently large and spacious and adequately equipped and manned to represent in a fitting manner each and every one of the varied interests. The

maintenance ought to be met by the income from a sufficient endowment and would cost half a million dollars. Another half million endowment would furnish an income annually of \$25,000. This one million would be a small percentage of the capital now invested in all departments of pharmacy in this country and could, I believe, with proper machinery, be raised by assessment. I have not succeeded in finding statistics showing the total capital invested in all pharmaceutical activities. Friends have estimated the total sum to be somewhere between \$500,000.00 and \$1,250,000.00. There are approximately 50,000 drug stores in the country which at the low average valuation of \$5,000 each would total \$250,000,000. The manufacturing, wholesaling, distributing and other interests surely are capitalized by at least an equal sum. The very conservative and low estimate of 500,000,000 would yield one million dollars by an assessment of only one-fifth of one per cent. A drug store worth \$5,000 would contribute \$10, a manufacturing concern worth \$100,000 would contribute \$200 and others in the same proportion. Would this not be the very best investment that all concerned could possibly make? In this or a similar manner the business of organized American pharmacy could be established and when once a going concern, under right management might be made to pay dividends in time to gradually make the return of the assessments possible. But this should not be counted upon or expected.

Other divisions of the address were: The work and powers of the Council are upheld and no changes in administration are suggested, but the necessity is shown of a constant adjustment to the conditions and requirements of the times. Association finances are in a satisfactory condition. The present capital, including invested funds, has increased to more than \$50,000. While the *Journal* and the *Year Book*, which have now replaced the annual volume of *Proceedings*, are more expensive than the *Proceedings* were, they have increased the service and usefulness of the Association to a degree greater than that constituting the difference in cost and represent an increase in the value of the Association working plant worth more than the cost. Increase in Association income by increase in membership is suggested.

Increase in numbers and in influence of the Branches and a set of identical rules or by-laws to guide all Branches are suggested. Emphasis is laid upon the important fact that sufficient college training as a prerequisite to full registration is being recognized in an increasing degree throughout the country. Stress is laid, however, upon the urgent necessity of a sufficient academic training on which to base a professional training. The president also urged the association to continue the effort to secure for American pharmacy adequate recognition by and representation in the national service, as also the establishment of a pharmaceutical corps in the army.

The address concluded: "We must immediately begin to project pharmaceutical efficiency in an accelerating degree into the future. We must first put our pharmaceutical house into better order and in an unselfish, loyal and generous way unite, harmonize, correlate and synchronize our interests, forces and strength for a righteous common purpose. I am addressing not only the members of the American Pharmaceutical Association, but every person engaged in any division of American pharmaceutical activity. The duty as well as the obligation is upon every such a one. Not only do I counsel but I appeal to all members of the body-pharmaceutical to give personal, thoughtful consideration and study in the light of experience and wisdom of today, and thus fortified, to resolve everywhere in our beloved country to enter with grim determination upon the rehabilitation and further upbuilding of the pharmaceutical structure into one of greater solidity, eminence and usefulness. The cause for which we are to fight and sacrifice is devoid of any selfish purpose. We should more aggressively employ every proper and approved means to increase the efficiency of our calling and to more greatly deserve the respect and recognition we are already entitled to. The past has proven that the present must proceed on cooperative, coordinate and reciprocal lines to meet successfully the many perplexing questions demanding settlement. A barren pharmaceutical organizational heterogeneity must give way to a wholesome homogeneity and fruitful coalescence of all pharmaceutical interests. Every member of the body-pharmaceutical must do his or her share toward the common cause even if the contribution must take the form of an actual sacrifice. The present conditions demand imperatively undivided adherence to a purpose that has been all too long delayed. The spirit of American pharmacy has never been crushed. It may have been somnolent. We must awaken and arouse it into activity and give it proper direction. It can accomplish what an aroused interest determines upon."

The address was referred to a committee of five, of which Prof. H. V. Arny was chairman. Then followed the reading of the minutes of the Council by Secretary Joseph W. England, including the report of the Committee on Publication in which it was stated that the actual cost of 1916 *Journal* (including the editor's salary) was \$9,123.07, while the estimated cost for publishing the *Journal* in 1917 was put at \$1,500 more than for 1916 owing to the advanced cost of printing, paper, etc. The receipts for the *Journal* in 1916 from advertisements, etc., were \$5,473.21, the receipts for the first six months of the current year being \$3,163.74. Judging from the present outlook, the receipts for the current year would be about \$500 over those of 1916. The 1915 *Year Book* distributed during the year represented a total cost of \$3,501.94 as against \$3,522.03 for the preceding volume. The 1916 *Year Book*, it was announced, would be issued late this year or early in 1918.

The report stated that 23,000 copies of the National Formulary IV had been printed and bound, of which

practically 20,000 have been sold since the first copy was issued on July 25, 1916.

Secretary W. B. Day read greetings from several associations, as also from Prof. Joseph P. Remington, who was unable to be present, and J. O. Burge. Robert S. Lehman, president of the German Apothecaries Society, New York, sent a letter which was read by Hugo Kantowitz, expressing the interest and attachment of that organization to the A. Ph. A.

The committee on nominations made up from the delegates of the several states, then organized and later brought in its report which was adopted.

SECOND GENERAL SESSION

Following the reading of the minutes a telegram was ordered to be sent to Prof. Charles Caspari, Jr., of Baltimore, former general secretary of the association, who was unable to attend the meeting on account of illness. C. A. Mayo presented the report of the nominating committee, which contained the name of Dr. Edward Kremers of Madison, Wis., as one of the nominees for the presidency, but at Dr. Kremers' request his name was removed and that of Leonard A. Seltzer put in its place. The names of the nominees will be printed on tickets and sent to members to be voted on by mail.

Prof. James H. Beal, chairman of the committee appointed last year to take up President Alpers' address, stated that the committee had intended to take up fully the many points in controversy brought out in President Alpers' address, but the sickness and death of the author had made it impossible. However, in the work the committee had done it had discovered that not all of the accusations and charges were founded altogether on fact. The chairman explained that Dr. Alpers was a very sick man at the time of the Atlantic City meeting, and that he was nearer death than he or any one else then knew, and that there was no doubt but that his physical condition was reflected in his address. The committee recommended that the address be published in full in the *Journal*, together with the report of the committee, and that all drug journals be permitted to publish the address, providing the report was published at the same time. This recommendation developed a long discussion, many speakers taking part, but it was finally decided that the report of the committee and the address should be received and preserved in the archives of the association.

S. L. Hilton presented the reports of the committee on the status of pharmacists in the government service and of the Committee on National Defense, in which was recommended the indorsement by the association of the bill now before Congress to create a Pharmaceutical Corps in the U. S. Army, that the committee on National Defense be composed of fewer members with George M. Beringer as chairman, and that the N. A. R. D. be asked to appoint a similar committee. These recommendations were adopted.

Treasurer's Report

Treasurer H. M. Whelpley submitted a summary of financial affairs from January 1st, to Aug. 15th, 1917. The membership consists of 2640 members of whom 133 are life members and 7 honorary members. Only a few have not paid for 1917 and the names of these delinquents were reported to the council.

The overhead expenses for 1916 were \$11,957.02. The revenue was \$12,860.12, leaving a net gain of \$903.10 in the current account for the year. The permanent and special funds grew much more, so that the total increase of A. Ph. A. Assets for 1916 were \$15,195.80. The gain in assets since January 1st, 1917 has been \$8,256.43. The total funds today amount to \$82,280.23 of which \$8,663.45 is held in trust. The National Formulary Fund is now \$19,386.19. The current funds total \$16,806.81. The treasurer suggested making the National Formulary balance a permanent fund. He recommended employing an official auditor to examine his accounts.

LAST GENERAL SESSION

Owing to the illness of Secretary of the Council Jos. W. England, the minutes of that body were read by Mr. Eberle, the association approving with the exception of that part relating to a council committee on research. After a long discussion it was decided that the recommendation of the scientific section that a permanent research committee consisting of ten members be formed, the committee was to restrict itself to working out plans and scope of research work to be undertaken later on

under its direction with the aid of funds to be derived from the profits arising out of the sale of the National Formulary. Under the rule of the Council 50 per cent. of the net profits arising from the sale of the N. F. are to be put aside to form the A. Ph. A. Research Fund, 50 per cent. of the income of such fund to be used in original research and the balance of the income to be added to the principal until the endowment fund reaches \$100,000, when the entire income may be used for prosecuting original research.

Jeannot Hostmann, secretary of the House of Delegates, then read the report of the work of the House of Delegates which embodied several resolutions and recommendations, the A. Ph. A. adopting the resolution empowering its delegates to the National Drug Trade Conference to vote on any and all matters pertaining to drug legislation in State or Nation when they shall come up for action in the Drug Trade Conference, and that the vote should be in conformity with the will of the association when such will has been expressed, otherwise the delegates were to vote in conformity with their best judgment. The association also adopted the recommendation that steps be taken to secure proper representation for pharmacy and the drug trade on the Council of National Defense. The resolution asking that all patents and trademark registrations pertaining to inventions and products of nations now at war with the United States be abrogated or suspended by congressional enactment until the war is ended was not approved.

MEETINGS OF THE SECTIONS

Secretary Day read the reports of several committees, and stated that during the year 320 new members had joined the association, the total membership being now approximately 2,700. The Prætor Fund, according to the report of that committee, amounts to about \$8,000.

The installation of officers, who were introduced by Hugo Kantowitz and Charles S. McGregor, followed. President Holzhauser expressing his appreciation of the high honor that had been conferred upon him. With the adoption of resolutions expressing the appreciation of the members for the hospitalities and entertainment they had received from the local committee and others who had contributed to the success of the meeting the convention adjourned.

COMMERCIAL SECTION

This section was well attended, and the address of Chairman P. Henry Utech, of Meadville, Pa., elicited much favorable comment. This will appear in its entirety in the November Era.

After some discussion by Harry B. Mason and others. Dr. William C. Anderson introduced a resolution approving the recommendation of the Chairman that "colleges of pharmacy should lay greater stress on commercial training," which was adopted by the section and later confirmed by the association. The section also indorsed the Stephens' bill as requested by the American Fair Trade League.

Prof. Henry Kraemer then gave a lecture illustrated by lantern slides on "Commercial Possibilities in Scientific Pharmacy," in which he showed how it was possible for the retailer to commercially exploit and capitalize his scientific knowledge. This was followed by a paper on "Capitalize your Responsibility," by J. C. Peacock of Philadelphia, Prof. Henry Kraemer's lecture and Mr. Peacock's paper developing the same line of thought. These were discussed by Prof. J. U. Lloyd, and Messrs. Spease, Jones, Utech, Sass, and others.

At the second session papers were read by Clyde L. Eddy on "Net Profits and the Average Sale," W. W. Figgis, "More Profits Within Your Reach," H. S. Noel, "Various Phases of Drug Store Publicity," and Robert P. Fischelis, "Conserving Waste by Eliminating Waste." Several other papers were read by title and referred to the publication committee.

The section elected Robert P. Fischelis as chairman, and F. W. Nitardy, of Denver, secretary, for the coming year.

EDUCATION AND LEGISLATION

Space will not permit the reproduction of Chairman R. A. Kuever's address, which showed a deep insight and study

of the questions which now concern pharmacy in the matter of educational training and legislation. He spoke of the first educational era which had developed schools of pharmacy and placed on the statute books laws regulating the practice of pharmacy. Then came the prerequisite law in New York which made graduation from colleges of pharmacy a prerequisite to licensing examination, an action that was being followed by other states until now eleven states have this requirement, Iowa being the most recent to join the ranks. In order that satisfactory legislation might be obtained, more activity was required on the part of associations, which in turn should have the largest possible membership. Pharmacists should mobilize for this purpose, for after all, success in legislation depended on individuals. Better preliminary training and a more thorough pharmaceutical education were now more necessary than ever before.

Prof. Kuever summarized his address by saying that if pharmacy would give maximum professional service it must increase its preliminary educational requirement to four years of accredited high school work, must standardize its educational institutions, and the courses must be gradually changed to that which is scientifically sound. Research and investigative work must also receive more attention in the schools. He said that when these advances have been realized pharmacy will be in a position to give true scientific and professional service and in return would receive just and full recognition in the army and navy, as well as in civil life.

Secretary C. B. Jordan presented a report showing the present educational requirements on the part of colleges and boards of pharmacy, and the changes and additions that had been made in pharmacy laws during the past year. The report stated that 21 schools now require four years of high school work for entrance to the minimum course, 18 require four years of high school work for entrance to the Ph. C. course and 28 had raised the requirements during the year. Four states had passed prerequisite laws. Prof. Jordan stated that these developments indicated possibilities for further advancement. Reprints of the report were ordered to be sent to every State Legislative Committee.

A large number of interesting papers were presented in this section, the titles of which covered various phases of educational and legislative work, Dr. F. E. Stewart presented the report of the committee on patents and trademarks, and offered a resolution asking the association to petition Congress to abrogate the patents held by citizens of countries with which the United States is at war. The latter was referred to the resolutions committee, but was not adopted later by the association.

Prof. Sayre presented a report of the committee on drug reform, as also a paper on "Military Recognition of the Pharmacist." John C. Wallace gave a summary of the work of the National Drug Trade Conference during the year.

At the second meeting of the section Harry B. Mason, of Detroit, read his paper on "What Compulsory Health Insurance Will Mean to the Druggist," presented elsewhere in this issue of the Era. This created much discussion, and owing to the interest in this subject it was voted to print it in the *Journal* at an early date and that reprints of the paper should be sent to those concerned with State legislative matters.

Other papers were: "Fallacies in Popular Psychology of Salesmanship," by Chas. O. Lee; "Some Ideas about Teaching of Practical Pharmacy," by Prof. Zada M. Cooper; "The U. S. P. IX and N. F. IV as Textbooks for Pharmacognosy," by Prof. W. F. Gidley; "Iowa's Prerequisite Law," J. M. Lindley; "American Pharmacy," by C. T. P. Fennel.

The section officers for the ensuing year are; Chairman, C. B. Jordan; secretary, W. F. Rudd; associates, R. A. Kuever, F. W. Nitardy, and C. E. F. Mollett

On Friday afternoon a joint session of the section with the National Association of Boards of Pharmacy and the American Conference of Pharmaceutical Faculties was held. Dr. R. A. Lyman of Lincoln, Neb., presiding. Prof. Teeters, secretary of the Conference, read the minutes embodying the recommendations made by that body, and E. G. Eberle reported on the Fairchild Scholarship and its disposition. The session went on record as favoring the award of the scholarship to a graduate student. H. C.

Christensen read the report of the meeting of the National Association of Boards of Pharmacy, which was referred for publication.

Dr Edward Kremers presented in abstract his paper on "Graduate Instruction in Pharmaceutical Work in the United States," and Frank H. Freericks made a report of the work of the voluntary conference for drafting of model laws pertaining to pharmacy. This report was approved, with the understanding that it was an outline of desirable legislation for the guidance of those working for changes in their respective laws.

Other papers read by title were "The State Legislature," by W. H. Cousins; "Are Colleges Devoting Sufficient Time to Prescription Laboratory Practice?" by A. W. Linton, and "The Privately Owned College," by Edward Spease.

PRACTICAL PHARMACY AND DISPENSING

Chairman W. H. Glover presented an address in which he stated that the calling was slowly but surely advancing, the increased responsibilities placed on the pharmacist by narcotic and other laws showing that the public considered him to be a professional man as well as a tradesman. He said that his own experience had proved to him that a lucrative prescription business could be built up and kept as the core of the store, thereby subordinating the various sidelines to it. Advertising your professional ability by showing physicians and others what you could do in this direction in his opinion, was effort well expended.

W. L. Scoville read the report of the Committee on National Formulary, as also, the report of the Committee on A. Ph. A. Receipt Book. He said greater cooperation was desired in collecting formulas. L. D. Havenhill read a short report of the Committee on U.S.P., and Prof. H. V. Army presented a paper on "The Tyranny of the Teaspoonful" in which he showed the variations in the capacity of these measures as found in the average household. Theodore J. Bradley read a paper on "A Study of Percentage Solutions," which developed into the old question of whether a weight to weight or weight to volume relation was meant by the physician when using the expression "percentage" in prescribing. The paper was supplemented by tables illustrating the work that Prof. Bradley had embodied in his paper.

A prescription clinic conducted by Prof. C. H. LaWall and Ivor Griffith was the feature of the second session, a number of pharmacists taking part in the discussion. "The Carrel-Dakin Solution Pharmaceutically and Physiologically Considered" was the title of a paper by Mrs. St. Clair Rainsford Gay of New York which also elicited much interest.

The principal feature of the third session was a symposium on U. S. P. and N. F. preparations, a number of prominent pharmacists relating their experiences in making the various products by the new standards.

The following officers were elected; Chairman, J. C. Peacock; secretary, R. W. Terry, of Groveport, Ohio; associates Edward Spease, Cleveland, Ohio, and I. A. Becker, of Chicago.

HISTORICAL SECTION

This section held but a single session, which was opened by Chairman W. L. Du Bois with a short address. E. G. Eberle, as historian, described the Indianapolis historical exhibit, and outlined the aims of the association in making such collections. Edward Kremers said that the making of local exhibits should be encouraged because of the educational benefits that such work would give to the entire subject of making collections. Whether a local exhibit was of national significance or of local importance only was the question to be answered as Dr. Whelpley saw it.

J. K. Lilly read a paper on the development of manufacturing pharmacy in Indiana, while Frank H. Carter gave an account of the history of pharmacy in Indianapolis, this being accompanied by a very interesting letter written by Charles Dennis, now engaged in literary work, but who in his early life was a pharmacist. Caswell A. Mayo read a paper on antique mortars, which he illustrated with lantern projections, and Dr. Kremers gave some interesting

data concerning the history of ginseng, which he stated was first discovered in this country by a Jesuit priest of Montreal nearly two hundred years ago. A paper on the Chicago Veterans' Association, by Wilhelm Bodemann, was read by Hugo Kantrowitz.

The following officers were elected: Chairman, L. E. Sayre, Lawrence, Kansas; secretary, Hugo Kantrowitz, New York; historian, E. G. Eberle, Philadelphia.

SCIENTIFIC SECTION

Chairman J. L. Turner did not present an address, but started the proceedings immediately with the reading of papers of which there were many. One of the most interesting features was the symposium on drug plant culture, the discussion being opened by Dr. W. W. Stockberger, of Washington, D. C., and papers and addresses pertaining thereto being presented by John Uri Lloyd, E. V. Howell, H. C. Fuller, F. A. Miller, N. R. Mueller, Dr. Lyman, Dr. Edward Kremers and others, the lantern slides showing more than anything else the work that was being done at the present time in this highly specialized department of plant cultivation.

"Sulphur—Its Production and Use," by M. A. Mansbach; "Production of Borax and Boric Acid," by H. L. Harris; "Tincture of Cantharides," by W. L. Scoville, and "Some Color Changes in Solutions Containing Citro-Chloride of Iron," by W. R. White, were the titles of the papers read at the last meeting of the section, at the close of which the following officers were elected; Chairman, W. W. Stockberger, Washington, D. C.; associates, E. V. Howell, Chapel Hill, N. C.; W. F. Gidley, Lafayette, Ind; secretary, H. C. Fuller, Washington, D. C.

THE WOMEN'S SECTION

Mrs. E. A. Ruddiman as president called the section to order and read an address in which she urged the section to keep up the agitation for shorter hours in drug stores, to work for higher educational standards, reciprocity in registration between the different states, and to seek for better recognition for pharmacists in the army and navy. The women of the section should try and induce young women seeking work along professional lines to take up pharmacy, the scarcity of clerks at the present time making a special opportunity for securing positions, both in drug store work and to meet the demands for pharmacists in hospital and Red Cross work.

Papers were read by Prof. Zada M. Cooper on "Teaching the Public," Miss Mary L. Creighton, "Chemical Processes in the Home," and Mrs. W. B. Philip, "Problems in the Druggist's Home."

The following officers were elected: President, Prof. Zada M. Cooper; vice presidents, Mrs. W. L. DeWoody, Pine Bluff, Ark., Mrs. F. W. Meissner, Laporte, Ind., and Mrs. Fred J. Wulling, Minneapolis; secretary, Mrs. J. M. Kenaston, Bonesteel, S. D. (re-elected). Mrs. C. A. Dye of Columbus, Ohio, was elected chairman of the executive committee.

THE HOUSE OF DELEGATES

Delegates representing thirty-four state associations and the District of Columbia were in attendance at the meeting of the House of Delegates which held two sessions during the week. There were also present representatives of forty odd non-voting bodies. Chairman J. H. Beal read a very comprehensive address in which he presented a number of amendments to the by-laws of the House of Delegates and recommendations as to its work. Chairman Beal also presented the report of the Commission on Proprietary Medicines. The committee to which the chairman's address was referred indorsed most of the recommendations made, and these were embodied in the report of the Committee on Resolutions and referred to the general meeting of the association for action.

The following officers were elected for the ensuing year: Chairman, S. C. Henry, Philadelphia; vice-chairman, Otto F. Claus, St. Louis, Mo.; 2nd vice-chairman, S. L. Hilton, Washington, D. C.; secretary, Jeannot Hostmann, Hoboken, N. J.

(Concluded on page 332)

WOMEN IN PHARMACY

Looking Forward to the Holidays

By EMMA GARY WALLACE

IT does seem early to begin to think and plan for the holiday trade, but in reality it is high time that we were all keenly alive to the coming of this annual gift-making season and the peculiar circumstances which surround it this year. So much has been said and written on the subject of conservation and reasonable economy that the large majority of gift articles will be of a utilitarian character.

Of course there will always be certain ones who either have the money or the desire to give luxuries such as perfumes, rich toilet articles, and things of that kind, so we must provide for both. Then too, this year the home folks will be eager to buy and send holiday gifts to the soldier boys who have rallied to their country's defense.

In buying the Christmas stock we should remember these three classes:

First—those who wish to buy useful gifts for different ages.

Second—those who are willing to spend money for luxuries.

Third—those who wish something compact and useful to send through the mail to a soldier.

Early Buying

For the last several years early buying has been stressed to the public that those serving behind counters may not be worked to the limit at the holiday season and expressmen and others may also have reasonable opportunity to do the extra work put upon them at this season. All this means that the druggist must buy early also.

If you and I think to wait until we see how generously the trade buys before making our assortment, we are likely to have nothing but culls from which to select. Besides, we are going at it the wrong way. To wait until we are forced to buy is poor business policy. Far better make an attractive selection, display and advertise them, and get the trade coming our way as a result of our own initiative than to round ourselves up in a ball and wait Micawber-like for something to turn up. The up-to-date business man, and especially the business woman, uses the trowel of foresight and ingenuity to turn up the sod of opportunity.

Getting in Touch

Getting in touch with specialty houses carrying attractive lines is half the battle. Sometimes excellent lines are shown by traveling salesmen and one can never afford to neglect the opportunity of examining samples brought to the door. Yet if such goods are offered alike to all drug stores in town there is some danger of similarity of specialties. If exclusive offerings are made the proposition is decidedly more attractive.

As a rule staples may be bought without any trouble. It is the attractive novelty leaders which must be sought and if the holiday trade is of any size at all or competing stores succeed in doing a fairly good holiday trade, then by all means take time by the forelock and visit some convenient center and spend a day or two examining wholesale showings likely to be interesting to your customers.

A Timely Warning

When one gets away and gets into the spirit of holiday buying there is a little danger sometimes of losing sight of what will sell and sell at a reasonable profit. Because somebody else has made money on a certain line of goods is no reason why we can, unless it is a line likely to appeal to our class of trade.

This year service will be appreciated rather than show. Many articles of a staple nature such as brushes, rubber gloves and fountain pens, will sell much more readily if placed in attractive boxes of the right size. Sometimes it

is possible to move much stock already on hand by using ready-made or special boxes suitable for Christmas gift-making.

There are many attractive side lines which can be pushed at Christmas time. Cameras, stationery, cut glass, leather goods, automobile accessories, cards and booklets, books, choice boxes of confectionery, candied fruits, a special line of toys, perfumed corsage bouquets of artificial flowers and music boxes, are all among the lines which the writer saw successfully handled during the past one or two Christmas seasons.

For example, in October a cut glass manufacturer was visited by a certain woman pharmacist and several hundred odd lots of cut glass tumblers bought up which could be assorted into dozens and half dozens of a kind. These were bought for a song and sold at an attractive price yet making a handsome profit. The goods were right too, and proved a leader for other decorated crystal novelties.

The corsage bouquets sold like hot cakes and were excellent value for the money being hand-made, satin flowers carrying a lasting perfume.

Many an individual is debarred from buying a camera for himself or others for fear it will not be properly used. As a matter of fact there is many a camera reposing on a dusty shelf somewhere which the owner has never had success with because he or she has not learned to manipulate it. Make an advertising feature of your willingness to teach the owner to use the camera. If necessary issue a certificate with each camera that three lessons will be given free to the person presenting the coupon for that purpose.

This is an excellent time for music boxes. Many family members would prefer to pool their Christmas money and buy a good mechanical instrument rather than to spend it in purchasing a miscellaneous assortment which no one cares very much about. Then too, the records are steady business bringers. It is well to have one or two persons skilled in demonstrating the music boxes and capable of explaining their good points.

Do You Sell Tea and Coffee?

If you sell tea and coffee this is a good time to bring it forward. If you will have made or will purchase ready-made some attractive three and five pound containers, preferably of tin, many a sale will be made of these staple commodities which every one must have.

Then too, both the Thanksgiving and the Christmas season calls for extra cooking efforts on the part of the housewife, so push spices, flavoring extracts, chemically pure soda, cream tartar, baking powder, and anything in this line which you carry.

Reaching the Public

Reaching the public is a matter of supreme importance. Just to wait until the tide brings customers to your door is poor policy. Advertise in the newspaper, by individual appeal to a selected mailing list, by window displays, by special values on special days, by urging early buying, by having the whole store radiate a holiday spirit, and by being ready well in advance of the season.

A New Thought

How many factories, plants and institutions are there in your territory?

You will be surprised if you start to list them. Three years ago a woman pharmacist received a telephone message from the head of a factory asking for a price on fifty pounds of chocolates in pound boxes. The price was made and the goods delivered the day before Christmas. Every girl in the employ of the company was given a pound box of candy.

This gave that resourceful retailer an idea and the next year she approached the heads in some cases and the buyers in others of all of the good prospects about her likely to purchase confectionery in quantity lots. She did not sell to every one, but she did sell to a majority. It was a relief to the heads of these establishments to have the Christmas gift problem so easily solved. She made personal calls taking with her several sample boxes upon which she could quote a good price, and she made a few stormy days pay well when trade was dull. Of course she took pains that every order was delivered promptly and in good shape and in return she was rewarded by checks of substantial size.

The Soldier Trade

Trench belts, trench mirrors, comfort bags, flash lights, wrist watches, compasses, and the hundred and one other things suitable for soldier gifts should be on hand. If there is a military company from your town at the Front, keep posted on the exact address which will reach them so as to be able to inform customers. Many an individual will send gifts this year to "the boys" who has no special interest except a desire to show appreciation of the service being rendered.

What are you preparing to offer these people?

The writer recently heard a returned soldier tell of the joy of a company which was ranged up one morning for the purpose of each receiving a gift from a club of American women. The gift consisted of a small pocket mirror in a case and a cigar. The joy of the receivers was out of all proportion to the value of the gift, because it cheered them up immeasurably to know that the people back home were thinking of them and planning to give them a little pleasure amidst their long and sometimes very dull days.

Speaking of comfort bags. A call recently went forth from the Red Cross for a million, and churches, auxiliaries, and patriotic bodies everywhere are working to get these ready. Why not make a special offer on comfort bags or on articles with which to fill them?

The comfort bag may be of bright cretonne for hospital use or of khaki or water proof for service. They are about nine inches wide and fifteen inches long. The exact size desired could easily be obtained from a local Red Cross unit. These may contain a tablet of writing paper, a lead pencil, a tooth brush, a tube of tooth paste, a pipe cleaner, a pipe, a package of envelopes, some shoe laces, a cake of soap, a small book, a roll of adhesive, or any other small suitable article. Most of these things come from the drug store and where several hundred comfort bags are to be filled, the trade is worth going after.

Then too, many people would buy and send a comfort bag if they knew about them. Why not have some in stock? The bags are easy to make, being merely gathered at the top with a stout tape or cord for ease in handling.

The Housewife is another type of comfort bag which rolls up, the convenience being fitted with little pockets filled with suitable articles. These things should be right in the woman pharmacist's line for she could direct how they should be made, fill them properly, and offer them for sale.

Get ready for the holidays with foresight and intelligence and let people know what you have prepared to meet their wants! To do this is to insure a satisfactory volume of business, and that means gratifying profits.

A HALLOWE'EN WINDOW

A woman I know offers this suggestion:

Put a pedestal at least five feet high in the middle of a window. The pedestal can be constructed of any light wood. Place an enormous Jack o' Lantern with electric light "brains" on the pedestal and drape a sheet to give a ghost-like effect. Bring the draperies in a swirl about the pedestal base.

Cover the window floor with pumpkin yellow, crepe paper. Cut out black cats and let them sleep around. Have a black paper background. This will stand the white figure out. Cut cats from pumpkin yellow paper, using the black cats for models. Paste these on the black background. Use corn stalks, autumn leaves, or autumn vines to fill in and soften the edges.

At one side of the window, place a witch figure in black and yellow with a peaked cap. This can readily be improvised by using a bottle such as distilled water comes in for a base and putting a fitted, upright stick into the neck.

Put a soft black cloth around the figure for a cloak. Let the black cloth come up over the head part which can be stuffed out with a little tissue paper. Have the head bent over with grey hair and surmount the whole with a peaked black cap.

Across the witch's breast, hang a placard reading:

"If you would be successful in love, give her—"

Then around the feet of the figure on the window floor, scatter boxes of candy, bottles of perfumes, some fresh flowers, and any other gift-making articles, which you wish to suggest. Balance the figure by another witch on the other side, bearing the placard,

"If you wish to please him, give him a—"

Then scatter safety razors, shaving brushes, or anything else suitable for a gift for a man about the feet of the second witch.

WINDOW FOR THANKSGIVING

Let the prevailing colors be brown, gold, and a touch of crimson. The window base can be of soft nut brown, the hangings at the back, of crimson or yellow with bands of satin ribbon in crimson. If there is any brilliant autumn foliage available, use it also. Make the whole setting striking and distinctive.

Get a large sheet of matting or building paper and shape into an enormous cornucopia. Fasten and gild two or three times until the whole presents a finished appearance. Go to the five and ten cent store and get half a dozen long sprays of artificial flowers and leaves. Twine these about the cornucopia and hang it up so that the point is several feet up in the air and the mouth just touching the floor. Have fruits, flowers, boxes of confectionery, and anything else you wish to sell, tumbling in abundance out of the mouth of the "Horn of Plenty."

If it is less trouble, you can use gold or silver paper to cover the outside of the cornucopia, but it must be neatly pasted on or the effect will not be good.

A PATRIOTIC XMAS WINDOW

If possible, get three figures—two males and one female. These can be rented or borrowed from nearby stores.

Dress one as a soldier, one as a sailor, and one as a Red Cross nurse. Place the nurse in the middle background, a soldier and sailor at each end of the window. Use flags for draping.

In the window display comfort bags, Red Cross supplies, and gifts suitable for our boys in brown. The unusual and timely note will attract attention, and if the goods are artistically arranged and wisely chosen, will sell them as well.

AROUND THE CIRCUIT

Sympathy is extended to Mrs. S. C. Henry in the loss of her mother after a lingering illness.

The Louisville Chapter of the W. O. N. A. R. D. has recently added seven new members to its membership.

Mrs. K. O. Spelger who owns and conducts her own drug store in Louisville, Ky., has recently purchased a pleasant home on Shawnee Terrace.

The sympathy of the entire W. O. is extended to Mrs. Ralhfs and her little daughter upon the occasion of the sudden and sad death of husband and father. Mr. Ralhfs was taken ill on the train returning to Chicago from the Drug Picnic held at St. Johns, Indiana, Aug. 15. Mr. Ralhfs did not rally and expired before reaching home.

Practically every woman interested directly or indirectly in pharmacy knows who Professor John Uri Lloyd is, and most of them are wishing that they might have had a piece of that famous Blackberry Cobbler prepared according to his own private recipe for the Uplift Club Dinner of Cincinnati.

Perhaps some day Prof. Lloyd will be kind enough to reveal the secret of that famous delicacy. If the W. O. N. A. R. D. owned the recipe they would probably sell it to interested ones and use the fund with which to found a scholarship for the education of some young woman wishing to enter pharmacy.

Has any one a wonderful formula to contribute for such a worthy purpose?

Sugar and Glycerin Barred From B. P.

Medical Council Revises Wartime Standards

(By Our London Correspondent)

UNTIL a week or two ago one of the British institutions that had remained unaffected by three years of war, was the British Pharmacopoeia. Changes of revolutionary character had gone on all round, but the Pharmacopoeia was left untouched. But a week or two ago, without any warning, the General Medical Council, whose powers in this matter are absolute, announced that a long list of compounds were from that date withdrawn from the Pharmacopoeia until further notice. No explanation was given, but it was obvious from the nature of the list that the reason for making the change was the shortage of medicinal glycerin and sugar, for all the compounds that have been excluded from the official volume contain either one or the other of these substances if only in minute quantities. To be more precise the following are the preparations for which there are now no official standards:

All confections except those of pepper and roses; all glycerins; all mixtures except chalk mixture, compound iron mixture and castor oil mixture; all syrups except simple syrup and syrups of chloral, codeine phosphate, iodide of iron, iron phosphate with quinine and strychnine, and glucose; all lozenges except krameria and cocaine, morphine, morphine and ipecacuanha; also effervescing caffeine citrate, compound decoction of aloes; liquid extract of cotton root bark; potassium iodide and soap liniment; saccharated lime water; effervescing epsom salts; borax and honey; compound almond powder; compound licorice powder; compound tragacanth powder; effervescing sodium citro-tartrate; glycerin suppositories, compound tincture of cardamoms; tincture of kino; tincture of wild cherry; compound tincture of rhubarb; compound tincture of senna, and iodine ointment. Some of these preparations contain only a small quantity of glycerin or sugar and had the General Medical Council taken the advice of the Pharmaceutical Society it would surely have been possible to devise a more scientific basis for action.

How the Drug Trade is Affected

The way—as described in the preceding paragraph—the General Medical Council has met the difficulties occasioned by sugar shortage and the embargo on glycerin is drastic to say the least of it. The necessity for meddling with Pharmacopoeial Standards was presumably urgent, but it is at least unfortunate that while tens of thousands of shops are well stocked with sweetmeats composed almost entirely of sugar, the comparatively small quantity of sugar required to maintain the standards of the Pharmacopoeia should not be available.

The General Medical Council's action is likely to cause no little confusion. A pharmacist who holds a stock of preparations made in accordance with the official formulas, or who is able to replenish his stocks, will no doubt continue to dispense his medicines as before; on the other hand, a neighboring pharmacist less happily situated may be obliged to resort to the modified preparations.

What will be the result?

A patient takes his prescription to the "sugar" chemist and has it dispensed properly; when the bottle is empty he takes the prescription to the "sugarless" chemist, who dispenses something that tastes quite different; the result, the patient thinks he is poisoned. Or again, let us suppose the doctor orders compound licorice powder in tea-spoonful doses; one chemist supplies the Pharmacopoeia preparation; the other leaves out the sugar. The result is that the patient, with the sugarless compound takes twice as much senna and twice as much licorice root as the doctor intended! Clearly it is essential that pharmacists should come to an early agreement as to uniformity of practice. It would have been far better had the General Medical Council fixed a date after which no sugar preparation made according to the Pharmacopoeia should be dispensed, and laid down definite formulas for use afterward. In the meantime the wholesale druggists are continuing to

supply preparations made in the pharmacopoeial way and the Pharmaceutical Society is preparing a supplement to the British Pharmacopoeial Codex containing sugarless and glycerinless formulas to substitute for those that have been removed.

Substitutes for Sugar and Glycerin

In connection with the above changes a Drug Economy Committee appointed by the Government has sent a circular to doctors encouraging them to prescribe medicines containing sugar and glycerin as little as possible. The circular reminds prescribers that sugar is of little use in medicine save as an adjunct or excipient and makes certain suggestions to medical practitioners. For instance, practitioners are urged not to prescribe glycerinum, saccharum purificatum, and syrupus, except in cases of absolute necessity. A series of suggestions is submitted for the omission of glycerin and sugar from prescriptions or the use of alternatives to them, e.g., chloroform, water and mucilage of tragacanth, as a sweetening agent in place of sugar. The following formula is suggested:

Gum tragacanth, in powder.....	30 grains
Chloroform	40 minims
Water to	10 fl. ounces

As regards preparations of glycerin and sugar, formerly official now unofficial, practitioners are warned that after exhaustion of existing stocks many of these preparations will become unobtainable, and consequently if they continue to be prescribed, patients may be put to inconvenience and annoyance through the inability of chemists to dispense prescriptions for them. It is recommended therefore, that wherever practicable practitioners should order such preparations *sine glycerino* or *sine saccharo*, e.g. Tinct. Rhei Co., or alternative preparations, which may be put on the market by pharmacists. Existing stocks of glycerin and sugar and the supplies of sugar which continue to be available for medicinal purposes only will suffice to maintain a moderate supply of the glycerin- and sugar-containing preparations which remain official, if practitioners refrain from ordering these save for those patients for whom they are imperative.

Drug Prices After Three Years of War

The steady rise in the prices of drugs on the London Market continues almost without interruption and extraordinary figures have now been reached, in many instances, the rate of the advance being infinitely greater than in the case of almost all other commodities. For instance phenacetin now costs more than thirty times the pre-war price; atropine is now worth nearly 8 cents a grain; cocaine costs at least six times the figure quoted immediately before the war; aspirin is six times the pre-war price; caffeine is worth something like four times the old price; the price of carbolic acid has also quadrupled; cod liver oil is worth six times as much as it was three years ago; eserine is worth something like 16 cents a grain; some forms of opium are unobtainable and what is available is worth nearly three times the old figure; antipyrine costs ten times the old price; the price of potassium chlorate has been multiplied by 7; potassium bromide is more than four times the old price; potassium permanganate, one of the most popular disinfectants used to sell at \$10 a cwt.; it now costs about 35 times the pre-war price; salicylic acid costs seven times as much as it did before the war; while sugar of milk is about four times the old price.

But the list of drugs that have advanced in price is almost interminable and includes every item of the materia medica. A transaction which used to be regarded as a small sale now entails a considerable sum of money; for instance, 28 lbs. of phenacetin used to cost about \$19—it now costs about \$600. A hundredweight of potassium permanganate is now worth something like \$375 instead of \$10.

So far as can be foreseen, the upward tendency of prices is likely to continue as long as the war lasts. The difficulty of obtaining spirits and the rise in value of this necessary solvent for medicinal compounds, the scarcity of medicinal glycerin and the shortage of sugar have added considerably to the difficulties of manufacturing druggists and pharmacists in maintaining an adequate supply of household remedies and commonly prescribed compounds.

HOW ILLICIT SALES OF NARCOTICS ARE TRACED BY REVENUE AGENTS

New York Druggist Indicted for Selling 300 Ounces of Morphine Over His Counter in a Short Period— Tricks of the Underworld to Supply Drug Addicts —Much of it Smuggled.

A review of arrests which have been made recently for violation of the Harrison Narcotic Law reveals the highly ingenious methods used by drug sellers in dispensing their goods and reaping the rich harvest from drug addicts and at the same time attempting to keep out of the clutches of the revenue men. Colonel Nutt, Chief Revenue Agent for the District of New York, allowed a representative of THE PHARMACEUTICAL ERA to examine a number of departmental reports on some of the more unique cases, where arrest and conviction occurred recently. Judging from the data contained in these reports, the detective work required must be of the highest type; the slightest blunder in the process of working up a case might arouse the suspicions of the suspect and allow his escape.

The revenue agents have to deal with not only the poorer type of uneducated peddler, but also the wealthy addict who has many ways, born of the free use of money, for securing plentiful supplies of drugs. Ruses, carefully arranged, are practiced by both peddler and user as a means of avoiding arrest and conviction in case they are suspected and placed under surveillance by revenue agents.

Methods Used by Narcotic Peddlers

An example of the methods used by drug peddlers and the precautions taken by them to avoid arrest is illustrated in a case which happened in Philadelphia a short time ago. A gang of drug sellers made arrangements with the proprietor of a combination delicatessen store and cafe, to pay \$5 per day for the privilege of hanging two coats near the door leading to the street. In the pockets of the coats, arranged very carefully so as to be instantly available, were various sized "decks" of heroin and cocaine, wrapped in different colored paper and sealed. Two men handled the distribution of the "dope" from this place.

Addicts, who had been informed by their friends or agents of the gang, presented themselves and in the act of shaking hands with the peddler, passed him the money for the quantity of drug wanted. The man, receiving the money, then stepped into the store and shortly after his confederate appeared and under the guise of meeting an old friend, shook hands, at the same time delivering the "deck" to the addict. Revenue agents suspected the place and arrested persons leaving the store. Drugs were found in the possession of the addicts leaving the neighborhood but upon arresting two of the gang in charge at the time, nothing was found on their persons. It was only after considerable searching that the innocent looking coats attracted attention and were investigated. In the pockets of one were found 35 decks and eight 1/8-ounce bottles of heroin, and in the other 26 decks of heroin, wrapped in blue paper to be sold for \$1 each, and 15 decks in pink paper to be sold for \$1.50 each, different colored paper being used to distinguish the strength and quantity of drug contained in the deck.

David Bernstein, a cigar dealer, of Philadelphia, was suspected for a considerable time of illicitly selling narcotics. Agents of the revenue department were unable to obtain evidence sufficient for conviction, so withheld making the arrest. As a final resort they raided the store and searched the premises. Nothing was found in the way of narcotics until, quite accidentally, one of the agents knocked over a disused ash can in the rear of the building and a box containing six bottles of heroin rolled out at his feet.

Ruse Employed in New York

A ruse which has become quite common in New York, is the use of two rooms at widely separated spots in the city, one as living quarters and the other as a storeroom for the drugs. Upon arrest of the suspect, a search of his living room reveals no incriminating evidence. This was the method which Frank Sciortino of 444 East 13th Street, New York, made use of in his efforts to fool agents of the Internal Revenue Department, but his carelessness in leaving the address of his drug storeroom at the house in East 13th Street where he lived, resulted in his downfall. A search of his drug storage room revealed 53 1/8-ounce vials of heroin concealed there.

Perhaps one of the most difficult classes for the revenue men to handle is the supposedly respectable physician who sells narcotics to "patients" in a position, financially, to pay the price demanded. It is a difficult matter to convict a physician unless on evidence collected in the case of an actual sale of narcotic drugs without a pretense of prescribing for an ailment. Because the law allows physicians a certain amount of liberty in exercising "professional judgment," unscrupulous medical men take advantage of this fact and, unless the violation of the law is flagrant, they ply their trade as drug sellers, unmolested. If the quantity of drugs sold by a physician is large he is liable to be visited by agents of the revenue department, but, where his sales are small enough to avoid notice on the narcotic register of the wholesale drug houses supplying him, it is a difficult matter to bring him to justice.

Shipment of Narcotics

Manufacturers and jobbers are sometimes careless in shipping narcotics. An illustration of the clever way in which narcotics may be stolen while in transit is the case of a New York manufacturer who shipped a case of drugs among which were 25 ounces of morphine sulphate, from New York to Chattanooga, Tenn. The truckman, who carted the case, has been in the employ of the firm for a considerable time and has had thousands of dollars worth of narcotics entrusted to his care. He was above suspicion. Upon arrival of the goods at their destination, the morphine was missing from the case, although the latter was nailed shut and to all appearances had not been touched. The consignee placed a claim with the railroad company, the manufacturer refilled the order and the matter was forgotten except perhaps by the thief who would undoubtedly realize about \$1,000 on the 25 ounces of morphine, by selling to addicts.

A recent case of interest is that of George F. Philips, a New York druggist, who was indicted recently under the Harrison Act for unlawfully selling morphine and heroin, and for failing to comply with the law in keeping a record and inventory as required by that act. With the arrest of Dr. James about three weeks ago as one of the New York physicians who have been unlawfully selling drugs, suspicion fell on Philips and upon examination of his records, the revenue agents found that he had been filling many prescriptions for narcotics signed by Dr. James. A further search revealed the fact that since July 1st of this year, Philips has sold over 300 ounces of morphine, 45 ounces of heroin and 2 ounces of cocaine besides giving short measure on most of Dr. James' prescriptions, which permitted his selling the difference without showing any record for the sale. Philips has been hiding behind the physician's prescriptions but in spite of this, has been arrested and indicted.

System of Tracing Organized

A matter which further adds to the difficulty of running down violators of the Harrison Law, is the fact that 90% of all narcotics sold illicitly in the United States are smuggled into the country. Revenue agents have traced much of this supply to its source and have found that most of it originated in London. Because of the size of packages in which narcotics can be wrapped it is easy to smuggle and although a great quantity is confiscated by the revenue department every year, a certain amount finds its way through various dealers to the addict. The system of tracing the dealers in drugs is becoming better organized than ever before and the number of convictions obtained by the Internal Revenue Department has lately been the greatest the department has ever known, but at the same time, from the New York office comes the statement that drug users are rapidly increasing in number.

TRADING WITH THE ENEMY RESTRICTED

Congress Passes Bill Permitting Use of Enemy Patents Under License—Provisions for Recompensing Owners—Commission to be Appointed.

Imports as well as exports are to be restricted. The import restriction was written into the Trading With the Enemy bill by the Senate at the suggestion of the Administration. Another amendment prohibits the publication of war comment in the German language unless accompanied in a parallel column by a translation in English. After making these alterations the Senate passed the Trading With the Enemy bill without a record vote. The bill was passed by the House on July 11 last, the measure becoming a law by joint action of Congress.

A license may be issued by the commission to be appointed by the President for such purposes, to any citizen wishing to use an enemy patent. The terms are covered in Section 10 under subdivisions C, D, E, F, G., as follows:

(C) Any citizen of the United States or any corporation organized within the United States who desires to manufacture, or cause to be manufactured, a machine, manufacture, composition of matter or design, or to carry on, or cause to be carried on, a process under any patent or to use any trade mark, print, label, or copyrighted matter owned or controlled by an enemy or ally of an enemy resident within the territory, or a subject or citizen residing outside of the United States of any nation with which the United States is at war, or resident within the territory, or a subject or citizen residing outside of the United States, of any ally or any nation with which the United States is at war, at any time during the existence of a state of war may apply to the President for a license; and said commission is hereby authorized to grant such a license, nonexclusive or exclusive, as it shall deem best, provided it shall be of the opinion that such grant is for the public welfare, and that the applicant is able and intends in good faith to manufacture or cause to be manufactured the machine, manufacture, composition of matter, or design, or to carry on, or cause to be carried on, the process or to use the trade mark, print, label or copyrighted matter. The President may prescribe the conditions of this license, including the fixing of prices and the rules and regulations under which such license may be granted and the fee which shall be charged therefor, not exceeding \$100, and not exceeding one per centum of the fund deposited as hereinafter provided. Such license shall be a complete defense to any suit at law or in equity instituted by the enemy or ally of enemy powers of the letters patent, trade mark, print, label or copyright or otherwise, against the licensee for infringement or for damages, royalty, or other money award on account of anything done by the licensee under such license, except as provided in sub-section (f) hereof.

(D) The licensee shall file with the President a full statement of the extent of the use and enjoyment of the license, and of the prices received in such form and at such stated periods (at least annually) as the Commission may prescribe; pay at such times as may be required to the alien property custodian not to exceed 5 per centum of the gross sums received by the licensee from the sale of said invention or use of the trademark, print, label or copyrighted matter, or if such commission shall so order, five per centum of the value of the use of such inventions, trademarks, prints, labels or copyrighted matter to the licensee as established by the President, and sums so paid shall be deposited by said alien property custodian forthwith in the Treasury of the United States as a trust fund for the said licensee and for the owner of the said patent, trademark, print, label, or copyright registration as hereinafter provided, to be paid from the Treasury upon order of the court, as provided in subdivision (f) of this section, or upon the direction of the alien property custodian.

(E) Unless surrendered or terminated as provided in this act, any license granted hereunder shall continue during the term fixed in the license or in the absence of any such limitation during the term of the patent, trademark, print, label or copyright, registration under which it is granted. Upon violation by the licensee of any of the provisions of this act, or of the conditions of the license, the President may, after due notice and hearing, cancel any license granted by it.

(F) The owner of any patent, trademark, print, label or copyright under which a license is granted hereunder may, after the end of the war and until the expiration of the year thereafter file a bill in equity against the licensee in the District Court of the United States for the district in which the said licensee resides, or, if a corporation, in which it has its principal place of business (to which suit the Treasurer of the United States shall be made a party) for recovery from the said licensee for all use and enjoyment of said patented invention, trademark, print, label or copyrighted matter; provided, however, that whenever suit is brought, as above, notice shall be filed with the alien property custodian, within thirty days after date of entry of suit; provided further, that the licensee may make any and all defenses which would be available were no license granted. The court on due proceedings may adjudge and decree to the said owner payment of a reasonable royalty.

The amount of said judgment and decree, when final, shall be paid on order of the court to the owner of the patent from the fund deposited by the licensee, so far as such deposit will satisfy said judgment and decree; and the said payment shall be in full

or partial satisfaction of said judgment and decree as the facts may appear; and if, after payment of all such judgments and decrees, there shall remain any balance of said deposit, such balance shall be repaid to the licensee on order of the alien property custodian. If no suit is brought within one year after the end of the war, or no notice is filed as above required, then the licensee shall not be liable to make any further deposits, and all funds deposited by him shall be repaid to him on order of the alien property custodian. Upon entry of suit and notice filed as above required, or upon repayment of funds as above provided, the liability of the licensee to make further reports to the Federal Trade Commission shall cease.

If suit is brought as above provided, the court may, at any time terminate the license, and may in such event, issue an injunction to restrain the licensee from infringement thereafter, or the court in case the licensee, prior to the suit, shall have made investment of capital based on possession of the license, may continue the license for such period and upon such terms and with such royalties as it shall find to be just and reasonable.

(G) Any enemy, or ally of enemy, may institute and prosecute suits in equity against any person other than a licensee under this Act to enjoin infringement of letters patent, trademark, print, label, and copyrights in the United States owned or controlled by said enemy or ally of enemy, in the same manner and to the extent that he would be entitled so to do if the United States was not at war:

Provided, that no final judgment or decree shall be entered in favor of such enemy or ally of enemy by any court except after thirty days' notice to the alien property custodian.

The Senate amended the bill to extend the power to prohibit German and other enemy insurance companies continuing in business to cover all foreign insurance companies of all classes. This means that the President can prohibit a Swedish or any other foreign insurance company from doing business in the United States during the war if he has cause to believe that such a company is aiding the enemy.

LEGAL TO SHIP ALCOHOL TO "DRY" TOWNS

The amendment to the state liquor tax law, which provides for the possession of wine for sacramental purposes and alcohol by a licensed pharmacist to be used in prescriptions or for manufacturing purposes in "dry" towns in New York was signed by the Governor on August 29. The law now reads as follows:

An Act to amend the liquor tax law, relative to the sale, delivery and possession of liquors under local option vote.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Subdivision P of section thirty of chapter thirty-nine of the laws of nineteen hundred and nine, entitled "An act in relation to the traffic in liquors and for the taxation and regulation of the same, and to provide for local option, constituting chapter thirty-four of the consolidated laws," as added by chapter six hundred and twenty-three of the laws of nineteen hundred and seventeen, is hereby amended to read as follows:

P. It shall not be lawful for any person, persons or corporation, either having or not having paid a tax as provided in section eight of this chapter, and either holding or not holding a liquor tax certificate issued under this chapter, to sell, offer or expose for sale or give away liquors in any quantity, to be taken away from the premises where sold, if such person, persons or corporation shall have knowledge or shall have reason to believe that such liquors are to be sold, delivered or given to or by any person in a city or town wherein the business of trafficking in liquors under subdivisions one, two and three of such section eight is prohibited by reason of the result of a vote on local option questions, and it shall not be lawful for a person to have liquors in any quantity in his possession in any city or town where trafficking in liquors is so prohibited under such subdivisions, except when prescribed by a duly licensed physician for the medicinal use of such person or of some other person for whom such liquors were so prescribed. It is hereby further provided that it shall be unlawful for a person, association or corporation to accept for delivery or to deliver liquors in any quantity to any person in a town or city wherein the business of trafficking in liquors under subdivisions one, two and three of such section eight is prohibited by reason of the result of a vote on local option questions. The result of a vote upon a local option question or questions in any city or town or any provision of this chapter or other statute shall not impair or affect the right of a person to manufacture liquors therein nor to possess or store in such town or city the liquors so manufactured, nor prevent such manufacturer from shipping and delivering any such liquors into a town or city in which the sale of such liquors is not prohibited as the result of a local option vote, nor to prevent a transaction of sale, within the town or city where the liquors are manufactured, for such outside delivery. The provisions of this subdivision shall not be deemed to prohibit, in any such town or city, the possession of wine for sacramental purposes, nor the possession by a duly licensed pharmacist of alcohol to be used as a preservative or solvent in the manufacture and compounding of drugs and medicines, nor the possession of alcohol necessary for any manufacturing process, nor to prohibit the delivery of such liquors in such town or city for such purposes or acceptance for such delivery.

2. This act shall take effect immediately.

The railroads and express companies are now free to make deliveries which were held up for a time owing to the strict interpretation of the law by the State Excise Commissioner.

BOOKS REVIEWED

A SHORT MANUAL OF ANALYTICAL CHEMISTRY. qualitative and quantitative—inorganic and organic. By John Muter, Ph.D., F.R.S.E., F.I.C., analyst to the Metropolitan Asylums Board, Public analyst for the Metropolitan Boroughs of Lambeth and Wandsworth, etc. Sixth American edition, 111. Edited by J. Thomas, B.Sc. (Lond.), formerly lecturer and demonstrator, South London School of Pharmacy. 8 vo., 237 pages, cloth, \$2. Philadelphia, P. Blakiston's Son & Co.

The preceding editions of this manual have been familiar to students of pharmacy in this country since 1891, when the late Dr. Claude E. Hamilton of Kansas City brought out the first American edition to follow the Pharmacopoeia official at that time. Within this period the methods described in Muter's work have proved generally acceptable, and as a laboratory companion for the pharmacist the book has always been in good repute. In the present or sixth American edition, the general character and scope of the work remain unaltered, but one will find many changes and additions relating to recent advances in the assay of drugs, particularly with reference to the legal standards where such have been fixed by the ninth decennial revision of the United States Pharmacopoeia.

Part I is devoted to qualitative analysis, the following chapter headings showing the author's treatment of his subject; The processes employed by practical chemists; detection of the metals; detection and separation of acid radicals; qualitative analysis, as applied to the detection of unknown salts; qualitative detection of alkaloids and certain organic bodies used in medicine, with a general sketch of toxicological procedure. Part II, Quantitative Analysis; Weighing, measuring, and specific gravity; volumetric quantitative analysis; gravimetric quantitative analysis of metals and acids; ultimate organic analysis; special processes for the analysis of water, air, and food; special processes for the analysis of drugs, urine and urinary calculi; analysis of gases, polarization and spectrum analysis. The pharmaceutical chemist will find this manual a trustworthy handbook of information relating to his special field of work.

PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE NATIONAL ASSOCIATION OF MANUFACTURERS OF MEDICINAL PRODUCTS, now American Drug Manufacturers Association. 8 vo., 273 pages.

This volume contains a report of the meeting of the above association held last February at the Waldorf-Astoria Hotel, New York City, at which time the organization changed its name to that of the American Drug Manufacturers Association, a name which will certainly be preferred by those who are compelled to refer to the association in preparing copy for the printer. The volume is uniform in size and binding with the proceedings of previous year and constitutes a valuable asset to the pharmaceutical literature of the present interesting period of our country's development. The organization now has 41 firms listed on its roll of membership, a number which numerically may seem small, but when rated by the invested capital of the membership, it represents an industry which holds a most important place in drug and chemical trade activities.

Reprints Received

"Beech Nut Embedded in a Potato," by O. A. Farwell, department of botany, Parke, Davis & Co., Detroit, Mich.

"Notes on Hippochaete," by the same author.

"Digitalis Thapsi Lin." by O. A. Farwell and H. C. Hamilton.

"Bacteriologic Findings in Ozena," by Herbert C. Ward, Research laboratory of Parke, Davis & Co.

"Experimental Syphilis," by F. W. Baeslack, M.D., Detroit, Mich.

"The Ophthalmic Test for Glanders: With a Simplified Method of Procedure," by N. S. Ferry, Detroit, Mich.

Studies from the Research Laboratory of Parke, Davis & Co.: "Pruritis Ani. Preliminary Notes," by Louis J. Hirschman, M.D., F.A.C.S., and Herbert C. Ward, M.S.; "A Sero-Enzyme Study of Bacterial Proteins," by Herbert C. Ward.

CORRESPONDENCE

ALCOHOL IN INFUSION OF DIGITALIS

Editor The Pharmaceutical Era:

I notice that Mr. Beringer is not satisfied with the change made in the formula for preparing infusion of digitalis (See August Era, Page 245). I think he is wrong. A digitalis patient should be seen by his physician every day, and therefore a preparation which keeps longer than 24 hours is not only not necessary, but risky.

Respectfully yours,

DR. JULIUS FRANKE

Fairview, Mont., August 28.

QUALITY OF AMERICAN-MADE SYNTHETICS

Editor The Pharmaceutical Era:

The Council on Pharmacy and Chemistry, with the aid of the A.M.A. Chemical Laboratory, proposes to make a study of the quality of American-made synthetics. It will examine specimens of important, unofficial synthetic drugs submitted by their manufacturers and later, when these drugs are offered for sale, purchase them on the open market and report on their purity. The Council also offers to examine specimens of American-made synthetics when submitted by dealers, providing the origin of such specimens is established.

This control of synthetic drugs which, as the result of the war are now made in this country, is believed to be in the interest of American industry, for the protection of the public, and to the satisfaction of physicians. Since the manufacture of some of the synthetic drugs is to some extent experimental in this country, it is due physicians and the public, that they be given the protection which will come from the proposed investigation of the market supply. In undertaking this investigation, the Council feels confident that the responsible manufacturer will welcome this check as the best way of establishing complete confidence in his product.

W. A. PUCKNER, Secretary,

Council on Pharmacy and Chemistry
Chicago, Sept. 20, 1917.

A WARNING BY PARKE, DAVIS & CO.

Editor The Pharmaceutical Era:

The information comes to us from South Dakota that a person representing the Puritan Chemical Co. has what purport to be credentials from Parke, Davis & Co. recommending the remedies offered by the Puritan Chemical Co. Such credentials, whatever they may be, are obviously forgeries or misrepresentations.

We also warn all our friends in the drug trade to beware of one Dr. Joseph Louis Cermack, 241 East 78th Street, New York City, who uses a visiting card representing himself to be "Manager Parke-Davis Laboratories." The type used on this card is similar to that employed in printing cards for our salesmen. This individual is an impostor.

PARKE, DAVIS & Co.

LISTING MEN FOR WAR SERVICE

Thomas W. White of Newton Upper Falls, the druggist member of the Massachusetts Commission on Economy and Efficiency, and former state representative, gathered the names of every person in his city in every branch of war service, and posted the list in his store. A great many people came in daily to inspect the list, to report additions and what was also important—to patronize the fountain, candy counter and cigar department.

The quantity of platinum in the United States is estimated by the Geological Survey at 1,000,000 troy ounces, and the annual requirements at 165,000 ounces. With the expected increase in production in Colombia, Russia and the United States, and a decreased consumption in the dental and jewelry businesses, it is believed that the requirements of the chemical industries can be met.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

PROF. YOUNGKEN SUCCEEDS DR. KRAEMER

Prof. Heber W. Youngken, who has been appointed to succeed Dr. Henry Kraemer as professor of botany and pharmacognosy at the Philadelphia College of Pharmacy, brings to his new position an experience based upon much study and professional work in his chosen field. He was born in 1858 in Richland township, Pa., and early moved with his parents to Quakertown, where his father established a florist and nursery business, and where Prof. Youngken first became familiar with some of the plants which were later to be made the subject of his intimate study and furnished the groundwork of his professional career. His preliminary education was received at the Quakertown High School. In 1901 he entered the employ of Howard R. Moyer, a leading druggist of that place. In 1905 he graduated from the Medico-Chirurgical College with the degree of Ph.G., and in 1909, from Bucknell University, specializing in biology, where he received the degree of A.B. *cum laude*. He then returned to the Medico-Chirurgical College where he completed two years of work in the medical department, and was then called to the chair of botany and pharmacognosy in the department of pharmacy of that institution, a position he retained, with that of director of the botanical laboratory, until the merger of the department with the Philadelphia College of Pharmacy in the fall of 1915, when he was assigned a portion of the teaching of the subjects named under Prof. Kraemer in the P. C. P.

In addition to being a popular and efficient teacher, Prof. Youngken has been a student, taking up graduate work at Bucknell University and at the University of Pennsylvania, receiving the degree of A.M. from the former in 1912, and from the latter the degree of M.S. in 1914, and the doctorate degree in philosophy in 1915. He has been a large contributor to botanical literature and is the author of a "Text Book on Pharmaceutical Botany." He also holds membership in the Academy of Natural Sciences, the Botanical Society of America, the American Pharmaceutical Association, the American Association for the Advancement of Science, and a number of other botanical, scientific and college organizations. In 1911 he was married to Miss Clara M. Eastman of Bloomsburg, Pa., and they have three children. Prof. Youngken assumed his new position at the opening of the Philadelphia College of Pharmacy in September.

RISHER KING OF TEXAS COTTON PALACE

Harry C. Risher, active vice-president and general manager of the Behrens Drug Co., Waco, Texas, and also prominently identified with other important industries and business enterprises of Southern Texas, has been selected to be the King of the Texas Cotton Palace exposition this year, an honor which his friends in that part of the country say will meet with the approval of all who have the welfare of the exposition at heart. Mr. Risher is a native of Texas, and was born and reared in Austin. He is a graduate of the Philadelphia College of Pharmacy, and prior to his connection with the Behrens Drug Co., was a retail druggist in Waco. Besides being successful in business life, he has taken the time to make as equally great a success along the lines of religious endeavor and the social activities of Waco. Miss Anne, daughter of Mr. Risher, had the honor of being the first Queen of the Cotton Palace.

THIESEN CELEBRATES HIS ANNIVERSARY

Mayor T. W. Thiesen on Sept. 8 celebrated the 25th anniversary of his entrance into the drug business in Racine, Wis. He had a hard struggle at the beginning when he opened his first store at 606 State street, but he kept at

it and success crowned his efforts. Mr. Thiesen, now mayor of Racine, landed in America in 1884, direct from Germany, where he met an uncle who had preceded him. The nephew went to work in a factory, later becoming a pharmacist and going to St. Joseph, Mo., where he was employed by a leading drug company. Returning to Racine he decided to open a store of his own, which he did, and later on, organized the Red Cross Drug Co. of which he is the president and general manager, which operates a chain of successful stores in that city, the Sixth street store being the finest of the number. With all of the demands made upon him in connection with his business, he has never forgotten his duties to his adopted city. Besides being the present mayor of Racine, he served for several years as a member of the board of education, and his friends and neighbors credit him with having worked many improvements in school buildings and school systems during his term of office.

SERLES ACTING HEAD S. D. STATE

Earl R. Serles has been selected by the administration of South Dakota State College to fill the vacancy caused by the death of the late Prof. Bower T. Whitehead, and is now the acting head of the department of pharmacy of that institution. Mr. Serles is known as a hard worker. Shortly after the beginning of the second semester this year, when Prof. Whitehead was taken ill, he was obliged to conduct all the classes of the Sophomore students in addition to his other classes in chemistry and pharmacognosy. Later it became necessary for him to drop the work in chemistry in order to devote all of his time to teaching pharmacy. That he performed this duty intelligently and well is the verdict of the students in the college and the alumni of the institution scattered throughout the State.

Prof. Serles began the study of pharmacy in State College in 1909, and in 1911, received the degree of Ph. G. He immediately passed the State Board of Pharmacy examination and was given an assistant's papers, not having had at that time the necessary practical experience in a drug store to be given full registration papers. He then spent two years in various drug stores in the State and became a registered druggist of South Dakota in 1912. Returning to Brookings, he completed the requirements for the B. S. degree, which he received in 1915. The following year he accepted the position of assistant in chemistry with the opportunity of pursuing post-graduate study. In the fall of 1916 he was made instructor in pharmacy and chemistry with the privilege of continuing advanced studies, and recently completed the work necessary for the degree of M. S. That he will continue the good work so well begun by the late Prof. Whitehead, who for more than twenty years was head of the department, his friends in the college and pharmacists throughout the State are unanimously agreed. The college year for 1917-1918 began with entrance examinations and registration on September 17.

PERSONAL BREVITIES

—EMIL J. HANGGI of Little Rock, Ark., a graduate of the "Era Course in Pharmacy," enlisted August 1 for service in the army. He is at present a private in Company B. Casual Detachment, Medical Corps, stationed at Fort Jay, Governors Island, N. Y. Mr. Hanggi spent nine years in the employ of Durst's Pharmacy, Little Rock, during the latter part of which time he studied pharmacy and after completing the Era course, passed the Arkansas State Examination. He will undoubtedly be assigned to pharmaceutical work in connection with the field branch of the Medical Corps.

—L. C. McCORMICK, for the last four years credit manager for the Levy establishment, Jacksonville, Fla., has returned to pharmacy and acquired control of the

old Sharp stand at 125 Main St., in the same city. Mr. McCormick is a native Floridian, going to Jacksonville from Suwanee county, where he was born about 40 years ago. He graduated in pharmacy in 1898, a calling he followed until four years ago, when the condition of his health prompted him to seek another field of labor.

—CHARLES H. OTTER, druggist at 39th and Brooklyn Ave., Kansas City, Mo., was held up and robbed of \$120 on Sept. 2. He was busy behind his prescription counter, when a young man with a gun entered and ordered a young soda fountain clerk to hold up his hands, while the robber went behind the prescription counter and compelled Mr. Otter to walk up to the front of the store and open the cash register. The robber cleaned out the cash drawer and then fled through the open door and escaped.

—ALBION R. CLAPP and Mrs. Clapp celebrated the fiftieth anniversary of their marriage in the presence of twenty immediate relatives and friends in Rockridge Hall, Boston, on Wednesday evening, Sept. 12. Gifts of gold and silver were showered on the couple. Mr. Clapp was born in Boston in 1843, and has been engaged, since the age of 14, as a manufacturing chemist, retiring about 14 years ago when senior member of the firm of Billings, Clapp & Co., wholesale druggists.

—HARRY J. HORN, formerly a vice-president of the Northern Pacific railway and for many years a resident of St. Paul, Minn., is directing a shipment of medical and surgical supplies for the Russian military hospitals. The consignment was sent at the request of Dr. Frank Billings, head of the Red Cross mission to Russia and is supplemental to the allotment sent with the mission. The Red Cross war council appropriated \$160,000 for this second shipment.

—L. P. JENKINS, for many years in the drug business at Lead, S. D., previous to his entrance as chief assayer in the U. S. assay office and former state senator of South Dakota, has returned to his former vocation of pharmacist and is assisting F. W. Brown in the management of the latter's store. Mr. Jenkins says that the war is going to take all of the younger fellows away, and it is up to the older fellows to do their "bit."

—PROF. I. I. HIMES, principal of the West Palm Beach, Fla., public schools, recently resigned after a service of eight years, having become a stockholder in the Gruber-Freeland Pharmacies, Inc., and which he will serve as treasurer. Before going to West Palm Beach, Prof. Himes was principal of the Putnam high school at Palatka for seventeen years. The Gruber-Freeland Pharmacies, Inc., is the owner of a chain of drug stores in West Palm Beach and Miami, Fla.

—RAYMOND A. CURLEE, associated with his father in the drug business at Waukegan, Ill., and Miss Louise Gebhardt of Chicago, were married at the residence of the bride's father on August 29. Mr. Curlee formerly lived at Flora, Ill., where he was graduated from the high school of which his father was principal for several years. Later he was graduated from the University of Illinois School of Pharmacy.

—C. E. TOPLIFF AND L. O. PERKINS, registered pharmacists of Pocatello, Idaho, have recently purchased the old established drug store conducted for the past several years by Mrs. J. J. Burns, of that city. Mr. Topliff spent four years with the Cook Drug Co., and for the past six months was with the Book Store Pharmacy, while Mr. Perkins has been associated for the past few months with the Cook company.

—EMMETT KAUP, pharmacist for a number of years in the drug store of Engelbert Bach, Taylorville, Ill., is the new proprietor of the Leinhart pharmacy in the same city, having recently purchased it of J. A. Humphreys, owner of the store for the last year and who would have continued the business but for the fact that he has been drafted and compelled to leave shortly for the cantonment at Louisville, Ky.

—W. A. CARSON, state senator from Yates County, and Fred Heimer, who have for many years conducted a drug and grocery business at Rushville, N. Y., it is announced, will sell their stock of goods and close up their store, Mr. Heimer retiring because of ill health, while Senator Carson finds that the business is too arduous with his other duties without Mr. Heimer's co-operation.

—CHARLES FALKENHAINER, member of the Iowa Board of Pharmacy and who represented that organization at the meeting of the National Association of Boards of Pharmacy at Indianapolis recently, was recently named as the board member to have charge of the board of pharmacy's exhibit at the State fair. Mr. Falkenhainer is a well-known pharmacist of Dubuque.

—HUGH H. O'ROURKE has made the Wachusett Pharmacy, Worcester, Mass., one of the most attractive in the county. Show windows with mahogany panel sides, mahogany show cases and a new marble counter fountain are only a few of the improvements. Mr. O'Rourke has been 25 years in the drug business, and is president of the Worcester Pharmacists' Association.

—CHARLES PEACOCK, a pharmacist of Macon, Ga., who volunteered for service with the ambulance corps of the Atlanta Temple of Shriners, joined his company recently in Atlanta and expects to be on his way to France before long. His brother is one of the captains in the Macon battalion that forms part of the "Rainbow" division to be sent to France.

—THE PARK DRUG CO., of Waukesha, Wis., has organized a tobacco club which is to receive tobacco or the funds with which to purchase tobacco to be sent to the members of Co. L at Camp Douglas and Waco, Texas. No soliciting will be done and donors are requested to bring or have their contributions sent to the Park company's store.

—W. E. SHEFFIELD, druggist of Benton Harbor, Mich., according to a local newspaper of that town, is driving a real "red devil" delivery truck, placarded with his favorite mascot motto, "just common druggists." It is further set forth that he proudly states the truck was won by a Wilson election bet last fall, and that it is a Democratic outfit.

—J. E. TURNER, prominent druggist of 243 Formwalt St., Atlanta, Ga., has announced his candidacy for the office of councilman from the second ward of his city. He is a pioneer resident of the ward, thoroughly acquainted with its needs, and his friends, who are evincing considerable interest in his campaign, hope for his election.

—FRANK P. BARBER, a former Portland, Ore., druggist, is probably the oldest druggist in the country to go to war. He is 54 years of age and from 1898 to 1908, conducted a drug store at Park and Morrison Streets, Portland. He joined the Naval Reserve in April, and was summoned for duty August 1, for service for the duration of the war.

—WILLIAM GALE, JR., only son of the late William Gale, has purchased the drug business established by his father in Westfield, N. J., in 1869. Mr. Gale will make extensive improvements in the store. Mr. Gale, Jr., was educated in the Westfield schools, and was graduated from the New York College of Pharmacy in 1905.

—JOHN E. BOYLE, druggist of Fairfield, Conn., recently defeated Samuel H. Wheeler, wealthy benefactor of the town, in the Democratic caucus for the nomination for school committeeman. The result occasioned much surprise among the local residents, as Mr. Wheeler recently gave a school to Fairfield.

—JOHN R. SAWYER, of the executive committee of the Boston Association of Retail Druggists, and Miss Marie M. Knowles, a Boston school teacher, were married at Jamaica Plain. On their honeymoon they toured in Mr. Sawyer's automobile through the Berkshires and New Hampshire and Vermont.

—LAWRENCE ATKINSON, who received the degree of B. Sc. (Pharm.) from the University of Michigan last June, has accepted an appointment on the faculty of North Pacific College, Portland, Ore. He hails from Holly, Mich., and was formerly associated with the Detroit Drug Co., Detroit, Mich.

—MISS LORRAINE LIGGETT, daughter of Louis K. Liggett, head of the United Drug Co., was the star of the second day of the recent Newport horse show. She drove her entry, Harmony Girl, to first prize, winning over other prominent entries. Cheering and applause continued for fully two minutes.

—PATRICK J. CUDDYER, a South Boston druggist and a member of the executive committee of the Boston Association of Retail Druggists was held up as he was

"counting up his cash register." Although the thief had a revolver levelled at his head he yelled for assistance and escaped loss.

—WILLIAM D. DUNCAN, Ottawa, Ill., druggist, was struck by an automobile recently when crossing the street to deliver a package of medicine. He was badly bruised about the head and face and his right shoulder was dislocated. His friends say he will quickly recover from his injuries.

—CALVIN E. EVERETT, a drug clerk employed in the pharmacy at 206 Plymouth Ave., San Francisco, shot his divorced wife on August 28, and then turned the weapon on himself, firing a bullet in his own neck. Both were dangerously wounded. Everett and his wife were divorced a year ago.

—F. F. LANGENFELDT, formerly manager of the Taylor Isaacs drug stores in Louisville, Ky., and also at one time with the old Palmer pharmacy in the Kimball House, Atlanta, Ga., is now manager of the branch store of the Jacobs Pharmacy Company, 23 Whitehall St., Atlanta.

—HENRY HOLTZMAN, proprietor of the City Drug store, Gas City, Ind., and Mrs. Gail Martin of that town, were quietly married recently at Marion, Ind. Mr. Holtzman has been proprietor of the City drug store for the past two years, being formerly located in Jonesboro.

—DONALD W. VAUGHN, proprietor of the Searsport Drug Co., Searsport, Maine, was married on Sept. 5 to Miss Bernice S. McCaslin, the bridal party leaving immediately after the ceremony for a honeymoon trip through the State by automobile.

—CHARLES E. KLEINHAUS, of New York, a graduate of Columbia University, has been appointed Pacific Coast manager for the Bayer Company, Inc., manufacturers of pharmaceutical products, with business headquarters at 576 Mission St., San Francisco, Cal.

—ROBERT E. MORRIS, druggist at 127 West Broadway, South Boston, Mass., was shot and seriously injured, late at night, August 6, when three burglars invaded his store just before closing time. Joseph Mulloy, a clerk, witnessed the shooting.

—F. J. FELDER, of Orangeburg, S. C., and H. S. Martin, from Kansas, both registered pharmacists employed at Frierson's drug store, Charleston, S. C., have enlisted at the naval recruiting station, Charleston, as first class apprentices.

—A. R. HALL AND E. T. JOHNSON with the H. Martin Johnson Drug company, St. Paul, Minn., have been drafted into the national army. George Salvesson, doing relief work for the same firm is in a like situation.

—HENRY RAUCH, secretary of the Minneapolis Retail Druggists association made a rapid double-transaction recently. He purchased the drug store of H. M. Peltzer of Minneapolis and sold it again within a week.

—E. E. BRUCE, head of E. E. Bruce & Co., wholesale druggists, Omaha, Neb., recently bought the four-story building adjoining the company's present location at 401 South 10th St. The price was \$25,000.

—EMMETT THOMPSON, sundry buyer for the Aldo Sommer's Drug Co., Quincy, Ill., has gone to Kansas City where he has accepted a similar position with the Evans-Smith Drug Co., wholesale druggists.

—ROYAL CARTER, with the Red Front drug store, Frederick, Okla., passed the examinations for enlistment in the hospital corps of the United States army. He will be sent to Fort Sam Houston, Texas.

—F. D. McNEW, of Atlanta, Ga., has been appointed southern distributor for the Vito-Rex Co., of Cincinnati, Ohio, manufacturers of a proprietary specialty. His headquarters will be in Atlanta.

—A. T. SUNDBERG of the Bodin-Sundberg Drug Company, St. Paul, Minn., has announced that he is leaving the drug business. But he still will be interested in the public health—at least as to colds.

—A. S. KERR, formerly manager of one of the Riker-Hegeman drug stores in New York City, is the new proprietor of the Watman Pharmacy, 58 Church St., New Brunswick, N. J.

—T. F. LAURIN, druggist of Astoria, Ore., who attended the reserve officers' training camp at that place recently,

has received a commission as a second lieutenant of cavalry.

—EDWARD J. BARRY, well known drug broker at 94 Beekman street, New York City, recently bought the seven-story warehouse at the corner of Fulton and Cliff streets, same city.

—G. A. LAHMIRE, of Marietta, Ohio, has purchased the pharmacy of Alexander S. White at Sidney, Ohio. Mr. White was a pioneer in the drug trade of that section.

—R. S. MANSUR, of the Mansur Drug Company, St. Paul, Minn., spent a month's vacation with his family at Lake Cullen. The trip was made by automobile.

—JESSE F. MILLER, a South Wilmington (Mass.) chemist, was given a banquet at the Quincy House, Boston, previous to leaving for war service.

—JOHN DANEK, of Minneapolis, Minn., former president of the Minnesota State Pharmaceutical Association has joined the Home Guard.

—GEORGE B. GUNN, has become manager of the drug store of his father, Horace E. Gunn, an old-time druggist of Uxbridge, Mass.

—THOMAS P. SCHEFFER of Boston, was recently married to Miss Ethel Billington of Melrose. Mr. Scheffer is a Back Bay druggist.

—C. W. SWAN, a druggist of Lawrenceville, N. J., has sold his business and intends to enlist in one of the State hospital units.

—JOHN B. KANE, a drug clerk, was among the first to answer Uncle Sam's call for volunteers for the army at Boston.

—WILLIAM F. PERRY has taken a six months' leave of absence from the Gardner Pharmacy, Lawrence, Mass., to travel.

—EDWARD MALLINCKRODT, president of the Mallinckrodt Chemical Works, St. Louis, was a recent visitor in New York City.

—EARL L. SARGENT, Joseph D. Danforth and Miss Annie E. Flaherty have formed the White Drug Co., Peabody, Mass.

—JOHN P. JELINEK, of St. Paul, a druggist of St. Paul, Minn., is a member of the Fourth Division draft board.

JOHN F. BRESNAHAN'S NEW POSITION

Darwin R. James, Jr., President of the American Chicle Company, has issued the following statement: "I am pleased to announce that Mr. John F. Bresnahan assumed the office of General Sales and Advertising Manager of the American Chicle Company on September 1st. Mr. Bresnahan after twenty years of distinguished service with the most prominent newspapers and magazines of the country, during which period he successfully administered the periodical branch of the American News Company, the circulation departments of the Ridgeway and Butterick Companies, and Vice-Presidency of Every Week Corporation, will now devote his executive capacity and intensive knowledge of sales and distribution conditions to the interests of the American Chicle Company."

N. Y. HEALTH BOARD AND COURT PLASTER

Following the reports published in many newspapers, that specimens of court plaster sold in the West by itinerant vendors had been found to contain tetanus bacilli, the New York Department of Health, through its Bureau of Laboratories, recently examined a large number of specimens of court plaster sold in New York City. The Department states that in not a single instance were evidences discovered of any infection with tetanus. In the case of the positive findings reported by the newspapers, the Department states, that it is extremely improbable that this represents anything more than accidental infection. Certainly no one at all familiar with tetanus and attempting in such a fiendish way to kill his fellow men with the germ of this disease would resort to court plaster as the vehicle of infection.

While the Department of Health does not take any stock in the suggestion that court plaster is being deliberately infected, it advises the public to buy court plaster only from reputable druggists, and only the product of reliable manufacturers.

DEATHS IN THE DRUG TRADE

GEORGE M. OLCOTT

George M. Olcott, president of the Dodge & Olcott Company, dealers in essential oils and kindred products, New York City, died at his home in Ridgefield, Conn., on Sept. 14. He was born in Brooklyn, N. Y., in 1835, and was the son of Charles M. Olcott, who in 1832 founded the firm of Olcott & McKesson, the predecessor of the present house of McKesson & Robbins. He attended Brooklyn and New York schools, and later became a clerk in a wholesale drug establishment. In 1854 he associated himself with Dodge & Colvill, being admitted to partnership two years later, the firm name becoming Dodge, Colvill & Olcott, and subsequently, Dodge & Olcott. He became the senior partner of the last named firm in 1891 and president of Dodge & Olcott Company upon its incorporation in 1905.

Mr. Olcott was identified with many business interests and for years was active in the directorates of the Lloyd's Plate Glass Insurance Co., the Market and Fulton National Bank, the Federal Insurance Co., the Franklin Trust Co., of Brooklyn, and was president of the First National Bank of Ridgefield, Conn. He is survived by his widow and two daughters.

JOHN S. MUTH

John S. Muth, of the firm of Muth Bros. & Co., wholesale druggists of Baltimore, and widely known in the trade, died on August 31, after an illness of about one year, from a combination of diseases. Mr. Muth was born in Baltimore 51 years ago, and was a son of the late Michael J. Muth, one of the three brothers, who became partners of the firm, which was founded by the late George L. Muth. After completing his education at Calvert Hall, John S. entered the warehouse of the firm and gradually advanced until he was admitted to a partnership. He was essentially a man of domestic tastes, and had no connections outside of his family and church. Of unvarying charity and kindness, he followed consistently a favorite maxim of his father, who believed that if you are unable to speak well of a man, do not speak of him at all. His uniform courteousness, combined with a high sense of integrity, gained him a host of friends, and though he had been away from the establishment for long periods at a time, he was held in the warmest esteem and closest remembrance. He gave freely to religious, philanthropic and charitable purposes. A widow and three children, besides numerous other family connections, survive.

WILLIAM F. MACDOWELL

William F. Macdowell, chief pharmacist of the U. S. Public Health Service, and stationed for many years at Ellis Island, N. Y., in the immigration service, died on Sept. 11 of kidney trouble at his home, No. 3 West 192nd Street, New York City, at the age of 65. He was born and educated in New York, and since his original appointment in the Public Health Service on June 30, 1884, was employed by the United States government. Early in his career he served on board the warship Monongahela. From 1890 to 1892 he was in charge of the government hospital at Portland, Me., and from 1892 to 1894, of the government hospital at Cairo, Ill. During the Spanish-American War he was special disbursing officer of the United States at Havana, Cuba. In 1906 he was assigned as chief pharmacist at Ellis Island, a position he held until his death. He was a member of the Knights of Pythias and a Mason of long standing. He was also for a number of years a member of the American Pharmaceutical Association. He is survived by one son, Irwin Macdowell.

G. M. HAYS DEEMER

G. M. Hays Deemer, well known Boardwalk druggist of Atlantic City, N. J., died in the City Hospital on August 31 from injuries he had received several days previously when his automobile collided with a motor truck. Mr. Deemer, accompanied by his wife and two friends, were on their way from Atlantic City to Egg Harbor, when the accident happened, and beside Mr. Deemer, all of the occupants of the car were more or less injured. Mr.

Deemer's drug store on the Boardwalk opposite the Steel Pier was for years a favorite rendezvous for thousands of visitors to Atlantic City, and many prominent men and women throughout the United States and Canada were patrons of the store. Mr. Deemer was 41 years of age, and went to Atlantic City from Greenberg, Pa., where his aged parents still live. He was a member of St. Andrew's Lutheran church, a Mason, and a member of the New Jersey Ph.A. He is survived by his widow, who was seriously injured.

JOHN C. OTIS

John C. Otis, druggist at 1713 Ruth Ave., Cincinnati, O., and for more than twenty years president of the Cincinnati College of Pharmacy, a position which he held at the time of his death, died recently after an illness of four months. He was born in Cincinnati 61 years ago, and was a graduate physician. He served as a member of the Ohio Legislature in 1899, and at the time of his death was a member of the American Pharmaceutical Association and the Ohio State Pharmaceutical Association, joining the last-named in 1882. He had been identified with the drug business in Cincinnati since the early "seventies." He was a life member of the Elks. He is survived by his widow and four daughters, one of whom, Miss Clare Otis, was graduated from the Cincinnati College of Pharmacy last June.

RECENT DEATHS

—WILLIAM K. BROWN, oldest druggist in Dubuque, Ia., if not in the State, is dead, after an illness of several months' duration. He was born in Dumfries, Scotland, in 1835, and came to America with his parents in 1836, settling in Cumberland, Md. In 1845 he moved to Dubuque, starting in the drug business as a boy. He was for more than forty-five years manager of W. P. Allen's drug store, and on the retirement of Mr. Allen he became a member of the firm of Hedley & Brown, with a store at Third and Main Streets, where he was in business up to five years ago, having served the public as a druggist in the lower end of the city for almost three-quarters of a century. He was a member of Metropolitan Lodge No. 49 A. F. & A. M. He is survived by a daughter and one brother.

—DREW MARSHALL, druggist of Ogden, Utah, 32 years of age, disappeared at a point near the grounds of the Chesapeake Gun Club, near Corinne, Boxelder county, on Oct. 18, 1916, while out hunting with a party of friends. Although days were spent in searching for a clue to his whereabouts, nothing was found that would give the information. On Sept. 3 his remains were found at a point 15 miles down the river from where he was last seen by his companions. Only the skeleton was left, but identification was positively made by his clothing, a signet ring, and other articles he had carried. Mr. Marshall was a long-time resident of Ogden, was married, and had many friends in that city. He was a member of the Masonic order, the Elks and the Eagles.

—HOWARD L. OSGOOD, pioneer druggist, business man and resident of Oakland, Cal., died on August 30 from a heart ailment. From the time he was 17 years old he had been identified with the business interests of Oakland and Alameda counties, and with his brother Fred S. Osgood, he had conducted several drug stores, besides carrying an interest in other local industries and commercial establishments. He was born at Novato, Cal., 53 years ago. He was a member of the Elks and the Native Sons. Surviving him are his widow, two daughters, and two brothers, Fred S. and William G. Osgood.

—JAMES CRAYS, 75 years of age, and for many years connected with the Lyman-Eliel Drug Co., now the Minneapolis Drug Co., died recently following a long illness. He had lived in Minneapolis more than 40 years, and retired from business twelve years ago. During the Civil War he was captain of Company A, 105th Ohio volunteer infantry. At the time of his death he was a member of the Minnesota commandery, the Loyal Legion and John

A. Rawlins post, G.A.R. of which he was once commander. He was also a member of Plymouth Congregational church. He is survived by his widow.

—BORIS J. ELKIND, well known Hebrew druggist and for many years proprietor of a drug store on Grafton Street, Worcester, Mass., died on Sept. 1 in a private hospital, New York, following an operation. He was about 53 years of age and was born in Russia. He came to this country thirty years ago, and for twenty years had been engaged in the drug business in Worcester. He is survived by his widow and two sons, James, a pharmacist, and H. S., a physician.

—RICHARD L. JENKS, a retired druggist of Philadelphia, died at his summer home at Cape May from heart disease. Years ago he was in the government service, and later conducted several drug stores in Philadelphia. He owned a large power cruiser, which he turned over to the government as a submarine chaser. He was 50 years of age, and is survived by a widow and five children.

—THOMAS H. GRIFFIES, who conducted a drug store at Bradford, Pa., for the past year and a half, is dead, aged 66. He was a native of Schenectady, N. Y., but had spent the greater portion of his life in the oil regions, being well known to pharmacists of that territory where he had been employed in drug stores at intervals during the past thirty-five years. Two daughters survive him.

—LEON DI NOLA, 76, one of the oldest druggists in San Francisco, died in that city recently. He was born in Italy and came to America in 1862, serving as surgeon in the navy during the Civil War. After the war he located in San Francisco, where he established the firm of Leo di Nola & Co. He is survived by six children.

—CHARLES S. DUPEE, vice-president of the F. H. Wetmore Co., manufacturers of druggists' specialties, 242 Pearl Street, New York, committed suicide on Sept. 6 by hanging himself in the attic of his home, New Rochelle. He had suffered from nervous prostration for two months. He was born in Boston.

—WILLIAM JAMES JONES, JR., state chemist of Indiana, died on August 31 of paralysis. He was born in Watska, Ill., in 1870, and graduated from Purdue University in 1891, and received advanced degrees in 1892 and 1899. He was an authority on food products and fertilizers.

—EDWARD MCGOVERN, the eight-year old son of J. Edward McGovern, of the McGovern Drug Co., Auburn, N. Y., passed away Sept. 10 at the family home at Auburn. The little fellow's case was diagnosed as typhoid fever but developed into spinal meningitis.

—DR. SAMUEL MEYER, 48, widely known physician and druggist of Louisville, Ky., died recently at the Jewish Hospital, that city. He was prominent in Masonic circles and a former member of the Louisville Board of Education.

—RICHARD L. IGEL, a pioneer druggist of Leavenworth, Kansas, died of apoplexy on August 29. He was born in Wuerttemberg, Germany, and was a Civil War veteran. He is survived by his widow and five children.

—EUGENE BLAKEMORE, for the last four years a pharmacist in Richmond and Baltimore, died at his home in the latter city after a brief illness of tuberculosis. He was 27 years of age. He leaves a widow.

—WILLIAM J. FERRIS, owner of the drug business of Charles E. Ferris & Son, and secretary-treasurer of the New Castle Trust Co., New Castle, Del., died recently at the Johns Hopkins Hospital, Baltimore, Md.

—LEO ROBBIN, a druggist, walking to his home at No. 175 High Street, Brooklyn, N. Y., was struck by an automobile as he was crossing Flatbush Ave. His neck was broken and he died instantly.

—ARMON W. HIXSON, druggist and grocer, Flint, Mich., died recently of apoplexy. He was 64 years of age, and was born at Winnebago, Ill. He is survived by his widow and two children.

—WILLIAM F. TAYLOR, 82, retired druggist, is dead at Kansas City, Mo., where he had lived for 28 years. He is survived by three daughters and four sons.

—GEORGE A. KOCH, 53, druggist and resident of Woodmere, L. I., for the last twenty-five years, died recently at St. Joseph's Hospital, Far Rockaway.

—SILAS J. HUBBARD, formerly a pharmacist of Binghamton, N. Y., and more recently of North Brookfield, N. Y., is dead. He is survived by his widow.

—ROBERT SOBEY, 55, Chicago, Ill., is dead.

ALCOHOL ISSUE STILL PENDING

Members of National Wholesale Druggists Association Urged to Telegraph Their Representatives in Congress in Behalf of the Amendment Permitting the Solicitation of Orders.

In a circular issued recently by Secretary Francis E. Holliday, members of the National Wholesale Druggists' Association are urged to telegraph their representatives in Congress, asking them to recommend to members of the House Conference Committee the amendment to the War Revenue bill permitting the mailing of letters, price lists, and publications having reference to the sale of alcohol when it is intended for scientific, medicinal, mechanical, manufacturing and industrial purposes. The circular reads:

The War Revenue Bill was passed by the Senate late on Monday, September 10th, and as it originated in and was passed by the House of Representatives on May 23d, it now goes to Conference Committees from the House and Senate, and various authorities assume that it will take from five to ten days before an agreement is reached.

The bill as passed by the Senate contains an amendment to the so-called Jones-Reed Amendment, which prohibited the mailing of letters, price lists or publications of any kind, containing any advertisement of intoxicating liquors of any kind, which was construed by the Postmaster General to include alcohol, even if it was intended exclusively for medicinal or manufacturing purposes. This amendment appears under Title 11, Section 1106, referring to Postal Rates, and reads as follows:

Sec. 1106. That section five of the Act approved March third, nineteen hundred and seventeen, entitled "An Act making appropriations for the Post Office Department for the year ending June thirtieth, nineteen hundred and eighteen," shall not be construed to apply to ethyl alcohol for governmental, scientific, medicinal, manufacturing, and industrial purposes, and the Postmaster General shall prescribe suitable rules and regulations to carry into effect this proviso in connection with the Act of which it is amendatory, nor shall said section be held to prohibit the use of the mails by regularly ordained ministers of religion or by officers of regularly established churches for ordering bona fide wines for sacramental uses or by manufacturers and dealers for quoting and billing such wines for such purposes.

If enacted into law this will relieve the legitimate drug and manufacturing interests from the restrictions under which they are now placed. It is important that the Conference Committee from the House of Representatives agree to the passage of this section, and that all of our members who are interested should at once telegraph to their own representatives in Congress, asking them to urge the members of the House Conference Committee to support the Senate Amendment. Telegrams should also be sent to the members of the House Conference Committee, who are as follows: Claude Kitchin, North Carolina; Henry T. Rainey, Illinois; Lincoln Dixon, Indiana; Joseph W. Fordney, Michigan; J. Hampton Moore, Pennsylvania.

Paragraphs b and c of Section 600, Title 6, under War Excise Taxes, provide for the payment by the manufacturer, importer or producer of proprietary medicines, perfumes, cosmetics, etc., "of a tax equivalent to 2 per centum of the price for which so sold," instead of the rate in the House bill of 5 per cent on such articles.

In view of the fact that manufacturers of medicines and toilet articles will bear their full share of the increased tax on incomes, corporations, excess profits, transportation and other items in this bill, as well as the large advance in the tax on alcohol, it is recommended that members also telegraph their Representatives and the House Conference Committee, insisting that if any tax be levied on medicines it shall not be larger than the 2 per cent incorporated in the Senate bill.

Speaking of temperance, the honest pharmacist who doesn't want to run a "speak easy" is already planning how to increase his soda sales to keep pace with the demand that will come. Don't let the soda fountain and confectioners get it all.

PROF. STIEGLITZ SAYS THE CHEMISTS SAVED GERMANY FROM DEFEAT

President of the American Chemical Society Also Gives Full Credit to British, French and American Chemists—Urges Manufacturers to Share Profits With Them.

The American Chemical Society on Sept. 11, concluded its 55th annual meeting begun in Boston, following the address of Dr. Nichols, by morning and afternoon sessions each day at the Massachusetts Institute of Technology.

On Wednesday evening, Prof. Julius Stieglitz, president of the society, spoke in Huntington Hall. He reviewed the achievements of American chemists since the outbreak of the war, and said that in both a military and an economic sense Germany has thus far been saved from defeat by her chemists. He added that "the British and French chemists also rose to the crucial test of the war, and are proving themselves more than a match for their opponents."

After dwelling on the vital place which chemistry has come to occupy in the life of nations, he said:

"American chemists are meeting in the same way the most urgent problems of the immediate moment, as shown by the solution of the problem of manufacturing optical glass for range finders, the invention of devices for safeguarding submarines against internal explosions, for guarding the army and navy against poison gases, and the manufacture of important remedies hitherto imported and now on short notice prepared in this country.

"Manufacturers should treat their research chemists more fairly by sharing with them more equitably the profits resulting from their discovery and invention instead of exploiting them. The wiser policy has been largely responsible for the German leadership in chemical manufacturing. This stimulus of ambition and interest would be in line with the present social evolution.

"The future welfare demands also fair protective duties for dye and drug and chemical manufacturers, and better patent registration, so that we may have a large measure of chemical independence. Chemistry is now preparing remedies which in many instances are far superior to natural products, and the United States must do its share of the work of raising medicine from the realm of art to the safer one of science.

"For almost two decades it has not been a question of Berlin or Munich for the prospective chemistry student, but a question of Harvard or Chicago, Hopkins or the Massachusetts Tech., because our university professors are leaders in their fields."

Prof. P. E. Brown of Yale University gave a talk suggested by the slogan "Starve the garbage can." He advised that such material as the garbage can did receive be burnt in the home incinerator and the ashes mixed with wood ashes and spread on the soil.

Alexander Silverman and Raymond M. Howe of the school of chemistry of the University of Pittsburgh described a new method of preparing mirrors.

Alfred H. Cowles, of New Jersey, and Alfred W. Schmidt, of this city, presented two papers before the fertilizer division upon the preparation of a new fertilizer made from calcium silicates that has been found to be of benefit in the growing of tobacco, sugar and other beets, buckwheat, clover and grass.

W. H. Ross and Albert R. Merz reported on "the recovery of potash as byproduct in the cement industry," and they said that on a basis of an average production of 90,000,000 barrels of cement annually, the amount of potash escaping in the dust is recoverable to the amount of 87,000 tons annually. Some of the cement plants are reported to be losing as much as five and fifteen-one-hundredths pounds for each barrel of cement produced. It is probable they said, that with proper methods of securing this escaping dust as much as 100,000 tons annually, or nearly one-half of the normal yearly consumption of potash in this country can be recovered from the cement mills.

In this connection it was pointed out that the entire potash output of America amounted to only 350 tons in 1915 and that the amount had grown to 35,739 tons in 1916, with a value of more than \$4,250,000, yet that production

was only 3.6 per cent of the imports from Germany four years ago.

The closing days of the convention were devoted to a discussion of platinum and potash. A paper on platinum was read by Prof. Ellwood Haynes of Kokomo, Ind., who said its use in chemistry is absolutely necessary at all times. There is positively no substitute for it for chemical purposes. It must be had by the industry at any price, and the price has advanced from \$28 an ounce in 1907 to \$110 an ounce at the present time, so that present cost of a still for which the chemists use it is likely to be \$200,000. They use it also for crucibles, which cost less because they are smaller, but for both stills and crucibles they must have platinum.

The part of his message Professor Haynes wanted to emphasize in his address was that stellite and rhotanium have been found to be absolutely satisfactory substitutes for platinum in the jewelry business and that the jewelers, therefore, should abandon the use of platinum and adopt the rather new alloy of chromium and cobalt. He declared that this alloy is even more satisfactory than platinum for jewelry and can be polished more brilliantly, and it retains its brilliancy longer and is much lower in cost. He showed samples that had not been polished for five years and they were as brilliant as if new.

SESSIONS OF THE PHARMACEUTICAL SECTION

The section on pharmaceutical chemistry, with morning and afternoon sessions on Wednesday, Sept. 12, was a feature of the annual convention of the American Chemical Society at Boston. "Pharmaceutical Chemistry and the Future" was the morning's subject, and discussion was opened by Dr. L. F. Kebler, of Washington. Papers were read on this topic during the afternoon.

These new officers were elected: Chairman, F. O. Taylor, Detroit; vice-chairman, H. W. Rhodehamel, Indianapolis; secretary, G. D. Beal, Urbana, Ill.; additional members of executive committee, L. F. Kebler of Washington and E. B. Carter of Indianapolis. A new committee on analytical chemistry was elected, consisting of nine members, three each to serve for one, two and three years, three members to be elected annually thereafter. B. L. Murray of Rahway, N. J., was elected chairman of this committee.

WORKING FOR ARMY PHARMACEUTICAL CORPS

The National Pharmaceutical Service Association elected 68 new members from 23 different states at its meeting in Philadelphia on Sept. 10. Reports presented indicated increased interest throughout the country in the work of the association and that the bill introduced in Congress to create a pharmaceutical corps in the army is receiving the loyal support of pharmacists generally. The American Pharmaceutical Association, the N.A.B.P., and the Conference of Faculties at their recent meetings, it was reported, indorsed the work of the organization and the bill pending in Congress, while President Beringer stated that he anticipated similar action of the part of the N.A.R.D. which was soon to meet in Cleveland.

J. C. Peacock was elected treasurer of the association. It was announced that Congressman Edwards of Philadelphia, who sponsored the bill now in Congress to create a pharmaceutical corps in the army, was expected to address the members of the association on Oct. 8. It was suggested that pharmacists of military age who have been conscripted should keep in touch with the officers of the association, so that should the bill creating a pharmaceutical corps become a law a record would be available of those who are now in the service and arrangements could be made for their transfer to the pharmaceutical corps where they rightfully belong.

GEER DRUG CO. TO BUILD

John D. Owens, of the Geer Drug Co., Charleston, S. C., recently announced the purchase of a lot adjoining the Oakman drug store, on Magnolia street, Spartanburg, S. C., on which will be erected a \$50,000 concrete and steel building for use of the Spartanburg branch of the Geer Drug Co. The building will be one of the most modern structures of its kind in the state, and is designed to meet the needs of the company's growing business in that part of the Palmetto State.

NEWS OF THE ASSOCIATIONS

MARYLAND PH.A. HOLDS ANNUAL MEETING

Ocean City, Maryland, entertained something like 100 delegates to the annual meeting of the Maryland Pharmaceutical Association when the sessions were opened in July. Samuel C. Henry was present as a guest representing the Pennsylvania organization and as a visitor from the N.A.R.D. while H. H. Robinson represented the National Association of Wholesale Druggists.

Following the presentation of routine business reports by Samuel Y. Harris, Charles C. Neal and E. F. Kelly, the organization launched a criticism of the Government in hesitating to allow druggists to enter the service of the army at a higher rank than private and the organization went on record as insisting that an injustice would be done the profession unless this rule was changed. It is hoped that the bill now before Congress to create a pharmaceutical corps in the army will become a law.

The following officers were elected: President, Eugene W. Hodson, Baltimore; first vice-president, W. H. Clarke, Pocomoke; second vice-president, D. R. Millard, Baltimore; third vice-president, G. E. Pearce, Frostburg; secretary, E. F. Kelly, Baltimore; treasurer, Samuel Y. Harris, Baltimore; executive committee, C. C. Neal, chairman, Baltimore; R. E. L. Williamson, Baltimore; G. A. Bunting, Baltimore; T. M. Williamson, Frederick, and John R. Carson, Port Deposit.

H. Lionel Meredith of Hagerstown, Thomas M. Williamson of Frederick and Joseph E. Harned of Oakland, were endorsed for the Board of Pharmacy, one of whom is to be selected by the Governor to fill the next vacancy.

While the Maryland Pharmaceutical Association was holding its sessions, the Maryland Board of Pharmacy also held its yearly meeting, receiving annual statements and electing officers. In accordance with a legislative requirement a statement of the board's activities was submitted to the Maryland Association. It entered into a discussion of violations of the State pharmacy law, pointing out the inadequacy of the machinery at present provided to prevent and punish infractions. Prosecution of offenders is now in the hands of the States attorneys, who are usually so taken up with work that they have no time to appear in cases brought before magistrates, and prosecution is in many instances difficult, if not futile. The Board formally declared itself as favoring the appointment of a permanent secretary, whose duty it shall be to follow up violations and assist in prosecutions. A resolution asking the State Association to go before the next General Assembly with a request for legislation in accordance with this idea was adopted.

The election of officers resulted as follows: President, H. Lionel Meredith, Hagerstown; secretary, David R. Millard, of Morgan & Millard, Baltimore; treasurer, J. Fuller Frames, of J. P. Frames & Sons, Baltimore.

The only change was the election of Mr. Millard as secretary in place of Ephraim Bacon, who has held the office for years. W. C. Powell, the other member of the board, has just been appointed for another full term.

PRESENTS AMBULANCE TO COUNTRY'S SERVICE

Bands of music, troops of cavalry, veterans of Civil War Red Cross organizations and Daughters of the American Revolution marching to an open air presentation of an ambulance to the country's service, stirred delegates to the 32nd annual convention of the South Dakota State Pharmaceutical Association to a martial climax of a three days' session at Watertown, S. D. While the parent organization was meeting on August 15, 16, 17, the members of the Ladies Auxiliary were in session and at the close of the main convention the Druggists Mutual Fire Insurance Company held the annual meeting reporting great progress.

Among those who addressed the druggists were Governor Peter Norbeck, Dr. James H. Beal, pharmacist, physician and lawyer, of the University of Illinois, J. A.

Pool, president of the state organization, the Rev. Frederick E. Stockton, Mayor A. T. Hopkins, of Watertown, D. F. Jones, Mrs. August Duffner, S. H. Scanlon, of Mitchell, Mrs. C. Hansen, of Woonsocket, Joseph Miltenberger, of Aberdeen, Clay Carpenter and State Sheriff Shanks.

Officers elected for the ensuing year were: President, Frederick L. Vilas, of Pierre; First Vice-President, Perry Clett, of Big Stone City; Second Vice-President, Warren Page, of Dell Rapids; Secretary, E. C. Bent, of Dell Rapids; Treasurer, A. A. Woodward, of Aberdeen; Local Secretary, F. W. Brown, of Lead. The next convention will be held at Lead.

Henry K. Snider, retiring member of the State Board was nominated to the Governor as were B. H. Neymayr and D. F. Dexter. The Executive makes a selection for the vacancy from the three names submitted by the organization.

Officers selected by the Druggists Mutual Fire Insurance were: President, F. G. Stickle, of Melette; Vice-President, Henry Sasse of Henry; Secretary and treasurer, S. H. Scallin of Mitchell.

H. J. Crochet of Armour was elected to the board of directors to fill the unexpired term of W. A. Nyes of Salem, who died in the last year.

Considerable stress was laid on the duty of the druggists to insist upon a strict enforcement of the new state prohibition law and the drastic provisions were interpreted by several speakers. A stirring note of patriotism dominated the addresses of the members of the organization and the session closed with the public presentation to the Governor of an ambulance to be turned over to one of the state's units.

NORTH DAKOTA PH.A. SELECTS FARGO

Loyalty to the country, legislative matters, price maintenance, and re-pricing of patent medicines were some of the points touched upon by President A. A. Bradley in his address before the thirty-second annual meeting of the North Dakota Pharmaceutical Association held at Grand Forks on August 7 to 9. Among the subjects discussed was that relating to the handling of alcoholic and medicinal preparations. The action of the executive committee in purchasing \$3,000 worth of Liberty Bonds was approved.

Addresses were delivered by C. R. Noyes on buying and selling, and by Thomas H. Potts, secretary of the N.A.R.D. on "Compulsory Health Insurance." H. L. Haussamen presented a report relative to fire insurance and the suggestion that North Dakota pharmacists join the South Dakota Mutual Fire Insurance Co. or establish a similar company in North Dakota. Following a discussion of the proposition it was decided that no action be taken and the committee was dismissed.

The following officers were elected: President, Peter Mergens, Fairmount; 1st vice-president, J. H. Vold, Grand Forks; 2nd vice-president, Homer L. Hill, Sutton; secretary-treasurer, W. S. Parker, Lisbon; executive committee Max Strehlow, Casselton; Roy Cook, Fargo, and E. A. Engebretson, Devils Lake. The next annual meeting will be held at Fargo, August 5.

WASHINGTON STATE DRY LAW SUSPENDED

A final canvass of the signatures on the supplemental petition in connection with the dry law referendum, recently completed in the Secretary of State's office, Olympia, Wash. shows that the law so far as it applies to druggists of the State is suspended. According to the ruling of Attorney General Tanner, the effect of the suspension of the law will be to allow druggists to import liquor for mechanical, medicinal, scientific and sacramental purposes. The attorney general also holds that the suspension of the law will not restore the personal permit system, that being forbidden by the Reed law, a federal statute.

SEATTLE'S COMING STORE

Immediately after spending \$250,000 for a triangular site for a new drug store in Seattle, President L. C. Silverstone, of the Boston Drug Company announced that his company would spend \$90,000 for the erection of a new building on the site bounded by Westlake, Fifth and Pine Streets. The property which is 162 x 140 x 60 feet is now occupied by a one-story structure which will be razed to make room for the new structure. Dr. Hiram Silverstone, of Kansas City is associated with his brother in the purchase of the property mentioned.

According to special reports on the sale, the property acquired is in what is known in Seattle as the "close-in" district and it has been a big money maker for all the recent previous owners and has changed hands frequently because of the opportunity of the various owners to take large profits. One owner after holding the property for three years sold it at a net profit that would be equal to \$33,000 a year.

Situated as the property is, in the business section of the city it is just opposite one of the largest department stores of the west, and one face of the triangle is opposite a theatre. So that the new store will have the advantage of a tremendous traffic called to the neighborhood by thousands of dollars worth of advertising every year and is likely to prove a big factor in the business of the city.

President Silverstone has announced that he will erect a building with a foundation to carry ten stories and build three stories at once for the use of the drug store, so that from this it may be gathered that it is likely to be one of the largest drug stores in the country if the entire frontage is built upon as announced through unofficial sources.

One of the unique features is that the property was purchased from an architect, John Graham, and the supposition is that he has already an agreement to design the new building for the drug company and if this is true it may be gathered that it will be done on a scale to probably make a record store.

FOOD CONSERVATION AND RETAILERS

WASHINGTON, D. C., Sept. 12—The retail drug, specialty and department stores of the country are expected to prove to be a most important factor in assisting the United States Food Administration in its conservation work. It is conservatively estimated that one-twentieth of the entire population of the United States visit these stores daily. The power of such a medium for reaching the women of the country with the food conservation message is incalculable. Retail merchants are always eager to do their part and letters and telegrams are already being received by the Food Administration from merchants in all parts of the country, saying substantially "Tell us what you want us to do and we will do it."

Federal State Food Administrators will be appointed in order to decentralize the immediate supervision of the food conservation plans in each state. To bring about proper co-ordination between the retailers and the Food Administration, provided the Federal Food Administrator cannot undertake the work personally, there will be appointed in each state a State Merchant Representative, who will co-operate with the former in all matters in which the retail stores may be concerned, or where they may be of assistance to the Government. Under this plan, the retail stores will be notified by the State Merchant Representative of all educational conservation campaigns and other activities contemplated, will be advised what specific thing they may do to assist, and furnished with helpful data for use in connection with the work.

Meanwhile, retail merchants in all parts of the country are doing everything possible to get the following message to the public:

"EAT PLENTY, BUT WISELY, AND WITHOUT WASTE."

PLANT CULTIVATION IN WISCONSIN

At the request of the office of the drug-plant and poisonous-plant investigations of the United States department of agriculture, the Pharmaceutical experiment station of the University of Wisconsin has begun the cultivation of medicinal plants on a truly economic scale. The work is made possible by an increase in the budget of the sta-

tion granted as a war measure by the last legislature, and the regents have turned over to the station a 30-acre plat, partly wooded, on the shore of University bay.

The Pharmaceutical garden, which heretofore occupied about three acres, has been increased to about 10 acres. Only six acres of this have thus far been laid out in the new garden, but additional acre lots will be added as fast as the means of the station permit.

The work of transplanting the plants from the old garden to the new one has been carried on this season by members of the pharmacy department of the university. One acre of belladonna, one acre of peppermint, one-half acre of digitalis, one-half acre of henbane and one-half acre of poppies have already been planted.

The work of experimenting with medicinal plants was begun at the University of Wisconsin in the spring of 1908, but the experiments thus far have been carried on in a limited space, many of them on one-tenth, one-twentieth, or one-fifth acre scale. The chief object of the first experiments was merely to determine what medicinal plants would grow in Wisconsin. The work in the new garden will be done on a larger and more economical basis.

A.P.H.A. MEETS IN INDIANAPOLIS

(Concluded from page 318)

A unique contribution to the entertainment program which afforded merriment to all of the visitors was the presentation on Thursday evening in the theatre of the Deutsches Haus, of a two-act play written by F. R. Eldred and H. W. Rhodehamel. It was entitled "A Tale of Two Drug Stores," the proprietor of which advertised to supply free telephone service, free advice and free almost everything else, and who is finally compelled to sell out the business to one who refits the store as a modern drug store equipped with soda fountain, cigar stand and lunch counter, but which contains no drugs. Some of the leading members of the A.Ph.A. in caricature formed part of the cast, the "get-up" of the actor impersonating Dr. Henry Milton Whelpley, the esteemed treasurer of the association, being a "dead-ringer," as one member expressed it, for that worthy. The "hits" made at the idiosyncrasies of the members of the association caricatured by their respective impersonators, were numerous, and actually humorous.

On Wednesday evening the president's reception was held in the Riley Room of the Claypool Hotel, and on Thursday evening the association visited the Lilly laboratories, other numbers on the entertainment program being a musicale for the ladies, automobile rides, luncheon, etc. During the week various alumni organizations provided dinners, the more important of these being the alumni of the Philadelphia and New York Colleges of Pharmacy, and of Purdue and Michigan Universities.

MICHIGAN UNIVERSITY ALUMNI

The Prescott Club, as the alumni of the College of Pharmacy of Michigan University attending the annual meetings of the A.Ph.A. call their organization, held a dinner at the Claypool Hotel, Indianapolis, a hearty welcome being given to Prof. Henry Kraemer, who succeeds the late Prof. J. O. Schlotterbeck in the chair of pharmacognosy in that institution. Dr. L. F. Kebler acted as toastmaster, and speeches were made by all present. The proposed celebration of the fiftieth anniversary of the founding of the college of pharmacy to be held at Ann Arbor next year was also discussed, and E. J. Kennedy '82, L. F. Kebler '90, and Charles H. Huhn '81, were appointed a committee to outline plans and suggestions as to the manner in which the alumni could best co-operate in making the celebration a success.

The alumni present were: L. F. Kebler, '90; Julia E. Emanuel, '89; L. G. Blakeslee, '81; Wilber J. Teeters, '95; A. F. Schlichting, '12; J. M. Noble, '11; C. H. Stocking, '07; F. W. Casey, '16; Charles H. Huhn, '81; M. Noll, '81; Charles S. Koon, '83; L. E. Savre, '92; George B. Topping, '87; E. H. Wisner, '10; Edsel A. Ruddiman, '86; L. E. Warren, '03; Sidney Hauenstein, '03; H. B. McWilliams, '18; L. D. Havenhill '93; W. S. Hubbard, '08; Prof. Henry Kraemer; E. J. Kennedy, '82; C. B. Jordan, '08; W. F. Gidley, '08; Adolph Ziefle, '04; J. H. Beal; H. Gordin, John M. Noble, '13; C. R. Eckler, '02; A. H. Clark, '15.

Credit and Commercial Decisions

By GEORGE H. MURDOCH, Newark, N. J.

The giving of a chattel mortgage on fixtures is sufficient evidence of intention that they shall retain their personal character.—Boeringa v. Perry, 164 P. (Wash.) 773.

Payment of note by maker before maturity without surrender thereof is not a satisfaction against an innocent holder.—Manley Carriage Co. v. Fowler & Hill, 194 S. W. (Ark.) 708.

A postdated check is legal and proper and payable immediately at its date in the same manner as any other check.—American Agricultural Chemical Co. v. Scrimger, 100 A. (Md.) 774.

One who indorsed notes to lend his credit to the maker to enable the latter to raise money on the notes was a surety rather than an indorser.—Schillinger v. Wickersham, 75 So. (Ala.) 11.

A contract partly in writing and partly in parol becomes a mere verbal contract, and, where it is necessary to resort to oral evidence to establish terms of the contract, then the whole contract is a verbal one.—Moore v. Ohl, 116 N. E. (Ind.) 9.

That plaintiff seller experienced trouble in collecting from defendant for the first shipment of goods does not, in the absence of defendant's insolvency, relieve him from making further shipments.—North Ontario Packing Co. v. Napier-McCall Co., 75 So. (Ala.) 143.

Laws 1913, c. 77, making it a misdemeanor to transact business under an assumed name without filing a certificate with the clerk of court, etc., prevents an offending party from recovering for material furnished either on express or implied contract.—Courtney v. Parker, 92 S. E. (N. C.) 324.

The giving of a worthless check constitutes a representation that the drawer has credit with the drawee bank for the amount involved, and said representation related to an existing fact, so that a prosecution for obtaining money by false pretenses may be maintained.—State v. Tanner, 164 P. (N. M.) 821.

After a bankrupt has been discharged he may sue for and recover property not administered, and an attorney who prosecutes such suit and pays over to bankrupt money received in such litigated action is not, in the absence of fraud, liable for amount so paid on estate being re-opened.—Watson v. Motley, 75 So. (Ala.) 147.

By acceptance of a bill of lading covering a car of apples, which bill included the words "owner's risk," or letters understood by the parties to be their equivalent, the consignor relieved the carrier from its liability as an insurer, and limited it to liability for negligence.—McGovern v. Ann Arbor Railroad Co., 162 N. W. (Wis.) 668.

Improvements made by a partnership with partnership funds upon the lands of one partner, and used for partnership purposes, are personal assets of the partnership, and not real assets entitling heirs of deceased partner to partition; the partnership right being against, and not in, the property.—Flint v. Flint, 100 A. (N. J.) 754.

Where both parties act in good faith, execution of a mortgage by an insolvent corporation to a minority stockholder for money loaned to and applied by corporation to payment of current debts, and a subsequent foreclosure by the stockholder is not an unlawful preference; the trust fund theory not prevailing.—Callahan v. Pioneer Nurseries, 164 P. (Utah) 878.

Bulk Sales Law, providing that no proceeding shall be brought against a vendee to invalidate transfers after ninety days, is applicable to attachment proceedings instituted by the seller's creditors, since the action is a "proceeding," and, in the statutory sense, against the vendee.—Douglass Candy Co. v. Shenk, 194 S. W. (Mo.) 754.

The word "correct attest" before signature of bank directors to reports made to commissioner of banking mean, not alone to bear witness, but to affirm to be true or genuine, and such words are appropriately used for the

affirmation of persons in their official capacity to attest the truth of a writing.—Eland State Bank v. Massachusetts Bonding & Ins. Co., 162 N. W. (Wis.) 662.

It was essential to the validity of the transfer to a third person of a stock of merchandise and store fixtures by a corporation which received title through a composition with creditors from a bankrupt that the transfer was not only made on a good consideration, but that it was also bona fide, for if it were not made in good faith it was void, though the grantee paid full consideration.—Markowitz v. Land, 100 A. (Md.) 783.

The fact that defendant corporation was boxing up its stock, correspondence, records, etc., and had rented its offices, and was preparing to move its business without the state, was no evidence that it was doing so "with intent to defraud its creditors" so as to warrant attachment where there was no creditor but plaintiff, who was suing for an alleged wrongful discharge.—Dickey v. Findeisen & Kropf Mfg. Co. of New York, 164 N. Y. S. 989.

Where a promissory note is indorsed in blank, and without the consent of the indorser other and additional words are written above his blank indorsement, such as the words "protest waived," which operate to increase the liability of the indorser or impose new obligations on him; such alterations operate to discharge indorser from liability, such changes in the contract of indorsement being a material alteration.—Sawyer State Bank v. Sutherland, 162 N. W. (N. D.) 696.

The provision in a partnership agreement that a partner was to devote his time to matters other than the mercantile business, and whatsoever salary he earned should go to the partnership, was not an agreement to put further capital into the partnership which he had a right to withdraw upon dissolution, or a payment which such partner had the right at any time to refuse to continue, but the turning of his salary into the partnership was something belonging absolutely to the partnership.—Duncan v. Hahn, 162 N. W. (S. D.) 743.

A bank, which honors or pays a check of a depositor in the mistaken belief that his credit is larger than it in fact is, or in the hope or mistaken belief that checks which it has credited to his account will be paid, is estopped as against the owner of the check from revoking or avoiding such payment, since the bank may know the state of its own accounts, which the owner of the check cannot know, and since any other rule would result in intolerable delay, uncertainty, and confusion in commercial transactions.—Security Nat. Bank of Sioux City, Iowa, v. Old Nat. Bank of Battle Creek, Mich., 241 F. (U. S.) 1.

A contract, whereby the signers agreed to become responsible for all merchandise checked out of plaintiff's main store by one of the signers who was to become manager of a branch house of plaintiff, or by any other man whom the signers should appoint to order out the merchandise, stating the location of the branch house, and that the manager was to be paid a commission on all cash sales made by him, was not a contract of sale, but one employing the named person to manage its branch house, who was to receive the commission specified for his services.—Farmers' Union Mercantile Co. v. Pinkerton, 194 S. W. (Ark.) 709.

A provision in a fire policy requiring assured to keep a set of books presenting a complete record of business transacted, including purchases, sales, and shipments both for cash and credit, was not complied with by making a memorandum on a slip of paper of each cash receipt and each credit sale and entering these items in the cashbook and ledger weekly and keeping no account of purchases except by preserving the invoices of those purchases for which there were invoices, since the policy required the books to be kept in the usual customary way, and the entries should be made at or near the time the transactions occurred.—Boulanger v. British Underwriters, 75 So. (La.) 207.

PATENTS & TRADEMARKS

PATENTS

Granted August 21, 1911

- 1,237,413—Lambert Thorp, Detroit, Mich. Hypnotic bodies.
 1,237,485—Louis P. Devaucelle, Courchevoie, France, and Felice Bensa, Genoa, Italy. Process of manufacture of cyanids and ammonia.
 1,237,488—Charles A. Doremus, assignor of one-half to John Sherman Hoyt, Darien, Conn. Process for obtaining aluminum fluorid.
 1,237,504—Caroline Graham, West Chester, Pa. Spoon-holder.
 1,237,579—Konstantin Tarassoff, Moscow, and Peter Shestakoff, Petrograd, Russia. Process for obtaining solid products of condensation from phenols, formaldehyde, and salts of sulfo-acids.
 1,237,761—John T. Dwyer, West Philadelphia, Pa. Bottle cap and stopper.
 1,237,773—Ellsworth Gamble, Waverly, N. Y. Ether dropper.
 1,237,800—Charles Melchiori, Stambaugh, Mich. Funnel.
 1,237,815—George R. Riches, and William C. Piver, Hoboken, N. J. Process of making calcium arsenate.
 1,237,884—Carleton Ellis, Montclair, N. J. Ammonia oxidation process.

Granted August 28, 1917

- 1,238,147—Leopold Jesser, Vienna, Austria. Process of making magnesia.
 1,238,156—Reinhold G. Koch, New York, N. Y., assignor to Silver Crown Disk Co., Inc. Cover for bottle cap cork
 1,238,166—Harry R. McConnell, Richmond, Va., assignor to American Cork Screw Co. Machine for making cork screws.
 1,238,195—Edward Ritz, Chicago, Ill. Dispensing device.
 1,238,256—Grant Burton, Stapleton, Ala. Apparatus for producing and condensing distillate.
 1,238,600—Harlan L. Trumbull, Seattle, Wash. Process of producing alkali from kelp.
 1,238,635—Daniel L. Chandler, Fitchburg, and John H. Trayne, Groton, Mass., assignor to the Cellset Brush Co. Toothbrush and process of manufacturing the same
 1,238,713—John E. Johnson and Charles H. Oslund, Worcester, Mass. Rotary labeling machine.
 1,238,734—Charles C. Averill, Trees, La. Process of making lamp-black and hydrochloric acid.
 1,238,759—Antonio I. Gonsalves, Funchal, Madeira Islands. Device for preparing infusions.
 1,238,932—Paul Nawiasky, assignor to Badische Aniline & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthraquinone compound.
 1,239,068—Charles S. Adams, Buffalo, N. Y., assignor to Rice & Adams Corporation. Valve for filling bottles
 1,239,080—Laurenz Bock, Bad Homburg Kirdorf, Germany. Manufacture of ultramarine.
 1,239,109—Charles Klausberg, New York, N. Y. Bottle-holder.
 1,239,261—Chester W. Dudley, Boston, Mass. Bottle-cap.
 1,239,350—Alphonse S. Campbell, Medford, Mass. Hot-water bottle.

Granted September 11, 1917

- 1,239,618—August E. Nienstadt, Bensonhurst, N. Y. Paraffin powder and process of making it.
 1,239,803—Jesse B. Mars and Nick Stramaglia, Gary, Ind. Non-refillable bottle.
 1,239,822—Alfred Pignet, Ewald Steinbuch, and Robert Stocker, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Process for the manufacture of aromatic amino-oxy-compounds.
 1,239,867—John W. Blagden, assignor to C. F. Boehringer & Soehne, Mannheim, Germany, Art of hydrogenating organic substances.

TRADE MARKS

Published July, 24, 1917

- 100,054—Avery G. Deuel, Rock Springs, Wyo. Cold-tablets.
 102,078—Karatol Laboratories, Binghamton, N. Y. Toilet preparation.
 102,103—Carlos M. Riveroll, Laredo, Texas. Anemia tablets.
 102,782—Oscar R. Remington, Chicago, Ill. Medical preparation used for external application as an Eye remedy.
 107,209—Daniel Kovacs, Duquesne, Pa. Remedy for constipation.
 103,821—Gofeld Company, Philadelphia, Pa. Constipation pills.

Published July 31, 1917

- 103,083—Julius Kalish, Inc., New York, N. Y. An aperient, laxative and purgative.
 103,403—M. Achfeldt, New York, N. Y. Corn-salve.
 103,460—Ernest A. F. Scott, Pasadena, Cal. Perfumes
 103,505—International Drug Co., Wilmington, Del. Acetylsalicylic acid
 104,550—Samuel I. Welsher, New York, N. Y. Witch hazel cream and cold cream.
 103,588—Wendal J. Bixler, Fremont, Mich. Insecticide.
 102,688—Colgate & Co. Jersey City, N. J., and New York, N. Y. Toilet waters.
 103,766—Bauer & Black, Chicago, Ill. Corn plasters.
 103,772—Boris Fonstein, Chicago, Ill. Vanishing face cream.
 103,822-103,823 and 103,824—Habbard Medical Mfg. Co., Inc., New Orleans, La. A purgative; ointment for sores; medicine for irregular bowels and constipation.

- 103,926—Iodine Products Co., Laurel, Miss. Dental Cream.
 103,926—Hairperidermis Cosmetic Manufacturing Co., Washington, D. C., and St. Louis, Mo. Hair and scalp oil.

Published August 7, 1917

- 101,257—Louis N. Moss, New York, N. Y. Mint Lozenges.
 101,257—Louis N. Moss, New York, N. Y. Mint Lozenges.
 50,480—Berlin Laboratory, Inc., New York, N. Y. Medical preparation for gastric-intestinal disturbances.
 95,601—The Rydale Remedy Co., Inc., Hampton, Va. Talcum powder.
 96,419—The Abbott Laboratories, Chicago, Ill. Non-toxic and non-caustic antiseptic in powdered or liquid form, carrying chlorin combined with nitrogen, for therapeutic applications.
 96,482—White Cross Chemical Co., Lynn, Mass. An insecticide and deodorizer.
 96,812—Black & Walter, Huntington, W. Va. Preparation for rheumatism and weak lungs
 97,173—Dispensary Medical Association, Buffalo, N. Y. Proprietary medicines and remedies for treatment of female weakness, coughs, etc.
 100,248—Charmant Specialty Co., Inc., New York, N. Y. Face powders.
 100,653—Lazell Perfumer, Newburgh, N. Y. Perfumes
 100,965—William S. Merrell Chemical Co., Cincinnati, Ohio. Antiseptic solutions for use in cuts, sprains.
 101,310—Sulferro-Sol Company, Inc., Birmingham, Ala. Medicine.
 101,355—Albert A. Munsch, Pittsburg, Pa. Surgical dressing in form of wax.
 102,218—James M. Morrison, Fort Wayne, Ind. Preparation for relief of stomach troubles.
 103,155—Royal Remedies Co., Waukegan, Ill. Medicinal compound adapted to the treatment of colds.
 103,660—John H. Albert, Lancaster, Pa. Bitter tonic to relieve gas in the stomach.
 103,764—Alex Brown, Paynes, Miss. Salve, liniment.

LITTLE PURE ZINC OXIDE ON THE MARKET

WASHINGTON, D. C., Sept. 4.—Examinations made by the Bureau of Chemistry of the United States Department of Agriculture show that very little zinc oxide on the market in the United States complies with the standards of the U. S. Pharmacopoeia. Nearly all of the samples examined contained an excessive amount of lead. The samples were labeled "Not U. S. P.—Containing Small Quantities of Lead," and therefore complied with the Food and Drugs Act. The labels on the packages in most instances will probably come to the attention of the druggists, but not to the attention of physicians. The medical profession will therefore not be advised as to whether or not zinc oxide preparations are made from standard ingredients. Conditions may arise where a zinc oxide preparation contaminated with lead may do injury. A limited supply of U. S. P. zinc oxide is available and physicians may protect themselves and their patients from possible injury by calling for such material on their prescriptions.

MYKRANTZ ADDS LINKS TO CHAIN

Newark and Chillicothe, Ohio, are to be introduced to The Mykrantz Drug Company's chain stores and when they are opened for business the Columbus concern will have 21 sales marts in operation in the Buckeye State. H. C. Zimmerman will manage the Newark store and Frank Crawford will be in charge of the one at Chillicothe. Mr. Crawford was formerly with the Dow Drug Company, of Cincinnati.

Announcement of the two new projects was made by President F. F. Mykrantz who has made ambitious plans for a substantial increase in the consuming power of his company through the two latest links in the already formidable chain of stores marketing thousands of dollars worth of merchandise annually.

HARTFORD, CONN., R. D. A. ELECTS

The Hartford Retail Druggists Association held its annual meeting at the Hartford Chamber of Commerce in July, and after discussing pending Federal legislation concerning taxation and present market conditions, elected the following officers for the ensuing year; President, H. F. Ruby; vice-president, D. N. Callender; secretary-treasurer, S. Bienstock.

A meeting of the St. Paul Retail Druggists Association was held, Tuesday, September 11. The annual convention of the National Retail Druggists Association was one of the chief topics discussed. H. Martin Johnson, secretary of the local organization was the delegate to the national meeting in Cleveland, O., September 17.

THE DRUG MARKETS

TAX ON ALCOHOL STILL UNSETTLED

Opium Imports Decreasing and Prices Advancing for All Grades—Unfavorable Crop Reports and Increased Demand Affect Prices of Essential Oils.

NEW YORK, Sept. 25—The general market situation reflects strength, a firm tone being noticeable in the reports of most staples, while there is an active demand for many crude drugs, and stocks of the more important commodities are said to be light. The war revenue bill which passed the Senate nearly two weeks ago, is now before the conference committees of the House and Senate, and just how it will affect the drug trade is yet an unsettled question. As passed by the Senate, the tax on distilled spirits was placed at \$1.10 per proof gallon in addition to the tax now imposed, while the tax on toilet articles and medicinal preparations was placed by the Senate at 2 per cent of the price for which they are sold. If these clauses are accepted by the House, and representatives of the drug associations believe they will be, it will relieve the trade and tend to do away with some of the uncertainty that exists, and at the same time, take away some of the restrictions under which drug and manufacturing interests are now placed.

While no spectacular changes have occurred since our last report, there are quite a number of items that show advancing prices. Among these are tannic acid, aconite root, alcohol, arnica flowers, bay rum, camphor, cantharides, carbon tetrachloride, such spices as cloves, nutmegs etc., cocaine, echinacium seed, cubeb berries, Dover's powder, flaxseed, glycerin, jalap root, menthol, various essential and fatty oils, potassium nitrate, rape seed, silver nitrate, and bay wax. Declines in prices are noted for acetphenetidin, benzoic acid and benzoates, wood alcohol, Curacao aloes, asafetida, balsam of tolu, copaiba, coriander seed, gamboge, linseed oil, yellow prussiate of potassium, American saffron, and Honduras sarsaparilla root.

OPIMUM—Is reported scarce and prices are advancing, with jobbers quoting \$30@32 per pound for natural, and \$32 to \$35 for granulated and U.S.P., respectively. The amount stored in bonded warehouse in this country on June 30 was 10,004 pounds, as compared with 52,638 pounds in bonded warehouse a year ago. As shown by Treasury statistics, the imports for the fiscal year ending June 30 were considerably less than those of a year and two years ago, a condition which tends toward abnormally high prices for this narcotic.

MORPHINE—Manufacturers recently advanced their prices which caused jobbers to mark up their quotations to \$12.85 @ \$14 for sulphate in 1-oz. bottles, and \$13.05@14.50 per ounce in eighths. Meconate is held at \$16.80 per ounce, most of the other salts remaining unchanged at the prices quoted last month.

CODEINE—In sympathy with opium, this alkaloid and its salts continue to advance, the new schedule being as follows: Alkaloid, \$13.95@14.15 per ounce; hydrochloride, \$12.70@12.90; nitrate, \$12.70@12.90; salicylate, \$12.70@12.90; phosphate, \$12.70@12.90 and sulphate, \$11.45@11.65 per ounce respectively.

QUININE—Is in better supply and prices are lower, sulphate being offered at 80@81c per ounce on the basis of bulk in 100-ounce tins, 85@90c in 5-oz. cans, and 90@95c in 1-oz. tins.

GLYCERIN—There is a strong demand for all grades and manufacturers have advanced their prices. Jobbers quote 70@71c for C.P. in bulk, drums and barrels added, 72@73c for cans, and 79@82c for less.

MENTHOL—Advices from Japan report higher prices there, and the market is advancing here. Crystal is now quoted at \$3.25@3.75 per pound.

OIL OF PEPPERMINT—Advices from producing districts are not reassuring, and this information, taken with the active demand for this oil, has caused a strong upward trend in prices, the prevailing quotations being \$3.60@4

for New York, \$4.25@4.50 for Hotchkiss and \$3.60@4 for Western.

OIL OF SPEARMINT—Similar advices as to crop shortages affect the supply which has advanced to \$3.50@3.75 per pound.

ACETPHENETIDIN—Is in more plentiful supply and prices have declined to \$1.12@1.20 per ounce.

BENZOIC ACID—Acid from toluol continues to decline, owing to increased production, and jobbers now quote \$2.75@3 per pound. A noticeable reduction has also been made in the quotations of some of the benzoates, the prevailing price for sodium benzoate being \$2.30@2.75 per pound.

ALCOHOL—The adoption by the Senate of \$1.10 per proof gallon tax in addition to the tax of \$2.10 now imposed by law, with the hope that the House of Representatives will concur, tends to make the situation somewhat unsettled, and buying is largely restricted to actual necessities. Cologne spirit, 95 per cent, U.S.P., has been advanced to \$4.30@4.40 per gallon by the barrel, and \$4.55@4.80 per gallon for less. Commercial 95 per cent, U.S.P., is quoted at \$4.25@4.50 per gallon by the barrel, and \$4.45@4.75 for less than a barrel. Freer offerings of denatured alcohol are reported and a revision of quotations shows a lower range at \$1.10@1.35 per gallon. Wood alcohol in barrels is held at \$1.20@1.25 per gallon.

ALOES—The market is quiet with jobbing prices lower at 23@28c per pound in gourds, and 18@22c in bulk.

TANNIC ACID—Is still tending upward, with higher prices being asked for the finer grades. Commercial in cartons is offered at \$1.65@1.75 per pound, medicinal at \$1.80@1.85 and powdered at \$1.75@1.90.

ARNICA FLOWERS—Stocks are much depleted, and there is only a scant supply available with considerable inquiry. Jobbers record another advance and quote \$3.25@3.50 for whole, \$3.50@3.65 for powdered, and \$3.50@3.60 for ground.

ASAFETIDA—Is held at \$1.80@1.90 for fair to good, and \$2.10@2.20 for powdered.

BALSAM OF TOLU—Is lower at 55@65c per pound.

BAY RUM—Increased difficulty is reported in obtaining supplies and Porto Rican is higher at \$2.60@2.70 per gallon by the barrel, and \$2.75@3 per gallon for less.

BENZALDEHYDE—In common with a number of products of this character, larger supplies are in evidence, and prices are declining, jobbers quoting \$5.85 by the pound, and 38@40c per ounce.

BENZOIN—Sumatra has been advanced to 50@55c per pound, and powdered to 60@65c.

CAMPHOR—Following advices from primary markets and a continued demand, all grades are firmly held, refined selling for 85½@90c in bulk, and ¼-lb. squares at 83@88c. Powdered is 90c@\$1 and Japanese 87@92c.

CANTHARIDES—The market continues to be unsettled, owing to the Russian situation, with prices more or less nominal. For Russian sifted, jobbers have advanced their prices to \$5.75@6 per pound, and \$6.25@6.50 for powdered. Chinese flies are unchanged at \$1.55@1.65 per pound for whole, and \$1.75@1.85 for powdered.

CARBON TETRACHLORIDE—This solvent is in considerable demand for use in the arts and some scarcity in supplies is experienced, with jobbing prices higher at 35@55c per pound.

CLOVES—In common with a number of products from the Far East, a bare market is reported for supplies of this spice, and prices have advanced accordingly, Zanzibar being held at 50@55c for whole and 55@60c for powdered, pure; Penang cloves are also higher at 60@65c per pound.

BALSAM OF COPAIBA—Although the market is firm, a revision of quotations shows slightly lower prices, \$1.20@1.30 per pound being asked for South American. Para is unchanged at \$1.25@1.35 per pound.

CORIANDER SEED—The market has been somewhat irregular as to prices, which are slightly lower, 23@28c per pound being asked for whole, and 28@32c for powdered.

CUBE BERRIES—Stocks are meager and but little is available from abroad. There is some demand and quotations have been advanced to \$1.25@1.35 for sifted berries, and \$1.40@1.50 for powdered.

DOVER'S POWDER—Following the higher prices of opium, in fact for all of the substances entering into the manufacture of this powder, quotations have been advanced to \$5.50@5.75 per pound.

DRAGON'S BLOOD—Reeds are in meager supply and quoted at \$2.65@2.75 per pound.

FLAXSEED—Higher prices reflect some uncertainty in the market, reports from the Northwest indicating a smaller crop than was harvested a year ago, while a gradual hardening of values is reported from South American markets. Cleaned seed is held at \$15 per barrel, and less at 10½@13c per pound. For ground seed, 11@14c is asked.

GUAIACOL—There is an increasing demand and quotations are higher at \$1.65@1.75 per ounce.

IPECAC ROOT—Arrivals of supplies both here and in British markets are reported and Cartagena has declined to \$2@2.15 per pound for whole, and \$3.50@3.60 for powdered. Rio is unchanged at last month's quotations, \$3.45@3.50 being asked.

JALAP ROOT—Is scarce in this market and higher prices are asked, selected root being held at 40@48c per pound, and powdered, 50@55c.

MALVA FLOWERS—Prices for blue flowers have been gradually advancing for months, and with supplies dwindling, a decline in quotations is not to be thought of. Jobbers are now quoting \$3.50@\$4 per pound and the end is not in sight.

NUTMEGS—There is a strong seasonable demand and prices have advanced to 45@50c per pound; extra large, 80 to the pound, are held at 50@55c.

CHAULMOOGRA OIL—Jobbing prices show a lower range at \$2.40@2.50 per pound.

LINSEED OIL—Both boiled and raw are easier in this market and jobbing prices show a decline to \$1.30@1.45 for the former and \$1.29@1.45 for the latter.

OIL OF SASSAFRAS—Natural is in increased demand, with jobbing prices ruling firm at 90@95c per pound.

POTASSIUM NITRATE—Reports indicate an increased demand from powder manufacturers, and quotations are firm at 40@45c per pound; powdered, 36@41c.

POTASSIUM PRUSSATE—It is said that most of the available supply of yellow is now being imported from Japan, a comparatively new industry for that country. Jobbers quote \$1.30@1.60 per pound. Red prussiate is unchanged at \$3.75@4.25 per pound.

SAFFRON—American (safflower) is lower at 70@75c per pound.

SILVER NITRATE—The high price of silver has caused another advance to 86@91c per ounce. The rise in the price of the white metal during the past summer has been unprecedented in recent years, the active demand being due to the enlarged use of silver for world coinage caused by withdrawals of gold from circulation and the substitution of silver therefor.

BAY WAX—There is a good demand reported for all kinds of waxes, and the market is firm for all grades. Bay wax is scarce and prices have been advanced to 60@63c per pound.

GRUBER-FREELAND TO OPEN NEW STORE

At the annual meeting of the Gruber-Freeland Pharmacies Co., Palm Beach, Fla., the announcement was made that the company was contemplating opening another store in Miami before next winter. The company already operates three stores in West Palm Beach, and one in Miami. At the meeting all of the officers of the company were re-elected, as follows; President, M. E. Gruber; vice-president, B. B. Freeland, and secretary-treasurer, Miss L. E. Newell.

DRUGGISTS' FIRE INSURANCE CO. ACTIVE

At the recent quarterly meeting of the Executive Committee of the American Fire Insurance Co. at Cincinnati, it was decided that each new policy holder will be presented with one of the company's inventory books, which will be of special service to the druggist in view of the fact that the new income tax law will practically require every retail druggist to have an annual inventory.

The report for the first half of the year showed that the company wrote \$11,147,843.53 insurance at a premium of \$116,106.07, the increase in business for the period named amounting to \$1,264,530.53 at a premium of \$13,483.05. Of the business written the company reinsured \$1,962,704.88 at a premium of \$22,517.24. The net losses for the six months amounted to \$29,391.29, and the net expenses, \$31,795.34, while the total insurance in force on July 1 was \$20,272,593.39 at a premium of \$213,957.85, the total assets \$490,489.02, and the liabilities \$7,436.34, reinsurance reserve \$87,660.36, leaving a net surplus as to policy holders of \$395,392.32, and making \$483,052.68 available for protection of policy holders. The book value of government and municipal bonds owned by the company is \$454,443.33.

DICHLORAMINE-T, A NEW ANTISEPTIC

A new antiseptic recently introduced by Dr. H. D. Dakin, of the Herter Laboratory, New York, is Toluene-para-sulphondichloramine, commonly known as Dichloramine-T. It is used in oil solution, either as a spray or as a direct application, being dissolved in a Chlorinated Eucalyptol solution, then diluted to proper strength (from 2 to 7½ per cent) with Chlorinated Paraffin Oil. Used in the treatment of infected wounds it has greatly reduced the length of time required for healing as compared with other methods of treatment, and when sprayed into the nose and throat, is an effective method of treating diphtheria and meningococcus carriers. It contains about 29 per cent of chlorine, and can be used in very high concentration, being superior in this respect to the Dakin-Carrell hypochlorite solution. This substance has been placed on the market by The Abbott Laboratories, which also supplies the Chlorinated Eucalyptol and Chlorinated Paraffin Oil ready for use, according to the method described by Dr. Dakin. Literature descriptive of this new antiseptic, as also that of Chlorazine a water-soluble antiseptic devised by Dakin, together with prices will be sent on request to the Abbott Laboratories, Chicago.

FROZOCLONE, A TOILET NOVELTY

Frozoclone, a toilet novelty of solid icy Eau de Cologne, for the relief of headache, nervousness and fatigue, is a new money maker recently introduced to the drug trade by McKesson & Robbins, Inc., of New York. Its novelty seems to appeal instantly to druggists, as there is nothing like it on the market. Its compact solid form, which permits it to be carried where it is impracticable to carry smelling salts, as in shopping, motoring, or traveling on train or boat, gives it a peculiarly strong appeal to women. In fact, it can be as easily carried by a woman in her waist or bag as a powder puff and it takes up no more room. It is put up in an attractive, attention-getting display carton which carries twelve stick packages, each of which retails for 25c. With each order for a dozen, the dealer is furnished a liberal supply of sales stimulating folders in three colors, and a display card. Frozoclone costs \$2 a dozen and insures the dealer a good profit.

NEW RETAIL PRICE GIVES LARGER PROFIT

Notwithstanding the retail price of Pinex has been increased to 60 cents, the manufacturers state that the druggist will continue to make his customary percentage of profit, in fact, the higher retail price will mean a larger profit to the druggist on each bottle. They also state that although advertising costs have increased greatly in the past year, Pinex will be more heavily advertised than ever this season, and as usual, the advertising will begin early in October and continue through the winter and into the spring. The manufacturers give the druggist the privilege of returning any unsold bottle for credit at any time, and stock can be obtained promptly from any wholesaler.

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DRUGGISTS AND THE WAR REVENUE TAX

In the operation of the War Revenue Tax law, part of which became effective on October 4, other provisions becoming effective on November 2, druggists will find that their share in the taxation is a big one and that the taxes imposed under the new law will strike them hard. More than any other measure, the enforcement of this law will bring home to the consciousness of the people the realization that the country is at war and that to pay for it will require the assistance of every individual whatever may be his status in the community. The druggist as a good citizen, however, will do his best to live up to the law and the regulations that may be issued for its enforcement, not only in the hope that the right of democracy to live may be vindicated, but that with the return of peace he will experience greater opportunities, better business and—lower taxes.

As a revenue measure, the new law is the most complicated piece of legislation ever put on the statute books, and considerable study is necessary to determine just what certain parts of the new law mean and when the taxes provided thereby are to apply, as well as where they are to be imposed. Specifically the law imposes a tax of 2 per cent on the manufacturer's selling price on all proprietary medicines, perfumes, cosmetics and all preparations prepared by any formula whatsoever and for which any remedial claims are made; a tax of 2 per cent upon all chewing gum or substitute therefor, to say nothing of the tax on soda water and soft drinks, tobacco tax, etc. The druggist will also be materially affected by the new postal rules effective on and after November 3, and which increase the rate on domestic letters from 2 to 3 cents and postal cards from 1 to 2 cents. Then he will be subject to the new income tax, which applies to net annual incomes of \$1,000 or over for unmarried and \$2,000 or over for married persons; to an excess profits tax, stamp taxes on business paper, and taxes on transportation, telephone and telegraph messages, parcel post packages, admissions and dues, in fact almost everything within the activities of a highly civilized nation.

It is to be expected that in most instances the consumer will be made to pay the freight, and as a result, manufacturers whose products are taxed will raise their prices to cover the additional expense. Higher retail prices will prevail, and the cost of doing business will be much increased. If there ever

was a time in history when the druggist should know costs and prices, that time is now. Troublesome and vexatious as some of the requirements of the new revenue law may be, they will do more to create a business man out of the average druggist than any other means that could be suggested. If the druggist failed to prepare an annual inventory of his business in past years, his failure to do so could be attributed to lack of foresight and business initiative. To make his returns to the collector for income tax purposes he must prepare such an inventory now. This requirement, exacting as it is, and representing added expenditure, has in it one of the essential elements that make for self protection and good business.

THE QUEST FOR CHEAPER POTASH

The search for a cheaper and more economical method of recovering potash from the various mineral and organic substances known to contain it has been diligently pursued by chemists and inventors ever since the importation of this important alkali and its compounds from Germany ceased, now more than three years ago. Investigators and research workers have repeatedly tackled the problem, the satisfactory solution of which would place our country in an independent position as regards future supplies of this much needed substance in our industries and particularly, in the manufacture of fertilizers. Feldspathic rocks, alunite, salt deposits, etc., all of which contain potash, have been worked with more or less success, but the secret of production from these sources on a commercially profitable basis under normal conditions has so far proved an unsolved problem.

Occasional newspaper despatches, however, seem to indicate that some progress is being made, recent reports stating that after almost three years of tireless effort, British ingenuity has discovered a new way of obtaining potash. According to Sir Stephenson Kent, head of the British munitions mission now in this country, who was interviewed in Chicago a few days ago, "the process is to extract certain deposits in the fuels burned in blast furnaces by means of machines that have been invented for the purpose. The cost of these machines will be infinitesimal, and at the same time we shall be entirely independent of Germany in the future so far as potash is concerned. The discovery, of course, is also of great value to America."

Among the direct benefits which Sir Stephenson enumerates the discovery will confer upon his country is that it will enable British manufacturers to make certain kinds of optical goods which before the war were supplied by Germany exclusively, such as camera lenses, eyeglasses, binoculars and related articles. Similar demands for potash have existed and now exist in this country, and our necessities have compelled the utilization of many sources that heretofore have been unprofitable to work. Kelp, feldspar, and the deposits of the lakes in the State of Washington have all figured in the limelight, as contributing something to relieve the situation, but with none of these has it been possible to reduce the cost of

extraction to the basis indicated in the British representative's interview. His statement, therefore, that the new process will be of great value to America, is encouraging. One only has to study the statistics of importations before the European war to realize the great demand for potash and its salts in this country. Their use is essential to numerous industries that are vitally connected with the welfare of the American people. Relatively the quantity consumed in the manufacture of pharmaceutical chemicals, while important, is insignificant, as compared with the tons used in the fertilizer industry, the manufacture of explosive powders, alums, cyanides, bleaching powders, dyestuffs, and the chemical industries generally, but pharmacists are all interested in any process or method that will lower the cost of important chemicals and contribute to the industrial advancement of their country.

POSSIBILITIES OF DRUG PLANT CULTURE

All who attended the recent meeting of the American Pharmaceutical Association at Indianapolis and listened to the symposium of experiences and opinions there presented relating to the development of a real industry in growing medicinal plants in this country, must have had their eyes opened to some of the problems involved in such an undertaking. Not that success would come to a few who might become engaged in the work, for that has already been demonstrated; but for the many, the conditions under which they could or would operate are so varied and the consumption of the product harvested so limited, that the commercial possibilities of a large number of men engaged in this kind of work and winning remunerative returns would be far from satisfactory.

In no sense can such crops be compared with the harvests of grain producing plants or other agricultural produce upon which the sustenance of the world depends. Considered by itself, the growing of medicinal plants is but a small sector in a very large area of farming activities. The possibilities for a large group of investors and workers in this restricted field are therefore limited, and farmers as a class are not apt to find in such tillage the encouragement or promise of financial returns that are likely to result from the cultivation of staple food or industrial crops. The shortage of many crude drugs heretofore received from Europe and our necessities for them have served to throw a glamor over the possibilities of this particular division of industry that would outrival the imagination of the author of the famous phrase, "there's millions in it," but when the cold facts as presented by the expert and economist are studied, particularly as the data relate to consumption under normal conditions, the conclusions give no support to such vagaries. That the average individual with a plot of ground can become a man of affluence by utilizing his soil and labor in growing medicinal plants is highly improbable.

Upon the other hand, the evidence is positive and certain that the industry can be profitably followed by a few men who are trained for the work, for it is a business in which only the specialist can de-

velop to the greatest extent. Such an individual must have knowledge and experience that will enable him to co-ordinate climatic and soil conditions with problems of commercial distribution and world consumption, if he would win the greatest financial returns for his investment and labor. The present abnormal shortage and the stories of fabulous prices that have been paid for many botanical drugs may lure many to entering this highly specialized field of endeavor. Some of those who do so are bound to be disappointed, and most of them will be eliminated on the return of the world to peace and normal conditions. From those who are left, advancing as they must under the complex conditions of this much disturbed period in our history, there will be evolved a new and numerically small class of specialists and farmers who will be fully competent to grow all the medicinal plants the climate, soil, and commercial conditions of our great country will permit.

ILLUMINATION OF DRUG STORES

Drug store lighting is a subject which should appeal to every pharmacist. The artistic effect of a brightly illuminated store has a pulling power on customers that too often has been entirely overlooked by the average proprietor. Experience in merchandizing goes to prove that success in this direction depends considerably upon artistic interiors, and to produce this effect an efficient lighting system is necessary. Proper illumination tends to correct eyestrain, enabling the salesman to properly show goods, and thereby contributing to successful selling. Readers of the ERA will find in this issue a most instructive article on the subject by an expert, and the hints and suggestions he gives for hygienic and efficient lighting of drug stores are worthy of perusal.

THE ERA FOR 1918

There has developed in this country since the beginning of the European war an active and real demand for frequent information relating to drug markets, prices, and news of business life and merchandizing. A most important element in the dissemination of such information is timeliness, and within its limitations, the ERA has done the best it could to supply the most pressing demands. But from the very nature of its handicap, a monthly journal could not adequately cover the market and merchandizing side of the drug business as these should be done, and this knowledge has prompted the publishers of the ERA to establish a new journal to be called *Drug Trade Weekly*, the first issue of which is announced to soon appear. As its name indicates, the new journal will publish complete price information and general trade and merchandizing news, its aim being to help druggists handle their business on modern up-to-date lines.

The ERA will be continued as a monthly publication but devoted almost exclusively to technical and legal information and news of the colleges and associations. The market reports, prices current, general drug news and trade features pertaining to the merchandizing side of the drug business will be transferred to the new weekly, while the ERA,

assisted by an eminent corps of associates will endeavor to supply its many thousands of friends and readers with a strictly high-class and exclusive pharmaceutical magazine. The outlook for practical scientific pharmacy in this country presents a widening horizon to those who are working for improving the status of the pharmacist in the Government service, and the close of the war may see the pharmacist a real professional man. Modern progress demands such pharmacists and to the effort to keep in the van of this progress the ERA for 1918 will devote its best energies.

PROFESSOR CHARLES CASPARI, Jr.

In the death of Professor Charles Caspari, Jr., American pharmacy loses a most distinguished son. Successful in all of his undertakings, he embodied in his many-sided personality an aptitude and knack of doing things, any one of which, if it had been undertaken and accomplished by the specialist working in a narrow field of operations, would have been sufficient to earn a noted and honorable reputation. But his life work was built upon broader lines, and his activities followed as many ramifications as the knowledge that goes to make up the modern science and art of pharmacy. In this wide domain Charles Caspari was representative of American pharmacy at its best. If, as Goethe said, "man alone is interesting to man," then the story of this master pharmacist's life should be intensely suggestive of the possibilities that lie within the reach of every young student of pharmacy who will take advantage of the opportunity to acquire knowledge, thereby elevating and broadening himself, as well as the profession with which he is identified.

For years Professor Caspari was active in the American Pharmaceutical Association, and the work he did as general secretary earned for him the thanks and commendation of the entire membership of that organization. As author, teacher and State official, he came in contact with interests representing wide activities in the world's work, and in every instance he proved himself more than equal to the responsibilities of the undertaking. Throughout his entire career he did much to diffuse his share of human knowledge, and the future will surely find his name in the front rank of the pharmaceutical leaders of his time. Great knowledge, modesty and courtesy are rarely found combined in a single individual, but as we knew him, these qualities were all exemplified in the life of Professor Caspari.

Recent work has revealed the fact that American digitalis is as potent and valuable medicinally as any that was heretofore imported from Central Europe. It has been found that the digitalis plant growing wild in Oregon and Washington needs only harvesting and collecting to be of great assistance to war medical work, and the supply that may be thus obtained is deemed of importance by the Council of National Defense. Reports from various university centers and experiment stations in the two States named indicate a promising field for growing certain kinds of medicinal plants in that region.

BOOKS REVIEWED

THE PRESCRIPTION, therapeutically, pharmaceutically, grammatically and historically considered. By Otto A. Wall, Ph.G., M.D., professor of materia medica, pharmacognosy and botany in the St. Louis College of Pharmacy; Member of the Committee for the Revision of the Pharmacopoeia of the United States, 1880-1890 and 1890-1900, etc. 4th and revised edition. 6 x 9, 274 pages, cloth, \$2.50. St. Louis, C. V. Mosby Company.

Some modernists have averred that prescribing is a lost art, but the preponderance of evidence shows that it is not, although some druggists may believe that they do not fill as many prescriptions as in days gone by. The prescription may not drift into the drug store in some localities as it once did, but the doctor does just as much prescribing as he ever did, even though he does dispense his medicines, and this work presupposes that he formulates a prescription whether he reduces it to writing or not. All through recorded history the prescription has occupied an important place in the practice of medicine, and to many laymen, it was the tangible evidence of what he had paid his physician for, hence his oft repeated claim of owning the same, a claim which in many instances has never been satisfactorily settled in this country.

From every point of view this book is the most exhaustive work on the subject, outlining very fully what the prescription was, is, and should be, taking up in logical sequence the meaning of "prescription," simple and compound prescriptions, weights and measures, language, extemporaneous prescriptions, history, etc., and an appendix in which are intelligently set forth many interesting facts concerning the survival of early superstitious practices as shown in the use of the "recipe sign" as now employed, the little cross-stroke at the tail-end of the character being, according to the author, centuries older than the use of either the word "recipe" or the simple letter "R." We shall not attempt to follow the author in this most interesting account of the evolution of the prescription sign as we now know it, for the reader should consult the text himself if he would become cognizant of the vestiges of an earlier age that still linger around and are suggested in the present day use of this character. Latinity, incompatibilities, influences modifying the action and use of medicines, compounding, etc., are all discussed, and there is scarcely a point relating to the prescription that is not touched upon somewhere in this book.

HANDBOOK OF PHARMACOGNOSY. By Otto A. Wall, M.D., Ph.G., professor of materia medica, pharmacognosy and botany in the St. Louis College of Pharmacy; member of the Committee for the Revision of the Pharmacopoeia of the United States, 1880-1890 and 1890-1900; one of the authors of "Companion to the United States Pharmacopoeia," etc., etc. 4th edition, revised and enlarged. 6 x 9 inches, 629 pages, cloth, \$4.50. St. Louis, C. V. Mosby Company.

Pharmacognosy, according to the author of this book, is the knowledge of drugs, while drugs are the organic substances used in medicine and in the arts in the crude form in which they are brought into trade. To go a little deeper into the subject, "pharmacognosy teaches us how to recognize or identify drugs and how to determine their quality." Of course, to attain the knowledge and ability that will enable the student to become an expert pharmacognosist, call into service the knowledge of a wide range of related subjects the use of which, however, in its application, furnishes the means to arrive at the conclusions and record the data expressed under the general title "pharmacognosy." We have then, in this book, a presentation of the main facts which cluster around the "skeleton" of the science of pharmacognosy, particularly those which the student should make an effort to remember. But historical details that are not necessary in recognizing crude drugs are not made prominent, and only sufficient of the structure to enable one to identify the drugs is given, this usually being "all that is necessary or of direct practical use in pharmacognosy."

In studying individual drugs the following points are considered in this order: Name, origin, habitat, description [shape, size, color, fracture, structure (coarse, microscopical), odor, taste], constituents; uses, action and dose. This arrangement was first employed in this coun-

try by Maisch more than a generation ago, and it was generally successful as suggesting to the student the order and character of the information he should assemble in the study of a given drug. This method of study is applied to each drug, the drugs themselves being classified according to physical characteristics, viz., animal or vegetable, a further subdivision being based upon whether the drugs in the classes named show cell-structure or not. Following this classification to its logical conclusion we have a system of 82 groups in each of which may be found all drugs showing similar physical characteristics. The author's plan is an admirable one in that it enables the student to quickly get a comprehensive view of the whole field of pharmacognosy, particularly as it relates to the question of identification, etc. Previous editions of this book have been greatly appreciated by teachers and practical pharmacists, and we are very sure this volume, with its hundred; of illustrations will continue to hold a place in this specialized division of pharmaceutical work.

CANDY MEDICATION. By Bernard Fantus, M.D., professor of pharmacology and therapeutics, College of Medicine, University of Illinois, Chicago. 5 x 7 1/2 inches, 82 pages, cloth, ill., \$1. St. Louis, C. V. Mosby Company.

For a number of years the author of this book has strongly advocated the candy form of medicaments for children, to whom this form strongly appeals when most other forms are rejected, his several papers on the subject heretofore published in various journals demonstrating his specialization in this particular field. In order to make this form of medication more generally available, the main facts of Dr. Fantus' study are presented under the above title, the chapter headings being in the following order: Historical introduction; *tabellae dulces*; the uses of sweet tablets; the making of sweet tablets; the tablet machine; the construction of formulae for sweet tablets, choice of flavor, subduing of tastes, choice of color; formulae for the preparation of sweet tablets; formulae for stock preparations; references, index.

With this book as a guide, the retail pharmacist has at command information that will help him in turning out medicaments in candy form. The formulae are all workable and typical of all medicines suitable for such kind of administration, including concise directions on the care and use of the tablet machine so that the pharmacist can prepare tablets of this character without difficulty. Dispensing pharmacists will do well to add this little volume to their working libraries.

ELEMENTARY LESSONS IN LATIN. By Otto A. Wall, M.D., Ph.G., professor of materia medica, pharmacognosy and botany in the St. Louis College of Pharmacy; Member of the Committee for Revision of the Pharmacopoeia of the United States, 1880-1890 and 1890-1900, etc. 2nd edition. 6 x 9, 148 pages, cloth, \$1.50. St. Louis, C. V. Mosby Company.

A new edition of this book is evidence of its popularity, the elementary principles of the Latin language therein employed, being quite sufficient, the author states, to enable the student to read the Latin edition of the German pharmacopoeia, which is as much Latin as is necessary for the pharmaceutical or medical student. In this book the grammar, vocabularies and reading exercises are separate, the idea being that in this way the student will be better able to fix in his mind the essentials of the language without the confusion which results from having grammar, vocabularies and exercises promiscuously intermixed. For pharmacy students who have had no training in the mysteries of Latin, the text is well adapted, so that they may get a fair understanding of the language, even without a teacher, as the book is intended for self-study, if necessary.

Proceedings

Thirty-third Annual Convention of the Minnesota State Pharmaceutical Association, held at St. Paul, Feb. 13-15, 1917. Included as an appendix is a stenographic report of the Dean Wulling Testimonial Dinner given under the auspices of the Northwestern Branch of the A.Ph.A. at the Elks Club, Minneapolis, May 4, 1917.

Official Proceedings of the Texas Pharmaceutical Association, held in San Antonio, Texas, May 15-17, 1917.

Proceedings of the Thirty-ninth Annual Meeting of the Missouri Pharmaceutical Association, held at Excelsior Springs, Mo., June 12-15, 1917.

The Lighting of Drug Stores

By R. E. HARRINGTON

DOES advertising pay? A majority of the readers will at once answer in the affirmative, for its value is fully recognized. Why then do many store managers neglect the advertising value of a well lighted store? Consider, for instance, two stores in the same block; one well lighted and the other with inadequate illumination. If a careful check be made of the number of patrons entering each store during any given evening it will be noted that the majority will enter the well lighted one. This is not a theoretical statement but one that has been borne out by accurate investigations. Light has powers which draw people to it.

This article will discuss the equipments that are suitable and the methods of employing these to secure the best results for drug store lighting.

Efficient Lamps a Necessity

The Mazda lamp has become the most universal illuminant due to its economy, flexibility and pleasing color of light. It is the most efficient incandescent lamp on the market. In other words, more light is received for a given cost than with other types of incandescent lamps. Being made in a range of sizes from 10 to 1,000 watts for use on standard lighting circuits, it is possible to secure any desired results. Furthermore, all accessories, such as sockets, etc., have been completely standardized so that any required changes may be readily made. The color of the light is a nearer approach to daylight than that received from the older types of incandescent lamps. Because of this, goods on display show up more nearly in their true colors.

Mazda lamps may be divided into two classes: Mazda B and Mazda C. Both classes employ, as the light giving element, drawn tungsten wire. In the Mazda B lamp the filament is placed in a glass bulb which has been evacuated. In the Mazda C lamp the filament, which is first wound in the form of a spiral, is placed in a bulb which is filled with an inert gas. The Mazda C lamp is more efficient in producing light than the Mazda B, due to the introduction of this gas. The larger the size of the lamp in watts the more efficient it becomes. Mazda B lamps are employed in sizes below 75-watts, while the Mazda C lamp is used in sizes from 75 to 1,000 watts.

Reflectors a Factor in Illumination

In order to secure the best results from these lamps it is essential that they be equipped with the proper type of reflector for any given proposition. If an examination be made of the manner in which the light is distributed about the lamp, it will be found that the maximum is at the horizontal. Obviously this is not the most ideal condition, as the light is usually required on a plane below the lamp. The light may readily be re-directed by means of suitable reflectors placed about the lamp. Furthermore, the reflectors act as a shield to the eye by hiding the bare incandescent filament from view, a most important consideration.

Various Types of Reflectors Used

Reflectors are of various types for use in the following systems of illumination; direct, semi-indirect and totally indirect.

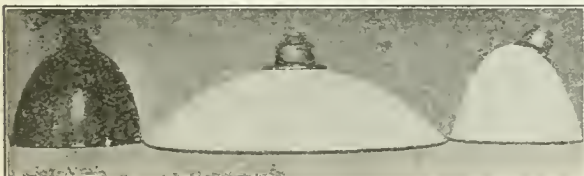


Fig. 1—Characteristic Shapes of Steel Reflectors.

In direct lighting the reflector is placed above the lamp, thus directing the light downward to the plane to be lighted. This group of reflectors may be divided into two classes—steel and glass. Although steel reflectors are not particularly applicable to the store proper, they are used for the lighting of the receiving and shipping rooms. They are made in a variety of shapes as shown in Fig. 1, and their reflecting surfaces are usually either matt aluminum or porcelain enamel.

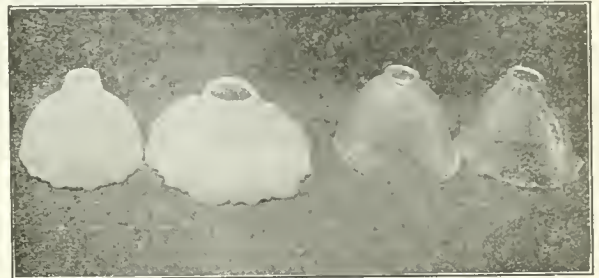


Fig. 2—Typical Opalescent and Prismatic Glass Reflectors.

Glass direct lighting reflectors are classified as prismatic and opalescent. The prismatic reflectors are more efficient in reflecting the light than the opalescent reflectors, although not as decorative in appearance. Typical reflectors of these two groups are shown in Fig. 2.

Prismatic reflectors can be designed to re-direct the light in any manner desired. It is possible to secure either a comparatively narrow beam of light to illuminate a small area, or a wide spread to the light to illuminate a large area. Any degree of concentration desired between these two limits may be readily secured.

With the opalescent glass reflectors, however, it is not possible to secure as accurate control of the light. This type of reflectors usually gives a fairly wide spread to the light. The opalescent reflectors are considered by many to be much more decorative than the prismatic, and are available in a great variety of designs and shapes.

Reflectors for semi-indirect lighting consist of a translucent bowl placed below the lamp. A majority of the light from the lamp is directed to the ceiling and is then reflected to the plane to be lighted. A smaller portion passes directly through the glass bowl to the plane of illumination.

There are two general types of semi-indirect units. One consists of several pieces of glass formed to the desired shape and held together by means of metal bands, the other consists of one piece of opalescent glass pressed or blown to the shape desired. This group of units accommodates either one Mazda lamp pendant, or several lamps in a horizontal position.

In totally indirect illumination the reflector is opaque and is made either of enameled steel or mirrored glass. All of the light from the lamp is reflected upward and is then re-directed to the plane of illumination by the ceiling and walls.

In order to secure the maximum efficiency with the semi-indirect and totally indirect systems of illumination, it is essential that the ceiling be finished in a light color, preferably white or light cream. Although the indirect systems of lighting are naturally less efficient than the direct, yet they possess such decorative value, and give such good diffusion to the illumination, that they are becoming more and more popular with each increase in efficiency of the lamps which, of course, reduces the net cost of operation.

General Considerations for Interior Lighting

Drug stores require almost as much illumination on side walls and shelves as on the counters, for the goods on display on these shelves and in the cabinets must be

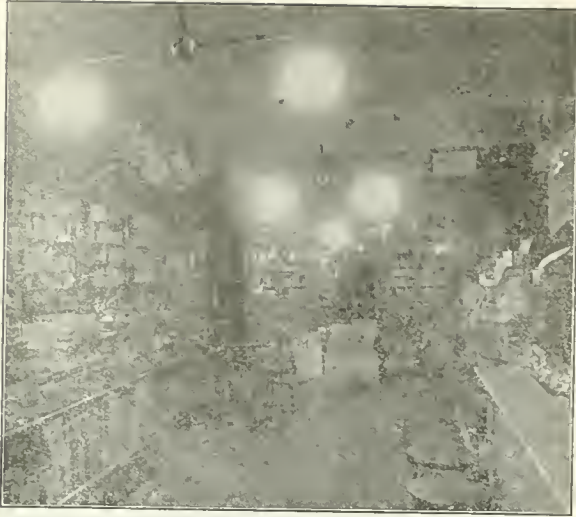


Fig. 3—Drug Store Lighted by Single Row of 2-arm Fixtures, Using Mazda Lamps and Prismatic Reflectors.

clearly shown. This may be secured by any of the methods of illumination mentioned previously if proper care be taken in the selection of lighting units and installation of same.

If the store is of medium width (20 feet), two rows of lamps using direct lighting reflectors, which confine the light to comparatively narrow angles, will meet the requirements. As an alternative, a single row of outlets down the center of the store, employing multi-light fixtures with wide arms, will be satisfactory.

In stores narrower than the above one row of single units down the center of the store will give the required results. Reflectors giving a wide spread to the light



Fig. 4—A Drug Store Using Mazda Lamps equipped with Opalescent Glass Enclosing Globes and Flat Steel Reflectors.

should be used. All of the Mazda lamps for use with direct lighting reflectors should be bowl frosted.

An investigation of this class of stores using the direct system of illumination showed that approximately 1.25 watts per square foot of floor area should be employed.



Fig. 5—A Well Lighted Drug Store Using Mazda Lamps and Semi-Indirect Reflectors. You Will Note the Evenness of Illumination and Absence of Shadows.

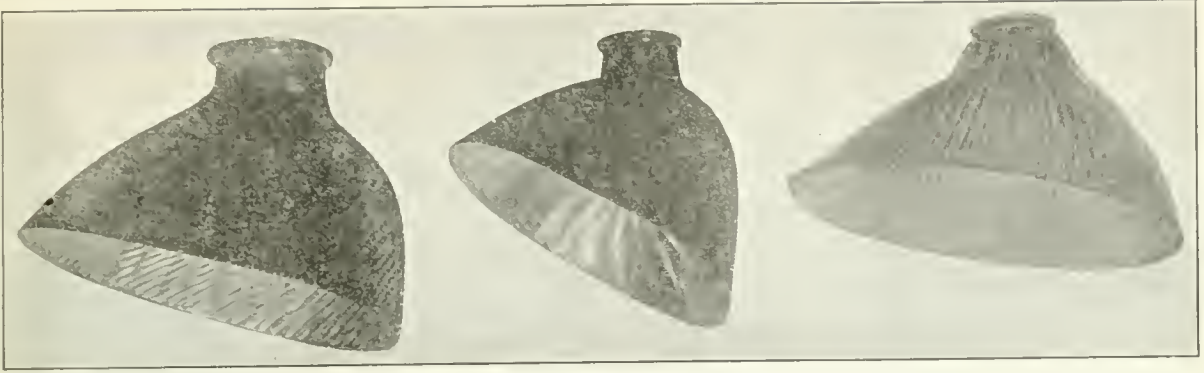


Fig. 6—Three Types of Reflectors Applicable to Show Window Lighting.

In Fig. 3, is shown an example of the use of a single row of multi-arm fixtures down the center of the store. Bowl-frosted Mazda lamps are used equipped with prismatic glass reflectors.

The lighting of many of the smaller classes of drug stores which formerly used a single row of multi-arm fixtures down the center of the store has been changed to the use of a semi-indirect unit at each of the outlets. Although a slightly higher wattage is required for this method than with direct lighting for the same illumination, this is offset by the better general appearance of the store.

The drug store shown in Fig. 4 is lighted by Mazda lamps equipped with opalescent enclosing globes with a rather shallow reflector above the globe. This particular type of unit re-directs the light in such a manner that the side walls, shelves and show cases are well illuminated.

Where the stores are wider than those mentioned and illustrated above, the method of lighting as described, i. e., a single row of units, is hardly applicable. This class of stores may be divided into squares and a lighting unit located at the center of each square.

The semi-indirect system of illumination has come into quite universal use for this particular class of drug stores. Foster's drug store, Newark, N. J., shown in Fig. 5, is a good example of the application of this method of lighting. Good illumination is secured on the shelves and counters. The light is well diffused and the store presents a very pleasing appearance.

Windows Should be Properly Lighted

As the windows are the part of the store which first attract the customer, it is essential that they be properly lighted. The window display may be exceedingly at-

tractive, but unless correctly lighted will lose much of its value at night.

Store windows may be divided into two groups, open and boxed in.

Open windows are virtually a part of the store proper and the units used to light them should be in keeping with those used to light the store. Usually the front portion of the store depends for its light, to a great extent, on the window lighting units. These are usually located in the center portion of the window ceiling.

In boxed-in windows the method of lighting is different than in the open type. Mazda lamps with the proper reflectors should be located at the front upper edge of the window. They should be so pointed that the maximum light will be directed to the back lower corner of the window. Typical window lighting reflectors are shown in Fig. 6. A valance or painted sign should be placed between the reflectors and glass of the window in order that the lighting units may be hidden from the pedestrians. With opaque reflectors such as steel or mirrored glass, the valance is preferable. With translucent reflectors of the prismatic glass type, however, the light transmitted through the reflector may be utilized to illuminate a sign painted on the window, thus offering a means of advertising.

In closing, an analogy may prove useful in bringing out more forcibly the value of a well lighted store. Consider a garden in which all the flowers are of the same kind and of equal beauty. A person entering this garden will naturally pick the ones nearest at hand, as no one flower stands out in contrast to the rest. This is exactly the same condition that would be secured if a city block was made up of the same type of stores with equally attractive lighting. As there is no difference from an outward appearance, a person will naturally enter the one nearest at hand.

Supposing, however, that the garden is filled with a large variety of flowers, the most beautiful being farthest away from the entrance. One wishing to pick flowers would naturally be attracted to those beautiful ones at the far side of the garden. This is exactly what happens in a given city block where there is a marked difference in the illumination of the stores. A person entering the block at night will at once be attracted to the one that has the best illumination. In other words, good illumination is an advertisement in that it brings to the attention of the public the location of a given store; a customer will go out of his way to patronize the well lighted shop.



Fig. 7—A Well Lighted Window Using Mazda Lamps with Mirrored Glass Reflectors Located at the Front Upper Edge of the Window.

CHICAGO DRUG CLERKS ELECT OFFICERS

The Chicago Drug Clerks' Association held its fourteenth annual meeting at the Hotel Sherman, Chicago, and selected the following officers: President, Richard Voge; vice-presidents, Otto H. Mentz, J. F. Forbrich and John A. Peetz; recording secretary, H. A. Yates; financial secretary, J. M. Schwalbe; treasurer, C. M. Abrahamson; sergeant-at-arms, O. C. Buss; chairman entertainment committee, Dr. M. H. Pritchard.

The U. S. P. IX for the Drug Chemist*

By H. C. FULLER

I HAVE been asked to discuss the ninth revision of the United States Pharmacopoeia from the standpoint of a chemist. I presume that in presenting my observations I may be permitted to give expression to the thoughts which come to one who has been associated with the chemical features of drug problems in a broad sense including analytical, standardizational and forensic. I feel that I am pretty well acquainted with the Pharmacopoeia as a working unit after over fifteen years of almost daily contact with the seventh and eighth editions, and from the study I have already made of the ninth and latest edition of the work. My association with the Pharmacopoeia is not a literary or a second-hand, critical, chemical study, but an intimately practical one in everyday work, and during the last nine years I have been able to see at first hand its applicability in relation to chemicolegal problems.

I know nothing of pharmacopoeia politics and am not, and never have been, concerned with anything but the finished work and what it embraces. Hence I can look at it from that standpoint. As a result of my experience the test of the Pharmacopoeia is an intensely practical one. It is the signal test of usage. This test lies entirely in its working value—as it elucidates the definite problem of the moment, either analytical or descriptive. In proportion as it is thus applicable and serves to indicate or clarify the immediate method of procedure or the description of the substance under investigation, in such measure is it a significant factor in my work, and I think I can state with authority, in such measure is it of real and lasting value to the pharmaceutical and medicinal chemist.

Pharmacopoeia the Working Unit

The Pharmacopoeia is the authority to which one turns both for standards and for methods of analysis. It is the working unit for the drug and medicinal chemist. Now what is the scope of the ninth revision from the point of view of the drug and medicinal chemist?

The Food and Drugs Act states "that the term 'drug' ** shall include all medicines and preparations recognized in the United States Pharmacopoeia or National Formulary for internal or external use and any substance or mixture of substances intended to be used for the cure, mitigation or prevention of disease of either man or other animals." Now the first thing that strikes the critical eye of the chemist in looking over the 782 articles recognized in the text of the new edition of the Pharmacopoeia is the fact that about 10 per cent. of these articles do not answer the definition of drug as given above but are more strictly speaking chemical reagents, intermediates, condiments, flavoring agents, perfumes, mechanical solvents, vehicles and binders. Thus we have well-defined standards for sulphuric, hydrochloric and nitric acids, aqua regia, sodium indigotinsulphonate, zinc metal, cochineal and red saunders; for lead oxide, bleaching powder and silver oxide; for sugar, caraway, coriander, fennel and mustard seeds, cinnamon, vanillin and nutmeg; for orange flower water, rose water, lemon peel, red rose petals, tincture of lavender and oils of orange, caraway, coriander, fennel, lavender, lemon, spearmint and rosemary; for benzine (petroleum ether), water, acetone and paraldehyde; for starch, gelatin, glucose, honey, paraffin, suet, talc and infusorial earth. Others might be mentioned. The drug chemist asks himself if any one of these substances comes within the scope of the definition of drug as given in the law. It is doubtful if any of the above substances have any extended use as internal or external mitigants or preventatives of disease. Objection will at once be raised to my attitude because of the fact that some of the chemicals mentioned above are employed in the preparation of other chemicals used in medicine, but the manufacture of chemicals is a commercial proposition, and the maker of ammonium chloride, for instance, is not concerned with the employment of a strictly U. S. P. standardized hydrochloric acid.

Furthermore, one of the general principles laid down by the committee of revision was to the effect that the standards of purity and strength prescribed in the text of the Pharmacopoeia are intended solely to apply to substances which are used for medicinal purposes. Standards for condiments and flavoring oils have been adopted by the authorities administering the food sections of our National and State Acts, hence the user of these commodities is now amply protected from any sub-standard or spurious articles.

Now please do not misunderstand my position with regard to the inclusion of a considerable number of reagents, intermediates, condiments and flavors in the text of the Pharmacopoeia. I am not objecting to their being included but the significance of including all these substances which are not drugs and medicines is somewhat obscure when a much greater number of important and valuable drugs have not been recognized or have been deleted. If substances such as sulphuric acid, nitric acid, bleaching powder and metallic zinc are included, why omit aniline and benzol which are the basic substances of a vast number of medicinal chemicals as well as iron oxide which is used in the coating of dark-colored tablets?

Deletions of Botanical Drugs

Again, since there have been included so many reagents, intermediates, condiments and mechanical agents, why was such a large number of botanical drugs of well-established therapeutic value omitted or deleted? For one who uses the Pharmacopoeia as a working unit this is a question of important and serious moment. Let us examine the list of deletions of this class of drugs. Among them are included:

Anthemis	Cypripedium	Pareira
Apocynum	Euonymus	Phytolacca
Berberis	Eupatorium	Prunum
Calamus	Ficus	Quercus
Calendula	Geranium	Quillaja
Cassia fistula	Hamamelis leaves	Rhus glabra
Chimaphila	and root	Rubus
Chirata	Hedeoma	Salvia
Coca	Horehound	Santonica
Conium	Krameria	Sassafras pith
Convallaria	Lappa	Savine
Corn silk	Leptandra	Scoparius
Cotton root bark	Lupulin	Scutellaria
Cusco	Matico	Viburnum opulus

What per cent. of the total deletions do these products and their preparations represent? Thirty-five per cent.

These botanical drugs have been used as medicinal agents for a great many years. Their value has been demonstrated over and over again by medical usage. The fact that they and the popular remedies containing some of them have withstood the test of years, and, in spite of the derogatory campaigns directed against them, have continued to grow in popular esteem, is in my mind a significant point in their favor. Nature in her omnipotence has well supplied man with everything he needs for his comfort and advancement; development only has been needed to make it available. Why should we doubt that nature would fail to supply man with the agents for combating the diseases to which he is subject? The development of drug chemistry during the past decade has demonstrated that the botanical drugs, which have been used more or less empirically for many generations, possess new and hitherto unexpected chemical individuals and the discoveries in the field of phytochemistry are destined to assume greater and greater importance. In the case of our natural drugs it has been demonstrated over and over again that no one ingredient is the cause of the therapeutic activity of the individual conglomerate. The classical work of Dr. F. B. Power and his associates has increased our knowledge of the chemical composition of many well-known botanical drugs. The work of unraveling the constituents of our North American drugs has hardly begun, and as Dr. Power recently stated at a meeting of our chemical society, this field is one of the most attractive to the organic chemist at the present time.

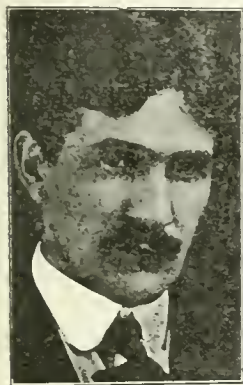
(To Be Concluded in the December ERA.)

* Address delivered before the Washington Branch of the American Pharmaceutical Association. Reprinted from the Journal of the A. Ph. A.

Commercial Problems in Pharmacy*

By P. HENRY UTECH, Ph. G., Meadville, Pa.

WE are met today under conditions most unique in our Association's history. The prolongation of the European War into its fourth year of combat has affected every phase of our business and social life. With the declaration of our own country, a few short



P. HENRY UTECH

months ago, to enter the war, our personal interests have become more directly involved in the great world conflict, thereby entailing added burdens and responsibilities on our fellow-workers. As this is being written Congress is debating the question of imposing a war-tax on many articles usually sold by the pharmacist. An additional tax on alcohol is also to be imposed. The prices of drugs and chemicals, already excessive, are mounting higher and higher, while profits are coming downward. These problems, coupled with the increased cost of doing business; the scarcity

of help; slow delivery of goods; the legislative restrictions in many states; cut-rate and chain store competition—are not a very hopeful augury for the immediate future of the pharmacist.

However, amid all the confusion and chaos of business conditions in recent years, as pharmacists we have been signally favored through the timely operations of the Pure Food and Drugs Act. The wisdom of having an efficient Federal Food and Drugs Act in successful operation during such a critical period of our national life has been thoroughly demonstrated time and again. Economic conditions in Europe incident to the war have practically revolutionized the drug market, demanding ever greater vigilance on the part of those in charge at the various ports of entry. It is no exaggeration to state that no single instrument of our National Defense has been fraught with such incalculable benefit to the pharmacist; nor afforded so large a measure of protection to the public health as this specific bit of national legislation. The reasons are obvious. Consciously or unconsciously, we have grown to be a large drug-consuming nation. One of our American drug editors commenting recently on the situation calls attention to the fact that as a nation we consume more and produce less drugs than any country on the globe. For obvious reasons the cultivation and collection of drugs for medicinal uses has never been seriously undertaken in this country. In the old world, in times of peace, it is an important industry. Economic conditions obtaining in these countries at the present time have diverted this labor largely to other and more needful occupations, causing a scarcity as well as an inferiority of many of the ordinary drugs daily supplied by the pharmacists. Conditions governing the traffic and transportation of crude drugs have likewise been seriously threatened because of the exigencies of war. As a result of these numerous and varied circumstances the offerings of spurious and adulterated drugs at the port of New York during the past year has exceeded that of the five years preceding, compelling us to pay higher and ever higher prices for our supplies, with little or no opportunity for discrimination as to quality. Nor is there any immediate prospect of relief in sight.

Crude Drug Industry Offers but Little Relief

Ambitious newspaper propagandists, inspired by patriotic impulses have offered many timely suggestions. They would have us develop this crude drug industry over night. Their receipt is an exceedingly simple one. They would

have the Government furnish all necessary data and stimuli—all the farmer has to do is the work. Their enthusiasm is indeed commendable as witness the following titles taken from recent American dailies: "Profits from Drug Weeds;" "\$100. per Acre for Medicinal Weeds;" "An \$18,000,000. Herb-growing Industry Going to Waste;" etc. One particular article by way of illustration cites a specific instance of "How a certain plant which grows like a weed is cured like hay; sells at 45c per lb., which is at the rate of \$900 per ton. Under proper conditions an acre ought to average \$1,800." Now as to the facts. As pharmacists we all know that the crude drug industry offers little or no inducement for time and labor invested. That excepting under ideal methods of cultivation and propagation it is an absolute failure. In a recent article by Professor F. B. Kilmer, he states that belladonna grown by the firm of Johnson & Johnson cost in the first year \$100 per lb.; that digitalis cultivation undertaken at the Lilly Gardens costs about \$1,000 for the first few pounds. My attention has been called to a successful cultivation of cannabis indica by the Mulford Company at Glenolden, but these instances of successful plant cultivation are all unusual exceptions and afford little or no relief from the prevailing market conditions.

Business Problems Arduous and Perplexing

As suggested above, the business problems which beset the pharmacists today are both arduous and perplexing. The situation, while not a wholesome one, is, upon analysis, not altogether so depressing as appears on the surface. The crying need of the hour is a higher standard of business efficiency among pharmacists. "The times have changed and we are changed with them" reads the old Latin proverb, and the problem which chiefly concerns us as pharmacists is to adapt ourselves to the modern economic order. Today success in any enterprise—commercial, industrial, intellectual—means concentration. The advice of Dr. Samuel Johnson to an inquiring youth as to the best means to achieve success "To know something about everything and everything about something" is both pertinent and apropos. In substance it is nothing more or less than a paraphrase of the modern program of efficiency. And the pharmacist who has studied and mastered the various details of his business; who has his business well organized on system—not guess work; who keeps in touch with market conditions; who has made a study of costs and knows his exact percentage of expense—the remedy is obvious. It is a mere matter of simple calculation. The moment an item advances in the market, up goes the cost to the purchaser. It is simply the application of system to business practice. And in these days of flurrying markets and keen competition, he can ill afford to do business otherwise. He must devote more of his time to accounting, to costs, credits, and collections, so that his business may be handled intelligently, systematically, efficiently—for without an intimate knowledge of these all-important factors in his possession, he is simply steering his business barque between the Scylla of chance and the Charybdis of failure.

The Pharmacist's Peculiar Hardships

Take an illustration, the unsettled condition of the drug and chemical market at the present time. It has been an exceedingly difficult problem for the pharmacist to determine a satisfactory basis upon which to figure his profit. This variation in price has advanced in many instances to ten times that of normal. There has likewise been a very perceptible increase in the cost of bottles, corks, paper, boxes, labels,—in short every item involved in the operation of compounding has suffered an advance. And while the pharmacist may be enabled to make an increased charge for his product, nevertheless, such increase in price in no wise corresponds to the increase in cost to him for his materials. The situation is both unusual and unfortunate. It is one of the peculiar half hardships to which a pharmacist is subjected at the pres-

* Chairman's Address to the Commercial Section of the A. Ph. A., 1917.

ent time under a turbulent market and requires constant vigilance and the keenest business acumen if he is to protect his own best interests. In times like these it behooves the pharmacist to exercise extreme caution and buy only in limited quantities for his immediate needs lest he be caught in the maelstrom of declining prices once the crisis has been reached.

Pharmacists Lack Fundamentals of Business

That the average pharmacist is lacking in business essentials and pays little or no attention to the scientific management of his business is proverbially true. In proof of this statement permit me to call your attention to an analysis of business conditions as reported recently by the Associated Advertising Clubs of America. A committee of 1,700 made a nation-wide canvas in the month of November 1916, investigating six different lines of business—drugs, jewelry, hardware, grocery, clothing and department stores. The report shows an average increase in all lines (as against the same month in 1915) of 20 per cent. with the net profits of 7.8 per cent. As for the sales in retail drug stores they increased 16.9 per cent., while the profits increased but 5.5 per cent. Department store sales during the same period showed an increase of 19.2 per cent., with a net increase of 12.3 per cent. The logic implied in this analysis is simply this; that the pharmacists as a class are lacking in the fundamentals of business knowledge, while the department stores as a class are better business men by 224 per cent.

This failure on the part of the pharmacist to develop more eagerly the business side of his calling, with its opportunity for increased revenue, has been a serious handicap to his material progress. And despite the growing inroads of commercialism, it is surprising to find that we still have in our rank and file a goodly number of able and well-meaning pharmacists who maintain that professional pharmacy *per se* ought to succeed; that the introduction of specialties and side lines is debasing and unethical in practice and is a reflection on the fair name of our profession. This fancied scorn of the commercial factor in pharmacy to my mind, is wrong in principle and a grievous error. It implies that the business of pharmacy is mercenary, degrading and disreputable, as though the profession of pharmacy and the business of pharmacy were antagonistic in practice and principle. Nothing could be more fallacious—no argument more absurd. The very fundamental principles of our modern economic life demand that all business—professional, commercial, industrial—whatever its sphere, be built upon a basis of honest practice and the strictest ethics.

Commercial Factor Dominates American Activity

Nor must we forget that the commercial factor dominates every activity in our American life. It is the presiding genius of our industrial system. It is the keynote of our progress and greatness as a nation. It is not inconsistent with, but rather a necessary part of every highly specialized profession, law, religion, medicine, as well as pharmacy. This is the gist of the problem—that all business, whatever its nature, honestly conducted is ethical and honorable. And just as soon as we come to realize that the business of pharmacy and the profession of pharmacy and the trade of pharmacy, all have a common interest and purpose; that all can go along together hand in hand on noble principles and high ideals, just as soon shall we be on the high road to progress and establish our position and prestige as pharmacists in the community in which we live and serve.

Professional versus Commercial Pharmacy

There is yet another factor in connection with this business phase of our calling which deserves our earnest consideration at this time. Heretofore we have placed altogether too great an emphasis on the professional side of pharmacy, oftentimes at the expense of our more vital interests. As a result we are being confronted in America today by a peculiar anomaly. Educational requirements for those desiring to take up the study of pharmacy are gradually becoming more rigid. Conditions are making it increasingly more difficult for men and women to attain professional rank, and this, in spite of the fact that professional pharmacy is daily growing less remunerative. Statistics show that we have fewer phar-

macy colleges today than we had a decade ago, but with higher entrance requirements; that college graduation as a prerequisite to registration is already compulsory in eight states and is being seriously considered in many others. Quite naturally we are expected to follow the vocation for which we have peculiarly fitted ourselves through special training and equipment, and hence we have the unfortunate spectacle of a group of men, of professional rank, educated and specially trained for professional services to the community, but compelled by the exigencies of the situation to become tradesmen in order to earn a livelihood.

Exclusive Professional Practice Rare

Passing strange that our colleges of pharmacy had not taken due cognizance of this condition long ago. It is neither novel nor extraordinary but has existed in our midst for years. A careful survey of conditions obtaining in our country today reveals the fact that competition is keener, that business is less remunerative and that pharmacy as a distinct and separate profession is slowly retrograding. And if it be true that the pharmacy of a decade ago was 50 per cent. commercial—as one authority has stated—it is equally true that at this time this ratio has grown to 75 per cent and in the more populous localities perhaps even more so. It is likewise a fact that a pharmacy conducted along exclusively professional lines is a rara avis in America today. So far as the writer's observation goes there are less than a score of such in successful operation. Given the proper location, equipment, etc., we will grant for argument's sake there would be opportunity for as many more. But what an infinitesimal number when we consider that we have in the United States today well nigh 50,000 pharmacists with no immediate prospects of advancing their social or material welfare.

Were it possible to draw a sharp dividing line between the business of pharmacy and the profession; or if the pharmacist were legally protected in his inherent rights and privileges (as has been frequently agitated and as is being done in many European countries)—it would go a long way toward elevating the status and morale of our calling. But until such specific legislative protection is afforded us; some powers of elimination whereby we may separate the wheat from the chaff, we must continue to grapple with conditions as we find them, looking forward to the day when the justice of our cry will be heard and pharmacy and pharmacists come into their rightful heritage.

Attitude of Colleges to Economic Trend

Thus far our colleges of pharmacy have manifested an attitude of indifference toward the present economic trend of affairs and the courses offered in commercial pharmacy and business training are but an insignificant part of the work required for the degree. Our large universities, however, have long ago caught the proper spirit and instead of devoting so much time to a study of the classics, are now giving way to elaborate courses in scientific, industrial and economic subjects. Take the cases of Harvard and Yale, two of our oldest American colleges, which were founded primarily as religious institutions, the number of students taking the religious courses today is less than 4 per cent. And if these conservative institutions can commit themselves to such radical changes in their curricula it seems to me the suggestion ought to have consideration in our pharmaceutical schools and I would therefore advise that this section of commercial interests, seeking ever the professional and material welfare of the pharmacist, recommend that our colleges of pharmacy place greater emphasis on this phase of our calling and that courses in commercial pharmacy and business training be undertaken at the earliest possible moment to the end that our successors may be more adequately fitted to cope with existing conditions in pharmacy and be accorded a higher measure of esteem, as pharmacists, from the public whom we serve.

The Wyoming State Pharmaceutical Association elected the following officers at its annual meeting held in Saratoga in August; President, A. E. Roedel, Cheyenne; vice-president, N. B. Bennett, Sheridan, and John Yeager, Rawlins; secretary-treasurer, R. J. Cook, Casper. The 1918 meeting will be held at Thermopolis, on August 9.

Conserving Life By Eliminating Waste*

By ROBERT P. FISCHER, B.Sc., Phar.D.

IN April, 1916 it was the writer's pleasure to address a joint meeting of the Philadelphia County Medical Society and the Philadelphia Branch of the American Pharmaceutical Association on the subject of "How Physicians and Pharmacists can Co-operate in the Use of Available Drugs." It was pointed out at that time that the scarcity of many drugs made it necessary to look about for suitable products to replace those which were unobtainable. The suggestion was made that sodium salts be used to replace potassium salts wherever possible and that standardized galenicals be used in place of alkaloids for internal medication wherever this procedure was feasible. Since these suggestions were made our own country has become actively engaged in the great world war and the problem of conserving life has become more significant to all of us than ever before.

We have a fair example of what may be expected on the part of some of those who are in control of the necessities of life when we consider the food and coal situation. Prices have increased with the increasing demand for these products on the part of our allies and the situation has reached such a stage that dictators have been appointed by the Government to take full charge of the regulation of prices and supply.

I cite this merely to show the ultimate outcome of either speculation or improper handling of necessary articles.

Why Waste Must Be Eliminated

It is time to sound a warning to pharmacists, hospital authorities, physicians, dentists, veterinarians and all others engaged in manufacturing, supplying, dispensing and using drugs and biological products, that unless efforts are made on the part of all to eliminate waste through carelessness, deterioration or misapplication, we may be confronted with a serious situation regarding supplies of many drugs, chemicals and biological products most necessary for the conservation of life.

Fortunately, much has been done in the past three years to place America on an independent footing as regards the manufacture of medicinal products, but much more must be accomplished before this end will have been attained. The demand for certain drugs and biological products, particularly for the large armies which are being raised, is bound to be unprecedented. The civilian population will need the same medical attention as it is accustomed to in time of peace and patriotism demands that our boys at the front shall not be inconvenienced the least bit for lack of medical supplies.

Unless waste is eliminated in the handling of drug products and remedies are judiciously employed, shortages are bound to occur. Foreign governments have commandeered drugs in their countries from time to time when acute situations arose. Our country will be forced to do the same thing unless the professions demonstrate that they can handle the problem adequately themselves. Surely we do not want a Hoover in pharmacy nor do we want situations to arise which will compel the government to further regulate business.

Concerted Efforts Necessary

Such steps are inevitable however unless concerted efforts to conserve supplies of pharmaceutical and biological products are put forth. There is an inexcusable waste of biological products each year due mostly to careless ordering on the part of the retailer. Let us stop and consider for a moment that if every drug store in the United States were to return but one package of diphtheria antitoxin to the manufacturer because it had become outdated and therefore useless, approximately 50,000 packages of this valuable remedial agent would be wasted—and this while lives are being lost elsewhere for want of the product. This is but one example and when we take into consideration that there are 150,000 physicians and 15,000 veterinarians in addition to the 50,000 druggists in the United States, who use hundreds of biological products, the wastage possible, because of careless ordering, at once

assumes enormous and startling proportions. Yet such a waste would occur if a majority of the members of the professions did not stop to contemplate the results of such carelessness.

All of us must stop thinking merely as individuals and consider the significance of multiplication of individual wastefulness and carelessness. The slice of bread thrown away from one loaf seems a trivial thing, but a slice of bread thrown away in every home in the United States in one day would mean a waste of sufficient bread to feed starving thousands in another part of the world. A single package of any article, subject to deterioration, which becomes useless due to overstocking seems trivial, but when multiplied by thousands this trivial waste soon assumes formidable proportions. It makes no difference whether the pharmacist bears the loss in permitting an article to deteriorate or whether the manufacturer makes an allowance, there is nevertheless always a loss. And added to the loss of the product itself there is the loss of accessories like rubber, metal, glass, wood, paper, dyes, other chemicals, time, labor and money used in putting it up, which in these days are very expensive and in some cases rare commodities.

Practice of Returning Goods a Waste

Of course, it is impossible to foretell with absolute accuracy what the demand for a certain perishable product will be, but the careful pharmacist can gauge demands pretty accurately and waste can be reduced to a minimum by careful study of conditions. It is unnecessary, particularly at this time, to order more biological or pharmaceutical products than are needed for use in the immediate future, as supply stations of manufacturers are now so conveniently located to every section of the country that in the case of epidemics, supplies of biological products, etc., can be obtained anywhere within twenty-four hours at the very latest. It is better to take advantage of supply facilities than of the privilege of returning goods. The former is economy; the latter is waste. It is also unnecessary for pharmacists to stock the products of numerous manufacturers. It is better to investigate carefully and decide upon the most reliable manufacturer who is in a position to give satisfactory service and handle his goods exclusively than to tie up capital in the products of three or four manufacturers. Under the latter conditions the chances are that stocks will always be incomplete whereas in the former case a complete line can be carried at much smaller financial outlay.

Overstocking of supplies of all kinds in the drug store is exceedingly bad practice from a commercial point of view as well as from the standpoint of national necessity just now. The practice of hoarding supplies of products which are apt to become scarce is also a poor one from the point of view of the shrewd business man, aside from any moral consideration, owing to the uncertainty of market conditions and the uncertainty regarding the length of the war. It not only has the effect of inflating prices, but it may also serve as a boomerang and leave high-priced stocks on the hands of the retailer when normal conditions are restored.

Pharmaceuticals Subject to Deterioration

The purchase in bulk of pharmaceuticals subject to deterioration is a wasteful procedure unless there are immediate prospects of disposing of them. It should always be remembered that quick turnovers bring greater profits than "free goods" lying on the shelves for long periods.

We must not overlook the fact that every pint of fluid-extract and every package of bacterin or serum manufactured represents materials more and more difficult to procure, as well as time and labor, which, unless properly utilized represent absolute waste. In times of peace, this does not loom particularly large but under the stress of war it assumes great proportions and we must see that it is not allowed to go on.

"Doing Your Bit" means more than flying the American flag over your store. It means enlisting actively in the work of *Conserving Life by Eliminating Waste*.

* Read at the meeting of the Commercial Section of the American Pharmaceutical Association, Indianapolis, Ind., August 30, 1917.

Getting Ready for the Holiday Season

By ARTHUR PAUL

THE forthcoming holiday season is going to prove a gold mine to the energetic druggist. The holiday season holds out opportunities that seldom, if ever before, have been presented to a retail storekeeper.

It is only necessary to call one's attention to the hundreds of thousands of soldiers in the cantonments, to those in the national guard and the regular army together with the men in the navy and marines in order to illustrate this wonderful opportunity. Each man who has relatives or friends will receive souvenirs from the ones at home for Christmas. Then again there are the Red Cross units, the nurses, and so on, who also will receive many valuable gifts.

But it is going to be up to Mr. Druggist, to get busy and make plans so that he will get his share. He has got to do some hard thinking and lay his plans carefully and well beforehand while he has the opportunity and not when he will be pressed for time and rushed. For each merchant in every line of business recognizes this opportunity and is going to fight hard to try and get a little more than his share of this business. Hence it is not a problem of just having to fight your competitor, but also the merchants in nearly every line.

Go over your stock carefully and see what you have for sale that will appeal to the soldier, sailor or Red Cross nurse. Possibly the best way to do is to make a list of such articles. You can make a list of absolute necessities and another list for other necessities which can be classed as somewhat of a luxury.

Take this list and check it against your stock, see what you have that will fill each particular need. To illustrate; Suppose we get up a line of articles which will appeal to a soldier in one of the cantonments. Here's how it would look:

1st. We have talcum powder, a necessity in all branches of the service; next let us say, shaving preparations under which you would list mug, soap, stick, powder, cream and liquid. Then come shaving accessories which would include razors with safety and straight edge and also the blades; also razor strops, shaving brushes, and so on.

For his teeth there are the various forms of dentifrices, powders, liquids, and creams, and, of course, a tooth brush.

Here is an opportunity to sell a surgical dusting powder, for the soldier will find such a powder a blessing, especially in cases of severe chafing where something more healing and quicker-acting than talcum is required.

After you have made your list of articles, fill out the names of the various makers of articles which you have for sale. Then make up a handy box which will include some of each item. Of course, if tooth paste is placed in the box it is not necessary to include tooth powder also. Make up boxes to sell at various prices, say for from \$1 up. It will also be a good plan to offer packages of ½ dozen of a single product or a dozen, as many people will want to send their friends a dozen tubes of shaving cream, and so on.

The druggist should keep in mind that it will greatly facilitate the sale of such packages if all or nearly all of the goods are well known—those that have been heavily advertised. If a person sees a Christmas package the first impression is that it contains a few standard or advertised articles and the rest are "dead" ones. It is like a woman who buys a box of strawberries. She looks on the bottom of the strawberries to see if they are good all the way through. The public is instinctively skeptical of boxes and the best way to overcome this is to list the name of each article it contains, such as ½ dozen Menner's Shaving Cream; 1 Rubberset brush; 1 Durham Duplex Razor and 3 dozen blades; ½ dozen borated talcum; 2 tooth brushes; ½ dozen cans of Blank's tooth powder; and so on. Such a sign will act as a salesman for you and also relieve you of a lot of explanation as to what the box contains. The minute unknown articles are placed in the box that minute you will reduce your chance of selling it.

Counter and window displays are necessary and these must be made at least a month before Christmas to remind the folks that it takes a long time to get things over to France. It will be none too early to start your store campaign the first of November. The Post Office Department has announced that all packages to go abroad should be mailed before November 15. It is advisable to have a large sign somewhere in your window and in a prominent place calling attention to the length of time it takes to get products abroad.

Have various assortments in your window. Have two or three at \$1, \$2, \$5, \$10 and it will be good policy to have one at an extremely high price for the advertising value. A lot of people will stop and read to see what is in it and wonder if anybody will buy it. There is a chance of a club buying one of these expensive assortments for a former member who is in the trenches. Bear in mind that there probably will be more of the boxes of larger denominations sold as the whole family will combine to buy a box and then again the poorer people will be likely to buy such articles as they have more money than formerly, especially those working in munition plants. Beside each box you place in the window should be a card showing the price and also showing the contents of the box.

The window can be decorated with the flags of each of the Allies, giving it, of course, the proper Christmas setting. Have one or two boxes in your store for demonstration purposes to that your customers can look at the articles. I would have only those listed at, say, \$10 and up.

Also, have a sheet printed showing the cost of the various boxes and the contents of each box, numbering each assortment so that the customer can order number 1 or 2 or 6 or whatever the number may be, making it easy for you to identify the assortment wanted, and at the same time to distribute these to your customers; send the sheet to your mailing list and include it with every parcel that you wrap. It will be up to you to sell the prospect on your assortment, to induce him to buy it at your store, for the chances are that most of the people are going to send over a box of some kind. Decorate the interior of your store so that it will impress your customers.

Keep in mind the fact that here is an opportunity to sell articles in half dozen lots and a large number of different items at one time. It costs you no more to sell a box than it does to sell one item.

It is not necessary to confine your assortments to drugs and toilet goods but go after articles carried by your competitors. Include tobacco, cigarettes, pipes, chocolate (this will be in heavy demand), writing paper, an Ingersoll wrist watch, and so on. Give your assortment very careful thought and make it as easy to sell as you can by including only such articles as are advertised. There is a feeling among those at home that nothing is too good for the member at the Front and that these will be a luxury to him. They will want to send him articles that he has heard of so as to make him feel good. Don't kill your chances of making sales by thinking this is an opportunity to get rid of a lot of "dead ones" for the chances are that you will be the one that gets stuck.

DRUGGISTS LIMIT DELIVERY SERVICE

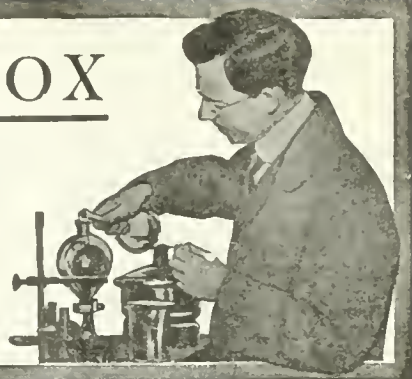
The San Francisco Retail Druggists Association recently adopted resolutions indorsing the system of two deliveries a day for drug stores with the exception of emergency prescriptions. Other resolutions providing that drug stores close on week days at 9 P.M. except Saturdays, at 10 P.M., and on Sundays from 12 o'clock noon till 6 P.M., and after 8 P.M. were adopted. The following officers were elected for the ensuing year: President, J. M. Stanton; vice-president J. M. Casselman; secretary-treasurer, N. W. Schwartz.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Composition of Coconut Shells

(D. C.)—It is impossible for us at this time to search journal literature for information regarding the chemical composition of mature coconut shells. However, we find in Vol. XV. (1896) of the *Journal of the Society of Chemical Industry* an abstract of a report on the "Composition of the Shells of the Coconut" which seems to give some of the particulars you desire. The original investigation was reported by R. W. Tromp de Haas and B. Tollens, and the abstract is as follows: "The substance was finely powdered, and exhausted with dilute acid (HCl), and afterward with ammonia, washed, dried, and exhausted with ether alcohol. The product thus purified was hydrolyzed by boiling with dilute sulphuric acid (4% H₂SO₄). The solution, further treated in the usual way for the isolation of sugars, gave a satisfactory yield of crystallized xylose. The mother-liquors gave a further yield of pentose, which appeared to be the only product of the hydrolysis. The residue from the treatment was hydrolyzed by treatment with strong sulphuric acid, diluting and boiling. From the solution crystallized dextrose was obtained."

We do not know to what extent coconut shells are used in the manufacture of acetone. One of the methods sometimes employed is that of the dry distillation of wood, but commercially it is prepared by the dry distillation of calcium acetate, *grey lime*, at a temperature of about 300° C. Ground coconut shells at one time were said to be quite extensively used as adulterant of powdered condiments, drugs, etc. When used in this way they may be detected by their yellow stone cells, which have thick yellow walls with branching pores and dark brown contents. The stone cells vary from polygonal and isodiametric cells, to cylindrical wedge shaped forms that are quite characteristic. In addition there occur fragments of long thick-walled, porous fibers with accompanying stegmatic cells, each containing a spheroidal, tuberculated silicious granule. The dark brown fragments are not affected by bleaching agents, such as Schulze's macerating solution. For full particulars of the microscopical examination and characteristics of the powdered coconut shells you will do well to consult various works on pharmacognosy like that of Kraemer and other standard authors. We suggest that you also consult the various annual index volumes covering the files of "Chemical Abstracts," published by the American Chemical Society, as also the *Journal of the Society of Chemical Industry*, published in London.

Non-Inflammable Cleaning Fluid

(S. L. D.)—A formula of the so-called "non-inflammable" type appeared in the October, 1917, *Era*, page 314, which see. Another formula of this character but containing soap, is the following:

Rosin soap.....	1	pound
Common white soap.....	1	pound
Potassium hydroxide.....	3	ounces
Alcohol	8 fl.	ounces
Carbon tetrachloride	5	pints
Water	q. s.	

Melt the soaps together on a waterbath, adding to them a little water from time to time as required. Dissolve

the potassium hydroxide in the alcohol, add to this solution 1½ pints of carbon tetrachloride, and incorporate the liquid in the mixture of soap, beating the whole with an egg beater. Transfer the pasty mass to a suitable bottle, add the rest of the carbon tetrachloride and mix the whole by agitation. The compound should at once be transferred to wide-mouthed bottles of the size desired for the market, immediately corking the bottles tightly. Sometimes a portion of the carbon tetrachloride separates from the "cream" on standing, but it can be re-incorporated quite easily by shaking before using.

Rubber piano covers may be cleaned by spreading the covers on any convenient object and scouring them with water, using a liquid soap made of spirit of soap, yolk of eggs, and oil of turpentine, after the following formula, suggested some years ago by a writer in the *National Druggist*:

Soft soap.....	5	ounces
Oil of turpentine.....	1	ounce
Yolk of	5	eggs

Mix. This is rubbed on the cover with a sponge, warm water is then applied, and the surface scrubbed with a stiff brush. For badly spotted or stained covers, the following is recommended:

Ox gall	16	parts
Alum, powdered	2	parts
Kitchen salt	2	parts

Mix and boil together for a few moments. After cooling, bottle for use. A little essential oil of lavender or lemon may be added to cover the odor of the ox gall. This mixture may be used in the same manner as the foregoing scouring preparation.

Sympathetic Ink

(G. F. L.)—Whole volumes have been written on the manufacture of ink, while the formulas that have been devised for the fabrication of disappearing or invisible inks are as various as the ingenuity of chemists utilizing an immense variety of substances can suggest. Here are a few formulas showing some of the methods suggested:

Disappearing Purple Ink

Write with a very dilute solution of iron in aqua regia (nitrohydrochloric acid), and shut up the paper with a watch glass containing sulphocyanide of potassium and a little sulphuric acid. The writing soon becomes visible of a blood-red color, but if held over ammonia will disappear again completely.

Invisible Ink

Cobalt oxide	½	ounce
Hydrochloric acid, sufficient to dissolve it		
Water	4	ounces
Mucilage of acacia	1	dram

Mix. Characters written on paper with this solution are invisible, but on the application of heat they instantly appear in blue. On cooling they again become invisible.

The following, according to *Pharmaceutical Journal*, is different from the usual formulas given for compounds under the above title. Make a fairly strong solution of phenolphthalein in alcohol, and use as an ink. The writing with this solution is quite invisible when dry, but when

exposed to the vapor of ammonia it becomes pink, and fades again as the ammonia volatilizes. By breathing upon the paper the color disappears almost immediately.

Salts for Ampoule Solutions

(G. B. I.)—Green iron and ammonium citrate is obtainable in the market and is listed by such manufacturers as Powers-Weightman-Rosengarten Co., the Mallinckrodt Chemical Works, and other concerns. It is made in the same way as ordinary iron and ammonium citrate, but a larger proportion of citric acid is used, and only sufficient ammonia is added to produce a green color. It occurs in green deliquescent scales which, on ignition, leave from 18.5 to 20 per cent. of ferric oxide. In other respects, it has the characters of iron and ammonium citrate. The green form is recommended for the hypodermic administration of iron, it being stated that a 4 per cent. solution in sterilized water may be injected deeply, in doses of $\frac{1}{2}$ to 1 mil (8 to 15 minims), every second or third day.

The soluble variety of iron arsenite, a double salt of ferrous arsenite and ammonium citrate, should be used for hypodermic injection. Such a compound is noticed in the British Pharmaceutical Codex under the title "Ferri Citro-Arsenis Ammoniatum" or "ammonio-citro-arsenite of iron;" synonym, "soluble iron arsenite," which is described as occurring in green or yellowish-green, deliquescent scales containing from 15 to 18 per cent. of metallic iron, and the equivalent of 1.4 per cent. of arsenious anhydride. It is very soluble in water, and on account of this ready solubility, is used for hypodermic injection as an antiperiodic in the treatment of malaria, also in pernicious anemia, and generally for the administration of iron and arsenic hypodermically.

Quinine dihydrochloride, now official in the U. S. P., may be prepared from the official hydrochloride by dissolving 10 parts of the latter in 20 parts of distilled water, adding 3.7 parts of 25 per cent. of hydrochloric acid, then filtering and crystallizing. It may also be made by interaction between quinine bisulphate and barium chloride. Its great solubility as compared with other quinine salts has caused it to be employed where quinine is to be used hypodermically as a prophylactic against malarial infection or for its cure. All of the above compounds are employed in making solutions for filling ampoules.

Synthetic Whiskey

(T. P.)—Published formulas for synthetic whiskey were somewhat in vogue before the days of pure food and drug laws, and possibly may have been used to some extent, but at the present time and under the present regulations it is doubtful if such combinations fill any needed want or that they may be legitimately sold. As showing the character of the "essences" supposed to imitate the flavor of whiskey, we select the following formulas published some years ago:

(1)

Butyric ether, 1 ounce; rectified fusel oil, 1 ounce; amyl butyrates, 1 ounce; acetic ether, 2 ounces; extract of orris, 1 ounce; extract of vanilla, 1 ounce; extract of musk root, 4 ounces; cologne spirit, 12 ounces. Mix and use 1 ounce for flavoring five gallons. Said to be a typical formula.

(2)

Ethyl acetate, 250 parts; ethyl nitrate, 200 parts; oil of caraway, 1 part; oil of anise, 1 part; oil of juniper, 2 parts; alcohol, 1,000 parts; sugar coloring, sufficient.

Styptic Pencils

(A. P. D.)—The astringent or styptic pencils used by barbers and others are generally prepared by fusion of anhydrous aluminum sulphate. The salt is simply melted and poured into suitable moulds; the moulds used for preparing urethral suppositories may be employed for the purpose. The moulds should be warmed to prevent too sudden congealing, and the liquid should be near its congealing point to obtain a smooth paste. The moulds should not be greased. Pencils of zinc sulphate, which also are occasionally used for their styptic properties, may be prepared by melting crystals of zinc sulphate in a porcelain dish in the water of crystallization, and then carefully pouring the liquid thus obtained into cones of wax paper. A formula for a styptic pencil with formaldehyde, recom-

mended as possessing antiseptic and healing properties, is the following:

Alum	480 grams
Borax	28 grams
Zinc oxide.....	2.5 grams
Thymol	8 grams
Solution of formaldehyde....	10 grams

Melt the alum, borax and thymol on a waterbath, add with constant stirring the zinc oxide and the solution of formaldehyde, remove from the waterbath, and pour into suitable moulds before solidifying.

Some general information on the manufacture of pencils was published in the Era of July, 1912, page 444.

Washing Powders

(S. E. M.)—Most of the so-called washing powders on the market are powdered mixtures of carbonate of soda (soda ash or sal soda) with soap, other ingredients being incorporated according to the ideas and experience of the individual manufacturer. As the economical production of these powders requires the use of special machinery, the process cannot be well carried on except in large factories. However, here are several formulas from Henley's "Book of Recipes, Formulas and Processes," one of which may answer your purpose:

I.

Sodium carbonate, partly effloresced	6 parts
Soda ash	1 part

II.

Sodium carbonate, partly effloresced.....	6 parts
Soda ash	3 parts
Yellow soap	1 part

III.

Sodium carbonate, partly effloresced.....	3 parts
Soap bark	1 part

IV.

Sodium carbonate, partly effloresced.....	5 parts
Borax	5 parts
Yellow soap	5 parts

V.

A good powder can be made from 100 parts of crystal soda, 25 parts of dark yellow rosin-cured soap, and 5 parts of soft soap. The two soaps are placed in a pan, along with one-half the soda (the curd soap being cut into small lumps), and slowly heated, with continual crutching, until they are thoroughly melted—without, however, beginning to boil. The fire is then drawn and the remaining soda crutched in until it, too, is melted, this being effected by the residual heat of the mass and the pan. The mass will be fairly thick by the time the soda is all absorbed. After leaving a little longer, with occasional stirring, the contents are spread out on several thin sheets of iron in a cool room, to be turned over by the shovel at short intervals, in order to further cool and break down the mixture. The soap will then be in a friable condition, and can be rubbed through the sieve, the best results being obtained by passing through a coarse sieve first, and one of the finer mesh afterwards. With these ingredients a fine yellow-colored powder will be obtained. White stock soap may also be used, and, if desired, colored with palm oil and the same colorings as are used for toilet soaps. The object of adding soft soap is to increase the solubility and softness of the powder, but the proportion used should not exceed one-third of the hard soap, or the powder will be smeary and handle moist. The quality of the foregoing product is good, the powder being stable and not liable to ball, even after prolonged storage; neither does it wet the paper in which it is packed, nor swell up, and therefore the packets retain their appearance.

GINSENG GROWERS MEET

The Wisconsin Ginseng and Golden Seal Growers' Association elected the following officers at its annual convention held at Wausau, Wis., recently: President, J. H. Koehler, Wausau; 1st vice-president, George Maxwell, Antigo; 2nd vice-president, Henry Loehr, Johnsonburg; secretary and treasurer, C. S. Leykom, Antigo. The executive committee will name the date and place of the next meeting.

WOMEN IN PHARMACY

War Basis for Business as a Woman Sees It

By EMMA GARY WALLACE

BUSINESS conditions are somewhat different than they have ever been before within my memory. This was evident at the Cleveland Convention of the N. A. R. D. Some of the firms which are always looked for in the exhibit space, were not there, and some which were, were not urging business as much as usual because of high prices and the difficulty in some instances of getting supplies.

Nor was that all. On every hand was to be heard the remark:

"So and So could not come because it was impossible for him to get relief help sufficient to manage his business, so many have gone to war."

In spite of that the Convention was large and enthusiastic, yet the fact remains that we must reorganize our business to a certain extent on a war basis if we are to continue to prosper.

The Matter of Supplies

Without doubt what appears to be a strained condition at present in relation to supplies, will soon be relieved. American ingenuity and the investment of American capital, together with the skill of American chemists, will soon place upon the market American-made goods which will be every bit as good if not better than those which we have been importing.

In the meantime it would seem to be the part of wisdom to buy as our *immediate needs* make necessary, but not to lay in drugs and chemicals for the future. This is a logical policy because the high prices of the present may not continue, and no one wants to be forced to sell goods bought at a high price at a lower one to meet competition.

The Question of Help

The immediate question of help is a serious one and the solution seems to be that our gifted and educated young women must study pharmacy in larger numbers. This takes time and will not relieve the situation at once, but it *will* relieve it in time, and meanwhile the girls must gain their experience and when they are in earnest, they can be very helpful while they are doing it. Let all druggists, whether they be men or women, do their part to make plain the advantages of pharmacy for women in their local newspapers, among the girls whom they know, through the medium of the schools, and elsewhere.

In the meantime we must install all of the labor saving devices we can in order to do with less help. It often happens that we have required those capable of serving at the prescription desk or behind the drug counter to spend part of their time at duties which unskilled help could do. As druggists become fewer we must restrict the work of the pharmacist to the dispensing and selling of medicines and use ordinary clerks and help for ordinary tasks.

The Price of Goods

It is the earnest belief of many who are making a careful study of the situation that drugs are not being priced high enough even yet in many places to warrant a living profit. All too many druggists have hesitated to raise their prices sufficiently for fear of losing trade, and while perhaps they are holding trade, they are doing it at a loss. Figure in the increased price of labor, war tax, supplies of all kinds, and goods themselves, and then be honest with yourself.

This is the time of all times for organization. If there is not a local retail drug association, proceed to organize one, fix prices, and stick to the schedule. There is a tradition that there is lots of money in the drug business.

At one time the profits were very satisfactory. In later times profits diminished to the extent that side lines of all kinds had to be introduced. The result of this has been a lowering of the standard of pharmacy and a tendency to commercialize an ancient and honorable profession. There is an opportunity now which may never come again to hold the standards up and to keep them where they belong, so that even when the war is over we shall not go back to some of the old profitless methods. It will be impossible to do this without organization and co-operation, however.

Another Viewpoint

In addition to the individual conservation and local and national co-operation and the right pricing of goods, there is another serious situation to face. As of course many of you know, the United States Army does not recognize pharmacists as dentists and medical men and veterinarians are recognized, and as they are recognized in other warring countries, with the exception of Great Britain.

The result of this is that many wholly untrained and who could not qualify to handle medicine in civil life, are being allowed to do it in military circles. In fact, our boys who are graduates in pharmacy are simply on a level as regards rank, with those who have no pharmaceutical training whatever. In one case a barber is the superior officer of a pharmacy graduate. Thus, when pharmacists in the Army see and know the danger of handling, storing, and administering drugs in other than the best way, they are powerless to do anything under the system or to use their education and knowledge for the service of their country. Is it not as unfortunate to waste talent as materials?

Fortunately the American Pharmaceutical Association has taken up this matter and through them H. R. Bill No. 5531 has been introduced at Washington and is now in the hands of the Committee on Military Affairs. This bill proposes to establish a Pharmaceutical Corps in the Army, and it is the duty of every wide awake pharmacist at home to communicate with his Congressmen and Senators and to make plain his wishes. Germany returns 87% of her wounded to the field because of the excellence of her medical and pharmaceutical service.

The plea is made that "canned" medicine in the shape of tablets, pills, etc., must be used and that dispensing is not necessary. To be sure, First Aid is about all that is practical on the firing line, but in the hospitals, convalescent camps, etc., the men who enlist are entitled to as good care as they would receive at home. It is therefore, *not* a selfish thing to work for pharmaceutical recognition in the Army, and every mother and sister, yes and father too, who understands the situation, will feel safer to let members of the family go once there is a Pharmaceutical Corps in the Army.

During the Spanish-American War 454 Americans were killed and 5,277 died from disease. What will be the statistics of this war?

Doctors themselves realize the need of this thing and the *Journal of the American Medical Association* of June 16, 1917, comes out very plainly on the matter. It says:

"So far as official recognition of it is concerned, the science and art of Pharmacy might not exist for the Army. Today, as never before, victory in war goes to the nation that most effectively conserves the health of its fighting men."

Let every one of us do his "bit" to reorganize nationally this end of the business of pharmacy. Remember *your* help counts!

RELIEF AND DEFENCE WORK

It is very inspiring indeed to know that the druggist women folk everywhere, are working for the Red Cross, the League of National Defense, and other branches of helpful service.

The ladies of Indianapolis Chapter, No. 20, work one day in each month in the surgical room, at the local Red Cross headquarters, going in a body. There they roll bandages, or do anything else which may be needed.

The ladies of Milwaukee Chapter, No. 19, donated a Red Cross banner to the Medical Department of the First Wisconsin Field Artillery. They have pledged their services to the League of Patriotic Women, and they give financial aid besides knitting and sewing.

Philadelphia Chapter, No. 6, is doing yeoman work in making knitted and sewed comfort articles for the Allies. The ladies meet on Wednesday at the home of Mrs. Lee. Among other things, they have finished fifty-two suits of pajamas and hemmed three hundred and fifteen towels.

And so it goes everywhere. In some of the Chapters, the work of necessity has been somewhat individual, some of the members working through other organizations, but everywhere the women are working.

WHY DO YOU BUY?

When a travelling man comes into your place of business, you buy or refuse to buy for various reasons. Here are some of the motives every wide-awake retailer must consider, and unless he considers them, his stock of confectionery, or soda fountain supplies is bound to be ill-assorted.

The Question of Money

Every man has to ask himself whether or not the line of goods he is considering will offer him a fair profit. If it will *not*, he has no alternative except to pass it up. If it will offer a small margin of profit, he is bound to look at it critically and to *measure up beside that profit* his own expense of doing business. In many cases, the apparent or fictitious profit will disappear entirely and he will discover that if he stocks that line of goods, he is paying his own expenses and working for the other fellow. If the margin of profit is satisfactory, *then and then only* is he justified in going into the matter farther.

The Matter of Caution

The next question he will want to ask himself has to do with caution. "If I stock this line of goods, will I be competing with myself? In other words, Am I going to popularize this line at the expense of one already established? Am I uprooting an apple tree which is bearing fruit *now*, in order to plant a plum tree which *may* bear fruit some time in the future? What are my prospects of doing a good trade on these goods? Are they placed in other stores and must I carry them to hold my own? Am I given the exclusive agency? In that case, what is the manufacturer going to do to create a demand? I am investing my time, money, effort,—what do I get out of it? He is investing his capital, experience, and merchandising organization,—what does he get out of it? Are the profits fairly divided? After I have worked up a satisfactory trade on these goods, have I any assurance that my future interest will be protected?"

Powerful Pride

Many a retailer has stocked goods simply because the salesman said to him, "Mr. Smith, we are making you this offer first in your territory. We knew that you were the logical man to handle our line of goods, for you are up-to-date, wide-awake, and your prestige counts." Or, "Your competitors up the street and down the street have all bought heavily and if you don't buy, the trade is going to them, and the public will get other things while they are about it as well."

Sometimes it is well to pay attention to pride if we are really offered a good thing, but it is well to investigate and to demand plenty of time to investigate. If there is any attempt to rush our course, it is usually a safe proposition to beware.

The Matter of Service

Whether you are buying a soda fountain, an order of candy, a hot soda equipment, or a luncheonette table, the matter of service enters.

How will this serve me in my use of it? How will the goods serve the customers from their standpoint? Can I conscientiously feel and say that I have got and am able to give value received in good measure?

It isn't a matter of looks, or money, or caution, or pride, for service is the final test. If you are making a big margin of profit and the goods don't stand up, the business venture will be short lived. If your pride has been appealed to and the goods are not satisfactory in point of service, you are stung. If you have exercised caution and service is lacking, you will be left with the wares on your hands.

Four Sides

In buying then, be careful to avoid the single viewpoint. Take a glance out of each window. Ask,

Does the money prospect justify my going into this?

Do caution and conservative business management recommend this investment as a wise one?

Am I buying because of value received or pride?

Will the goods stand up under the ultimate test of service?

THE WALLET ADVERTISING SCHEME

There are numerous ways of advertising a business, but the wallet advertising scheme, which was put into practice by a leading druggist in the East, proves to be quite a novelty and success, and breaks away from the usual form of advertising. Most advertisements are made up on cards, circular letters, etc., which, after being read, are thrown aside and forgotten;—but not so with the wallet advertising scheme. The wallet can be used in every day life and by doing so brings to a person's attention continually the articles advertised; it is also something which everyone appreciates, be it in business or home life.

The wallet when fully open measures 9 x 8 ins. and when folded 9 x 4 ins.—being the size of an ordinary leather one. It is made of linen material and covered with a heavy light blue paper, making it substantial for constant use. The name of the business, articles to be advertised and remarks about the same are printed on the inside covers in black. To make it appear of importance the words "PRIVATE PAPERS" are printed in large type on the front cover. This would cause a receiver of the gift quite a surprise;—one would believe that he had fallen heir to an estate left by the death of a distant relative. However, he would soon realize his mistake and see the practicality and convenience of the advertisement. There are also printed on the front cover, near the center, the words "Property of:" and following this "Name" and "Address." The wallet is tied with a red, white and blue cord and a stamp placed in the upper right-hand corner, making it suitable for mailing to the customer or anticipated trade.

The public expects the proprietor of a business to show some appreciation of their patronage in his place during the year, and this advertising wallet would indeed make a rather unique and appreciable Christmas or New Year's gift; and at the same time it must be considered that it can be produced at a reasonable price. However, in carrying out the above idea, instead of preparing the wallet for mailing purposes, it would be better for the proprietor to personally hand it to his customers, or enclose in an envelope if he desires to mail it.

ASK BOARDS TO EXEMPT MORE DRUGGISTS

In an effort to relieve a serious crisis in the drug business in Iowa, the Iowa Pharmaceutical Association has sent an appeal to the two supreme exemption boards in Iowa, asking them to exempt registered pharmacists as far as possible.

"It would be an economic waste to draft men who are trained in a profession that will have so much to do with the manufacturing and conservation of medical supplies for the use of the government as well as for the home communities," the association states.

At present over 500 registered druggists in Iowa have either enlisted or been drafted into service. Forty drug stores have appealed to the state pharmacy commission for help. District boards of appeals have held that the drug business is not necessary within the meaning of the selective service act, nor does it contribute to the maintenance of the military establishment of the United States.

N. A. R. D. Meeting at Cleveland

Indorses Price Maintenance and Pharmaceutical Army Corps

There was an average attendance of delegates when the nineteenth annual meeting of the National Association of Retail Druggists opened at Cleveland, O., on Sept. 17. More than 180 members were seated, and during the session over 1,000 persons interested in the proceedings had registered. The action of the Association on the Edmonds Pharmaceutical Service bill was modified at the last moment by an amendment to the resolution endorsing the bill, providing that the proposed corps should be placed under the supervision of pharmacists rather than doctors. J. C. Gallagher of New Jersey, warned the convention that such an amendment would defeat the bill, but the amendment suggested by E. C. Brokmeyer, the Washington counsel of the Association, was approved and the recommendation changed accordingly.



W. H. COUSINS

Resolutions expressing hearty accord with the Government in its war programme were adopted, but an emphatic protest to Congress was recorded against the imposition of the proposed tax on proprietary medicines and against adding more taxes on medicinal alcohol. It was declared by resolution that some of the patents on foreign-made preparations, not now available, should be abrogated, to supply this country with such preparations.

The Stephens Price Maintenance bill was indorsed. The recommendation of Frederick J. Wulling of the American Pharmaceutical Association, for a federation of all drug and pharmaceutical associations was approved.

Cousins Opposes Changing Narcotic Law

Changes in the Harrison Narcotic law were opposed. W. H. Cousins, of Dallas, Tex., the newly elected president of the Association, said on this point:

This law, while in force only about three years, has proven very satisfactory, although we hear a great deal about illicit sales still being made by the people who are entrusted by the Government, as well as by the habitues of the underworld. However, compared with the enforcement of other laws of similar importance, there is reason to feel assured that the Government will soon have such violations reduced to a minimum, and that those entrusted by law to make sales of narcotics will soon be perfectly familiar with the rulings that are made from time to time. There still remains some confusion as to the rulings made by the State authorities as compared with the rulings of the national government, but with more time these points will all be straightened out.

The outcome of the Ashley case, in which our association is greatly interested, hinges upon the rulings of the department, and if such rulings will be sustained by the Supreme Court, more particulars of this will be given you in other reports.

Concerning price maintenance Mr. Cousins said:

While nothing of a progressive nature has been done along these lines during the past year, and while some disappointment exists on account of the Miles Medicine Company finding it necessary to withdraw its price-maintaining plan, yet we are far from being discouraged from taking an active interest in the matter of price maintenance. From the very fact that the Government has found it necessary to enact laws authorizing fixed prices of food, fuel, and other necessities, we have reasons to believe that we will be able to find relief under such measures as the Stephens-Ashurst bill, which is a live issue with us and still pending in Congress. In fact, the Government, in controlling prices on food and fuel, no doubt has set a favorable precedent.

While at the commencement of the war, we pharmacists were probably not as active as we might have been in having our profession of pharmacy recognized upon the Council of National Defense and its advisory board, and while all our allied associations have endeavored to impress the Army Department with the necessity of recognition of the pharmacists on the Council, I am pleased to say that at last we have some hopes of convincing the Government on this point and have actually made some progress along these lines. This entire matter is receiving attention at this time by our special committee appointed for that purpose.

Mr. Cousins also discussed the question of mail-order houses, saying:

I believe our association should become very active in its work against one of the greatest evils in which our entire membership is directly interested, and endeavor to adopt the slogan of "Buy

goods at home." A number of the largest publishing companies of national magazines and daily papers have taken up this slogan, and especially the Butterick Publishing Company, which concern has done some excellent work. This subject, in connection with cut prices, is of the greatest moment to our members, especially those situated in the smaller towns and villages of the country, and I trust that this convention will go on record as initiating a more active campaign and assisting such interests as those that have made such an excellent start in this work.

Other recommendations by Mr. Cousins were:

That we go on record and support a movement eliminating the distribution of trading stamps, coupons, and the like.

That we pledge our support toward legislation ridding the country of the mail-order house pest.

That we endorse the activities of the American Fair Trade League for price regulation.

That we take a more active interest in having druggists become affiliated with local, State and national associations and that our individual members make a better effort toward interesting non-members in association work.

Steps were urged to legalize the new Pharmacopoeia and National Formulary. The work of the American Metric Association received the approval of the convention. Co-operation between the Drug Trade Conference and the Bureau of Chemistry was urged.

The new officers elected are:

President—W. H. Cousins, Dallas, Tex.

Vice-Presidents—O. E. Muhlhan, Cleveland; W. B. Cheatham, Oakland, Cal.; A. A. Bradley, Williston, N. D.

Secretary—Samuel C. Henry, Philadelphia.

Treasurer—G. W. Stevens, Detroit.

Robert J. Frick, the retiring president, was elected to serve on the Executive Committee.

Chairman J. F. Finneran of the Executive Board made a report in which he said:

All over the United States our colleges of pharmacy are graduating yearly hundreds of men with expert knowledge which they would be happy to place at the disposal of the Government upon a reasonable basis.

We should at this convention pass a resolution asking Congress to enact a law giving pharmacists in the Army and Navy the same rating as physicians. This is due the pharmacists of the country, for they alone have that particular and specific knowledge that men obtain when they take up and master the facts pertaining to a given profession.

It is the hope of your committee that by co-operating with all the other branches of the drug trade we may be able to accomplish satisfactory results in the presentation of the above proposition to Congress.

Secretary Thomas H. Potts, who resigned at the Cleveland meeting, after serving the Association for several years, made a report in which he said:

Your secretary is extremely gratified to be enabled to place before you our financial condition. Notwithstanding the increase of expenses, due to the large increase in the price of printing, paper and everything that goes to make up the Journal of Topics, as also the increased expenses, due to the war revenue measure pending in Congress, we show quite an appreciable surplus over the preceding year. Your secretary, however, wishes to call your serious attention to what might have been done if our receipts had been larger.

S. C. Henry, chairman of the Committee on National Legislation, gave an account of the Committee's work in opposition to the tax on proprietary medicines. He said:

We took up the proposition with the finance committee of the Senate, and again joining forces with the other branches of the trade, made a strenuous and concerted fight against the tax, presenting every argument that could possibly be advanced against



SAMUEL C. HENRY

it, and had the satisfaction, as a result of our labors, of having the Finance Committee reduce the tax from five per cent. to two per cent., which action was accepted and adopted by the Senate, which will afford an opportunity for us again to protest strongly against the imposition of any tax whatever upon medicine, reiterating our belief that luxuries, rather than necessities, should carry the bulk of the burden of taxation, of which we are willing, of course, to assume our full share.

Regarding price-maintenance the report said in part:

At no time has it been clearly understood by a majority of the members of Congress that the price-maintenance legislation advocated by the National Association of Retail Druggists for so many years was such legislation as could be enacted with proper limitations and safeguards so that the public would not and could not suffer from the lessening of competition or the creation of monopolies. The Stevens bill, as amended by the Kelly bill, seems a much improved measure, particularly as far as creating a more favorable impression with Congress is concerned, and that, of course, must be considered at all times if it is hoped to secure the desired legislation. We desire to assure you that your committee has not lost sight of or interest in this very important subject, and has left no opportunity unimproved to discuss the matter with our national law makers, and that we are only awaiting the time when conditions will warrant our insistence upon action on this question, and in this we feel assured of the hearty support and co-operation of every loyal member of the National Association of Retail Druggists.

The Committee on National Legislation closed its report with the following recommendations:

1. That our associations oppose any and all propositions to amend the Harrison act.
2. That we continue our efforts in behalf of price-maintenance legislation.
3. That the association authorizes the introduction into Congress of a bill designed to reform our patent and trade-mark laws upon an equitable basis.
4. That we give our support to the Edmonds bill authorizing the creation of a pharmaceutical corps in the United States Army, and that we endeavor to secure better recognition for the pharmacists in the Navy.

The resolution on price-maintenance adopted by the Association reads as follows:

Resolved, That the National Association of Retail Druggists assist the pharmaceutical organizations of the several States to have enacted laws similar to the New Jersey statute governing the maintenance of resale prices; and

Resolved, That the National Association of Retail Druggists prepare and supply to State pharmaceutical associations a model for such a law.

Resolved, That we affirm our attitude toward the Stephens-Ashurst bill.

Resolved, That we endorse the activities of the American Fair Trade League relative to price-regulation.

There was considerable discussion of the recommendation that the Edmonds Pharmaceutical Corps bill be approved, the participants being Edward Spease, F. H. Freericks, L. C. Hopp, and C. E. Guenther, all of Ohio; J. F. Finneran of Massachusetts; C. F. Mann of Michigan; O. E. Bruder of Illinois; B. E. Pritchard, of Pennsylvania; Thomas Stoddard of New York; and T. F. Hagenow and E. A. Sennewald, both of Missouri. The consensus was in hearty favor of better recognition for pharmacy in the Army, the need for which was declared to be great because of reported inefficiency in the handling of drugs in military circles. There was a decided opinion that the purpose of the bill should be brought to the wide notice of the public.

W. O. N. A. R. D. CONVENTION ECHOES

The national officers elected at Cleveland, Ohio, for the coming year to serve the Women's Organization are as follows: President, Mrs. J. H. Riemenschneider, Chicago, Ill.; first vice-president, Mrs. Emma A. Frick, Louisville, Ky.; second vice-president, Mrs. S. A. Eckstein, Milwaukee, Wis.; third vice-president, Mrs. A. J. Hoenny, St. Louis, Mo.; fourth vice-president, Miss Nora V. Brendle, Wilmington, Del.; fifth vice-president, Mrs. Edward Fenger, Indianapolis, Ind.; corresponding and recording secretary, Mrs. Leslie O. Wallace, Auburn, N. Y.; financial secretary, Mrs. Nellie F. Lee, Philadelphia, Pa.; treasurer, Mrs. John C. Otis, Cincinnati, O.

Directors—Mrs. F. E. MacBride, Youngstown, O., chairman; Mrs. J. F. Waterhouse, Boston, Mass.; Mrs. Louis Emanuel, Pittsburgh, Pa.; Mrs. A. J. Riess, Rock Island, Ill.; Mrs. J. M. Newton, Mobile, Ala.; Mrs. Robert A. Clarkson, Springfield, Ill.; Mrs. William H. Farley, Asbury Park, N. J.; Mrs. George S. Morgan, Pawtucket, R. I.

Mrs. Muriel B. Holman of Parnassus, Pa., was awarded the ten dollar gold prize for superior scholarship throughout her course of study.

The W. O. decided to establish a second scholarship, to help educate a worthy young woman in pharmacy, for it was recognized that the need of assistants of the right kind would be increasingly great now that the country is at war and probably after the war is over. Donations were volunteered by those present faster than the financial secretary, Mrs. Nellie Florence Lee, could write them down, \$170 being pledged in short order. The largest gift of \$50 was from Mrs. Lee. The gift from the youngest member of the organization, Jean Gordon Lee, was \$5. The first Cradle Roll baby, Alice Seiberg, of Louisville, Ky., had \$5 pledged for her, as did Baby Eckstein of Milwaukee, Wis. Many of the Chapters and individual members made up the balance of the fund contributed. The award will be made to some worthy girl who comes from a state in which there is a Chapter of the W. O. She must be endorsed by two W. O. women, and the selection of candidates is made by the Board of Managers.

Still another change in policy was instituted through giving the President power to appoint a legislative representative in place of the Legislative Committee, the same to report regularly through the *Bulletin*, the W. O. official monthly, upon legislation affecting pharmacy, proposed and co-operative.

The Women's Organization are most happy to welcome Cleveland Chapter, No. 21, which was organized at the Hollenden Hotel, Sept. 21, and before noon of that date, had 21 members. At the entertainment given at the Log Cabin, Euclid Beach, that afternoon and evening, seventy charter members were pledged, and at the first meeting held in the Cleveland College of Pharmacy, Oct. 4th, the treasury was found to contain \$135.00. The Cleveland ladies are most enthusiastic and bid fair to be a most progressive and helpful addition. The officers are: President, Mrs. E. R. Selzer; first vice-president, Mrs. E. H. Hechler; second vice-president, Mrs. W. M. Fox; Secretary, Mrs. Carl Winter; treasurer, Mrs. E. F. Helwig; chairwoman constitution committee, Mrs. E. R. Selzer; chairwoman entertainment committee, Mrs. Leo Lesser; chairwoman membership committee, Mrs. J. Buckstein; chairwoman flower committee, Mrs. Albrecht; chairwoman refreshment committee, Mrs. Bejeck.

B. A. R. D. AIDING LIBERTY LOAN

Members of the Boston Association of Retail Druggists voted in their opening meeting, Oct. 17, at Massachusetts College of Pharmacy, to spend one hour every day in their stores in aiding the sale of Liberty Loan bonds. In a discussion of advancing price, resident John J. Tobin reported that in many instances chain stores are now paying more attention to their goods than the smaller retailers. James F. Finneran, chairman of the executive committee of the National Association of Retail Druggists, gave a blackboard demonstration of how prices of mixtures are arrived at in his store, the cost of each ingredient, the time of the mixer, overhead, and loss by evaporation or absorption being included in each mixture. George E. Ketchum told many interesting impressions of the Cleveland convention. The narcotic law and the internal revenue law were discussed by President Tobin, Mr. Finneran, Arthur C. Morey and Sherman N. Sears.

TO CONSERVE SUPPLIES IN BAY STATE

In a conference with State Food Administrator Henry B. Endicott of Massachusetts, the Bay State drug trade pledged itself to assist in every way in the conservation of supplies of all kinds, particularly paper and twine. The drug men said 5,000 retailers in Massachusetts would be glad to aid. The druggists were represented by R. P. Hoagland of R. P. Hoagland & Co., Fred L. Carter of Carter, Carter & Meigs, W. H. Corliss of the Dodge & Olcott Co., Charles A. West of the Eastern Drug Co., John A. Gilman of Gilman Bros., Louis K. Liggett of the United Drug Co., and Michael F. Lyons of the Theodore Metcalf Co. Jerome A. Crane, Fred L. Carter and Charles A. West were appointed a committee to work out a comprehensive plan of action for Massachusetts druggists.

N. W. D. A. MAY CUT OFF TRADE DISCOUNTS

Use of Trade Acceptances to Accompany all Invoices Proposed and Committee will Work out Details—Sales Methods, Metric System and Revenue Measure Discussed—New York Chosen for Next Meeting.

The meeting of the National Wholesale Druggists Association at Chicago during the week of October 1 to 6, was replete with progressive topics which started heated discussion.

Monday afternoon was devoted to discussion of credits and collections. A committee has been investigating this subject for a year and its report was presented by the chairman, R. R. Ellis, of the Hessig-Ellis Company, of Memphis, Tenn.

The most absorbing question raised, the one upon which most of the delegates spoke, was the cash discount. There were many protests when Mr. Ellis declared that what is known as the cash discount "will eventually be eliminated from American business life and that the entrance of the trade acceptance will hasten this development," and recommended that the druggists take this step. "The druggists should bring their business up to a thirty-day basis," said Mr. Ellis, "and unless goods can be paid for within one month the customer's credit should be cut off. If accounts are liquid a firm can better withstand any shock that may come."

President C. E. Bedwell, of Omaha, who succeeds President Morrisson, appointed a committee to be known as the Trade Acceptance Adoption and Discount Elimination Committee, whose purpose is explained by the title. The committee will consist of fifteen members and will work out methods for the best way of accomplishing the end desired—the abolition of the cash discount usually allowed to purchasers. In its place will be substituted the trade acceptance, which will accompany all invoices and will run for thirty days.

Several committee reports were made, and one of these—"Commercial Travelers and Selling Methods"—attracted general interest. H. D. Faxon, of Kansas City, who was chairman of the committee, declared in the first part of his report that in the world-wide competition that must come, American wholesalers in the drug industry must render certain distribution service cheaper than their foreign rivals or yield much of the advantage they now possess.

It was pointed out that one of the greatest evils prevalent in the drug trade is over-solicitation, and it was pointed out that this will continue a menace until the Druggists' Association acts as a body.

The report of A. R. L. Dohme, of Baltimore, as chairman of the committee on the "Prevention of Adulteration," showed that no other country in the world is supplied with as pure and efficient set of drugs as is the United States.

In the trade mark report the "aspirin" litigation was discussed and the conclusion reached that "While it would perhaps be presumptuous to express an opinion on the merits of a controversy that remains undetermined by the court, nevertheless, the better opinion appears to favor the position that the name has now become public property and that the Bayer Company can no longer assert a monopoly therein."

The special committee on metric weights and measures, A. W. Miller of Philadelphia, chairman, made an interesting report.

"At the present time manufacturers and exporters are seriously handicapped by their adherence to systems of weights and measures, which have long since become obsolete among the more progressive nations," said Mr. Miller.

President Morrisson said in his annual address:

"No one can pretend, in view of the carefully compiled and published figures of profits in the wholesale drug business, that these profits are excessive," declared President Morrisson. "No one will pretend that the wholesaler pays more for his goods than other distributing agencies. The assumed difference in price, then, must be due to the element other than price—that is to say, the service charge. The question is: Does the retailer need this service for which he is asked to pay?" Mr. Morrisson

answered his own question by saying that the retailer would be forced out of business or would find some source from which he could get service, such as credit, information, etc. He said that if service must be given it must be charged for, and further pointed out that the investment, effort and expense involved is not absolutely necessary for adequate distribution.

The creation of a senior council composed of ex-presidents of the association to act in an advisory capacity was provided for.

The following are the new officers:

President, C. E. Bedwell, Omaha, Neb.; First vice-president, Robert H. Bradley, Toledo, Ohio; second vice-president, Saunders Norvell, New York City; third vice-president, H. C. Risher, Waco, Tex.; fourth vice-president, W. C. Miller, Richmond, Va.; fifth vice-president, Clarence E. Hope, Boston, Mass.

Secretary, F. E. Holliday, New York City.

Treasurer, Title Guarantee and Trust Company, New York City.

Board of Control, Arthur D. Parker, New Orleans; George R. Merrell, St. Louis; L. D. Sale, Los Angeles; F. C. Groover, Jacksonville and H. D. Faxon, of Kansas City.

New York was chosen as the meeting place next year. The convention will open on Oct. 7.

VACCINE VIRUS ON ICE*

Vaccine virus rapidly loses its potency unless kept cool. In many drug stores vaccine is kept in a drawer back of the counter instead of in the ice-box. Under these conditions the vaccine is likely to be worthless and not to produce successful vaccination. In buying vaccine one should ascertain that it has been properly kept.

It is a matter of common knowledge that biologic products should be kept in a cool place. The United States Pharmacopoeia, ninth decennial revision, specifies temperatures between 4.5° and 15° C. for diphtheria and tetanus antitoxin and vaccine virus—the three official products of this class. What is not generally appreciated is the difference between these products in this respect. The change in the antitoxins, serums, and such products as typhoid vaccine is a gradual chemical deterioration, since these contain no living matter; in the case of antitoxins it can be demonstrated that at reasonable temperatures and within reasonable times the products are not rendered valueless, nor harmful—simply a somewhat larger amount must be used to produce a given effect.

With vaccine virus we have an altogether different situation. The virus is a living thing, suspended in a medium without food for multiplication, and like most minute living things which do not enter the spore state, death rapidly takes place unless the life processes are retarded by refrigeration. No definite and certain limits can be placed on the duration of the life of the vaccine virus at different temperatures, for we know neither the number of living microorganisms of vaccinia originally present nor the minimum number necessary to produce the characteristic vaccination; both are undoubtedly variable. As the virus leaves the manufacturer's hands it is practically always potent. It is a fact, however, that as commonly cared for in drug stores the vaccine virus of commerce deteriorates rapidly.

Virus of various manufacturers purchased at drug stores has been found, though within the stamped expiration date, to give less than 50 per cent. of "takes"; but when obtained direct from the manufacturer, "takes" were nearly 100 per cent. Vaccine virus at pharmacies is often kept in the cellar or in the soda fountain cooler, and the temperature of these places, both winter and summer, has been found to be in the neighborhood of 15° C. (59° F.) or higher. This is by no means satisfactory. Ice-box temperature is not freezing temperature, but usually several degrees above freezing. Vaccine virus should be kept in a metal container in constant contact with the ice itself. If it can be kept at or below the freezing point, so much the better. There is no danger of keeping it too cold.

* Public Health Reports.

Boards

ARKANSAS

Frank Schachleiter, secretary of the Arkansas Board of Pharmacy, announces that 2300 certificates of registration as pharmacists have been issued since the creation of the board in 1891, while for 1917 there were 1022 biennial renewals, the holders of 795 practicing in Arkansas. During the year 1916, certificates of registration were issued as follows: By examination, 57; on diploma, 17; by reciprocity, 3; honorary certificates issued to members of Oklahoma, Nebraska and Illinois boards, 15, making a total of 92. At an examination held by the board in the Chamber of the House of Representatives, State Capitol, Little Rock, on June 8 and 9, 58 applicants qualified as pharmacists.

CALIFORNIA

At the recent meeting of the California Board of Pharmacy fifty-nine applicants who successfully passed the examination were registered as licentiates and 45 as assistant pharmacists. Thirteen applicants were registered on their credentials and twenty years' experience. A meeting of the board was held at Los Angeles, Cal., on October 8, the examinations being held on October 10, followed by a meeting of the board in San Francisco on October 15, the examinations being held on Oct. 17.

The following officers were elected to serve for the ensuing year: President, J. S. O'Callaghan, San Francisco; vice-president, H. J. Finger, Santa Barbara; treasurer, E. J. Molony, San Francisco; secretary, Louis Zeh. The offices of the board are located in suite 909-911 Butler Bldg., San Francisco.

LOUISIANA

Successful applicants who passed the quarterly examination of the Louisiana Board of Pharmacy held on August 17 and 18 at Tulane University included ten registered pharmacists, six qualified assistants, and one registered apprentice. A. P. Firment, Marksville, La., was registered by reciprocity on his certificate of examination from another state, while under the reciprocal clause, honorary registration was granted to the members of the Missouri Board of Pharmacy, Charles Gietner, St. Louis, R. A. Doyle, East Prairie, Gus A. Fischer, Jefferson City, Paul L. Hess, Kansas City, and Edwin G. Cox, Craig. A. Di Tripani and George W. McDuff were selected to represent the Louisiana Board of Pharmacy at the annual meeting of the National Association of Boards of Pharmacy. The next quarterly examination, the fourth this year, will be held on Nov. 16 and 17 at the New Orleans College of Pharmacy.

MINNESOTA

At the July meeting of the Minnesota Board of Pharmacy held in Minneapolis, twenty-two applicants were granted full registration as pharmacists, and sixteen as registered assistants. Four of the successful applicants to receive the major certificates were women; Miss M. D. Tonsfeldt, of Minneapolis, Miss Emergene L. Gronlund and Miss Angie Hermanson, of Tyler, and Miss Ligonri M. Ertel, of Maple Rapids, Mrs. B. H. Adler, of Rochester, and Miss Frances Greenwalt, of Dawson, were among those receiving assistant's certificates.

OHIO

The Ohio Board of Pharmacy examined 159 applicants for pharmacist certificates and 54 for assistant's certificates at the recent meeting held in Columbus. Of the first number 85 were successful in the pharmacist's examination, and 19 obtained grades high enough to entitle them to assistant's certificates, and of the second class, 27 were successful and were granted certificates as assistants. Daniel L. Lensing, of Cincinnati, obtained the highest grade on the pharmacist's examination or 95 per cent, while the highest grade on the assistant examination was 97 per cent, obtained by John F. Winkler, of Apple Creek. An examination was also held in Columbus on October 9.

OKLAHOMA

Certificates of registration were issued to fourteen applicants who successfully passed the examination for registered pharmacists at the meeting of the Oklahoma Board of Pharmacy, held at Oklahoma City on July 10 and 11. Sixteen applicants were granted licenses as assistants, while eight were registered as pharmacists by reciprocity with other boards, and four were registered on diploma from Oklahoma University.

J. W. Montfort, whose term as a member of the board expired on June 15, was re-appointed by Governor Williams, and the board organized for the ensuing years as follows: President, S. W. Stone, Durant; vice-presidents, S. B. Howard, Oklahoma City; secretary, W. R. Jarrett, Oklahoma City; treasurer, H. S. Shackelford, Wynnewood. Messrs. Jarrett and Howard were elected delegates to attend the meeting of the National Association of Boards of Pharmacy at Indianapolis in August. The secretary reported that 40 class "B" permits had been issued during the last three months.

In the future five papers will be exacted of applicants for examinations and will bear the following headings: Pharmacy; chemistry; materia medica, botany and bacteriology; practical pharmacy (which includes laboratory work); posology, toxicology, chemical problems and identification. Secretary Jarrett's address is 308 Patterson Bldg., Oklahoma City.

SOUTH CAROLINA

The South Carolina Board of Pharmacy examined applicants for registration as pharmacists on July 31 at Greenwood, the meeting being held during the convention week of the State Pharmaceutical Association. Nine of the applicants were successful, two of them being negroes. During the past year 59 applicants were examined, 30 being successful. Applicants to become registered after July 1, next year must be graduates of reputable colleges of pharmacy. The next meeting of the examining board will be held at Sumter, November 21 and 22.

TEXAS

At the May meeting of the Texas Board of Pharmacy held in the St. Anthony Hotel, San Antonio, 47 applicants took the examination, twenty-seven of whom were successful. In attendance at the meeting were W. R. Jarrett, F. W. Stone and H. S. Shackelford, members of the Oklahoma Board of Pharmacy; E. C. Cox and Chas. Gietner, members of the Missouri Board of Pharmacy, and H. C. Christensen, of Chicago, secretary of the National Association of Boards of Pharmacy. At the September meeting, 59 applications were examined.

The Texas Board elected the following officers: President, A. W. Griffith, Austin; secretary-treasurer, R. H. Walker, Gonzales. John A. Weeks was elected delegate to attend the next meeting of the National Association of Boards of Pharmacy.

Under the amendment to the pharmacy law passed by the last legislature, the Texas Board of Pharmacy is authorized to collect the following fees: Examination, \$10; assistants, \$5; renewal fee for certificates and permits, \$1, to be paid annually on or before January 1 of each year. Failure to pay the renewal fee by March 1, of each year or 60 days after it is due, incurs a penalty of \$4. Duplicate certificates, permits and renewals, \$1. Reciprocity, \$25. The amendment became effective on June 1.

WISCONSIN

As a result of the examination of the Wisconsin Board of Pharmacy held at Madison, July 17 to 20, 26 applicants received registered pharmacist certificates, one of them being Miss Harriet A. Boberg, of Eau Claire. Registered assistant certificates were granted to 29 applicants who successfully passed the examination. Registered certificates without examination were issued to Frank H. Pridgen, of Iowa, Sr. A. Groesch, of Illinois, and A. S. Flath, of North Dakota, on the basis of the certificates issued to them by the boards of pharmacy in their respective states. An examination was held in Madison, on October 16 to 19.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

RAMSAUR JOINS GROOVER-STEWART DRUG CO.

Under the reorganization of the Groover-Stewart Drug Co., wholesale druggists of Jacksonville, Fla., recently announced, David W. Ramsaur, of Palatka, Fla., comes to the organization as vice-president, this office of the corporation formerly representing the Stewart interest in the



D. W. RAMSAUR

old organization. Mr. Ramsaur has been prominently identified with the drug trade of Florida for many years. A native of that State, he graduated with high honors from the Philadelphia College of Pharmacy in 1902, winning the Procter Prize for highest scholarship. At 19 he was first lieutenant in the 1st Regiment Florida Volunteer Infantry, Spanish American War.

Mr. Ramsaur has been in the drug business for twenty years in Florida, and as part owner and manager of the Ackerman-Stewart

Drug Co., in Palatka, he developed one of the most prosperous establishments in the State. He has been active in the civic affairs of his home city, and at one time served as a director and vice-president of one of the leading banks. He is an ex-president of the Florida State Pharmaceutical Association, and is at present secretary of the Florida State Board of Pharmacy, a position he has held for the past twelve years. He has also served as a vice-president of the National Association of Boards of Pharmacy, and has been a member of the A. Ph. A. since 1902. Probably no other man enjoys a wider acquaintance among the retail druggists of Florida than Mr. Ramsaur, and all of them testify to his activities for the betterment of the practice of pharmacy in his native state.

PHILADELPHIANS HONOR PROF. KRAEMER

Following the royal send-off the alumni of Girard College gave to Prof. Henry Kraemer on his departure for his new work in the University of Michigan, the representatives of the various pharmaceutical interests in Philadelphia which Prof. Kraemer had served so loyally and well during the past twenty years as professor of botany and pharmacognosy at the Philadelphia College of Pharmacy, about sixty in number, recently gathered at the Rittenhouse Hotel to bid him Godspeed in his new undertaking. Dr. George H. Meeker, professor of chemistry at the University of Pennsylvania, officiated as toastmaster, and speeches extolling the high character of Prof. Kraemer's work were made by Dr. H. V. Army, of the New York College of Pharmacy, Prof. Samuel P. Sadtler, emeritus professor of chemistry of the P. C. P., E. G. Eberle, editor of the *Journal of the A. Ph. A.*, Dr. Henry Beates, and Dr. Robert Fischelis, the last named on behalf of the Philadelphia friends, presenting Prof. Kraemer with a sterling silver loving cup on which was inscribed; "Au Revoir but not Good-Bye to Professor Henry Kraemer, from his pharmaceutical friends of Philadelphia, Sept. 24, 1917."

Prof. Kraemer was deeply touched by the tribute and responded with a stirring appeal for greater co-operation

among the various pharmaceutical interests, and for a recognition of the broader aspects of pharmaceutical endeavors. He stated that while leaving his native city, he expected to keep in touch with his many friends and to pay frequent visits to Philadelphia in the future. Other speakers were Prof. J. W. Harshberger, Dr. John R. Minehart, Dr. Horatio C. Wood, Jr., Samuel C. Henry, Henry C. Blair, H. F. Sanville, and Dr. F. E. Stewart. Letters from many representatives of the drug trade who were unable to attend the meeting were read, and Prof. Joseph P. Remington, who is in poor health, sent a message of greeting and good wishes for Prof. Kraemer by telephone. The "send-off" was characterized as being one of the best affairs of the kind ever held in Philadelphia.

HAMMAR, NAVAL PHARMACIST, A BENEDICT

Arik Hammar, who served as pharmacist on the United States flagship "Olympia" under Admiral Dewey in the naval battle which resulted in the capture of Manila, and now chief pharmacist of the Navy, stationed at Mare Island, Cal., as also proprietor of the Naval Pharmacy at Vallejo, was married recently to Dr. Dora Dorn, of San Francisco. Many pharmacists in the Eastern section of the country will recall that Mr. Hammar was honored with a banquet and reception in 1899 on the return of Admiral Dewey and the "Olympia" to this port. For his services at Manila, Mr. Hammar was promoted to the warrant rank of "pharmacist," being chosen as one of the twenty-five warrant officers allowed in the Navy Hospital Corps by act of Congress, June 17, 1898. Chief pharmacist Hammar is a past exalted ruler of the Vallejo Lodge of Elks, and a past grand patron of the O. E. S. of California.

PERSONAL BREVITIES

—JOHN H. C. HADLEY, for forty years with the Buffington Pharmacy Company, Worcester, Mass., and who in that time had worked himself up from clerk to stockholder and general manager, has just retired from active connection with that concern. He still retains an interest in the corporation, but has turned over the management to J. C. Fausnaught, for the last four and a half years manager for Brewster and Company, who has also purchased an interest in the Buffington Company. Mr. Hadley became the general manager on the death of E. D. Buffington several years ago, and the desire to improve his health and secure more freedom caused him to retire. He is planning to spend part of the time during the next few months with his wife in travel.

—GLENN S. STAINES, proprietor of a drug store in Detroit, Mich., was the first man from that State to be denied exemption from the draft on industrial grounds. Staines bayed his appeal on the fact that he owned and operated a retail drug store, and that if he were called from his store it would result in irreparable loss to him financially and also deprive the neighborhood of a drug store. He stated that under the state law a drug store must be pre-empted over by a registered pharmacist, who must be more than 21 years of age, and if registered pharmacists were drafted, great inconvenience would result, he claimed. Staines was refused exemption, however, on the ground that his work was not vital to the maintenance of war efficiency.

—J. O. COOK, druggist at Hopkinsville, Ky., was the defendant in a suit for \$20,000 damages brought against him by one Mrs. E. M. Flack who alleged that her late husband's death was caused by a mistake made in filling a prescription by J. A. Goodman, Jr., an assistant pharmacist in Cook's store. The trial lasted for three days and much interest was taken in it by reason of the prominence of the parties to the suit. The plaintiff charged that atropine was substituted by mistake for codein in the

prescription, and the one dose of the medicine taken by Mr. Flack killed him. A verdict of \$1,500 damages was returned against the druggist.

—E. D. DOREMUS, druggist of Union Springs, N. Y., while participating with his friends and neighbors in warding off an attack of yeggmen on a local bank recently, received a serious wound in his arm, the shot doing the damage, it is thought, having been accidentally fired by one of his own townspeople. Mr. Doremus was taken to his home where he is resting comfortably. None of the would-be burglars were apprehended, the efforts of the citizen's posse to which Mr. Doremus belonged appearing on the scene just in time to frustrate the yeggmen's plans to rob the bank.

—W. A. KONANTZ, of Quincy, Ill., has been appointed research assistant by the State Board of Education in the University of Iowa College of Pharmacy, where he will have the help and co-operation of the staff of instructors in pharmacy and chemistry. He will give his entire time to research and will endeavor to discover processes that are commercially possible for the manufacture of certain chemicals that are extremely expensive at the present time or are unprocurable because of the war with Germany. The first problem taken up will be the manufacture of acetphenetidin or phenacetine.

—HORACE C. BUXTON, manager of the Fort Fairfield Drug Company, Fort Fairfield, Me., for a number of years, has sold his interest in the company to Thurber E. Holt, and will probably settle in business for himself somewhere in Maine, perhaps in Washington county, in which is located his former home. The future management of the Fort Fairfield Drug Company will be under the direction of Adrian F. Kelleher, a graduate of the University of Maine, '09.

—L. D. HOPKINS, manager of the California pharmacy, Omaha, Neb., was recently convicted on two counts of violating the prohibition law and sentenced to sixty days in jail and to pay a fine of \$100. Municipal Judge Britt ordered that nine barrels and 175 small bottles of alcohol seized in the drug store raid be confiscated and recommended that it be turned over to government hospitals, rather than destroyed.

—FRANCIS E. FORTIER, druggist of Van Buren, Maine, and Miss Mildred C. Kelliher, of Orono, same State, were married on Sept. 12. Prior to locating in Van Buren as the proprietor of a drug store, Mr. Fortier was a clerk for the Orono Drug Co. Mrs. Fortier, since her graduation from the training school connected with the Eastern Maine General Hospital and previous to her marriage, was engaged in graduate nursing in Orono and vicinity.

—W. B. CHERRY, sales manager of the Merrell-Soule Co., has been appointed a member of the war council committee of the American Specialty Manufacturers' Association, an organization composed of about 200 concerns manufacturing trade mark food and drug products. Mr. Cherry was formerly president of the association. It is said that the government is seeking the co-operation of the makers of trademark specialties.

—JOHN C. OPFER, druggist of Waukon, Iowa, recently completed the erection of a palatial new home in that city at a cost of \$14,000. The foundation is of tile and cement and the walls of pressed Roman brick with tile roof. The structure is furnished with all of the modern improvements in water, heating and ventilating systems from basement to attic. The decorations are the work of a Minneapolis artist.

—WARREN L. BRADT, secretary of the New York State Board of Pharmacy, was recently presented with a life membership in the American Pharmaceutical Association by pharmacists in the New York State Hospital Service. Pharmacists in the State service are now classed as officers in the various institutions with increased pay, and they feel grateful to Mr. Bradt for the work he has done in their behalf.

—J. F. McCORKLE, who has been for some time with the Service Drug Co., of St. Augustine, Fla., will resign his position with that concern, and take up his new duties as instructor in penmanship at the opening of the school year. His work as a penman has been highly complimented, and

local papers assert that he will constitute a valuable asset to the educational system of the city.

—THOMAS C. GRIMSHAW, for more than sixty years engaged in the drug business at Pittsfield, Mass., recently celebrated the ninetieth anniversary of his birth, a reception being given for him and a large number of friends and neighbors calling and tendering their congratulations. Mr. Grimshaw came to the United States from Ireland at the age of six years.

—WILLIAM J. PETERSON, formerly with Benson, Smith & Co., wholesale and retail druggists of Honolulu, Hawaiian Islands, following his enlistment in the United States service, was appointed pharmacist at the new Pearl Harbor Hospital and it is expected that he will have charge of the dispensary at that institution.

—WALTER M. ANDREWS, former Muncie, Ind., druggist, whose father founded the Silverburg drug stores in that city, has embarked in the drug business at Long Beach, Cal. He recently purchased the pharmacy of S. A. Morris in the California town, where he has resided for the past four years.

—EMIL A. BERNIUS, proprietor of a drug store at 5345 Easton street, St. Louis, Mo., was arrested on Oct. 5 following his indictment by the Federal grand jury on six counts charging him with stealing from registered mail. Bernius conducted a sub-postoffice in his store.

—J. C. GREENE, formerly of the Greene Drug Co., Birmingham, Ala., has acquired an interest in the W. G. Patterson Cigar Co., of that city, and will have charge of the retail stores of the concern. He has also been elected vice-president of the company.

—DR. I. N. PERLEY, who conducted a drug store at Lebanon, N. H., for about 40 years and retired therefrom a short time ago, and Mrs. Perley recently entertained about 75 friends at an informal celebration of their fiftieth wedding anniversary.

—WARREN CHURCHILL, secretary of the Churchill Drug Company, Burlington, Iowa, intends to enter the ordnance department of the U. S. A., and recently left Burlington to enter the University of Chicago for a six weeks' course.

—P. R. STAHL has retired after 25 years in the drug business at Centralia, Wash., having recently sold his interest in the Stahl Drug Company to E. E. Garlich, who has been associated with the company for past twelve years.

—CLAUDE BROOKS, druggist of Paragould, Ark., was held up and robbed of \$130 at one o'clock in the morning recently while on his way home from his place of business. The highwayman, who was masked, escaped.

—PROF. E. T. MOTLEY, instructor in pharmacy at the Auburn, Ala., Technical Institute, has resigned from the staff of that institution and accepted a position with the Cleveland School of Pharmacy, Cleveland, O.

—FRED W. DIEDERICH, druggist of Newcastle, Ind., expects soon to leave for France where he will inspect gas masks made for American soldiers. He has been appointed for this service by the war department.

—CHARLES B. WHILDEN, formerly a member of the California Board of Pharmacy, and for a number of years engaged in the drug business in San Francisco, is now residing at Marion, S. C.

—JOHN N. ZOOK, proprietor of Zook's Pharmacy, Inc., Santa Fe, N. M., has been appointed a member of the New Mexico Board of Pharmacy to succeed Bernard C. Ruppe, resigned.

—DEWEY DYE, connected with the Bradentown Drug Co., Bradentown, Fla., has gone to Gainesville, where he will enter the Law Department of the State University.

—GUY WHITNEY, druggist of Lostant, Ill., has joined the colors and is now in a training camp. His brother Max will care for the drug business during his absence.

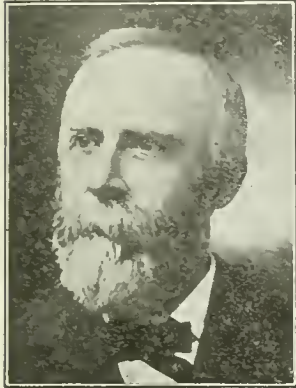
—JOHN R. LYNCH, a druggist of Somerville, Mass., and Miss Christine K. Ashe of that city were married recently.

—DRUGGIST EUGENE J. DONAGHUE, Mauch Chunk, Pa., was recently appointed a justice of the peace.

DEATHS IN THE DRUG TRADE

PROFESSOR CHARLES CASPARI, JR.

Prof. Charles Caspari, Jr., dean of the department of pharmacy, University of Maryland, Food and Drug Commissioner of Maryland, and author of Caspari's "Treatise on Pharmacy," well known to pharmacists wherever English is spoken, died at his home in Baltimore on Oct.



CHARLES CASPARI, JR.

13, of a heart affection with which he had been troubled since last Spring. Despite occasional attacks, he continued at work and, in fact, spent the day preceding his death at his office at the University of Maryland. Sometime during the night he developed grave symptoms of distress and remarked to his wife that he felt it would be his last. The end came several hours later, almost while he talked of getting ready to go to the University. He had repeatedly expressed a wish that he might be spared disability by illness, and that he might die in harness, and this wish was destined to be gratified.

The news of his death spread rapidly among pharmacists and city and State officials throughout Baltimore, and elicited many expressions of profound regret and remarks on the well-nigh irreparable loss which pharmacy had sustained. His great ability, unflinching courtesy and modesty had gained for him a host of friends in many walks of life, while he shunned publicity to the point where others at times received credit that properly belonged to him. His career during his life was closely identified with the progress of modern pharmacy in the United States, while his activities as a pharmaceutical writer and author placed him in the front rank of pharmacists and educators of his time.

Professor Caspari was born in Baltimore 67 years ago and was the son of Charles Caspari, Sr., a German who came to the United States many years ago and opened a pharmacy at 44 North Gay street. From his earliest youth he was in a pharmaceutical atmosphere, and this brought him under the notice of the late Louis Dohme, one of the founders of Sharp & Dohme, where he laid the foundation of his career. Later he took charge of his father's business, to which he applied himself with good results, afterward acquiring the pharmacy at Baltimore street and Fremont avenue, and he also secured an interest in the pharmacy at Harlem avenue and Carey street. But the commercial side of the drug business appealed far less strongly to him than its scientific aspects, and he soon gained notice as a writer on pharmaceutical subjects, having been graduated from the Maryland College of Pharmacy, the institution in which he was destined to become a member of the teaching staff. In the eighties he succeeded the late J. Faris Moore in the chair of pharmacy at the college, and this position he had held throughout the years, becoming the dean of the faculty and going to the University of Maryland when the Maryland College became a department of the older institution. To Dr. Caspari belongs the credit of having established perhaps the first pharmaceutical laboratory in the State and he was first in the practical teaching of pharmacy. The authorship of Caspari's "Treatise" won him renown among pharmacists everywhere. He became one of the editors of the National Standard Dispensary and held membership on the committee for the revision of the United States Pharmacopoeia for two decades. He was also a member of the committee on publication of the first issue of the National Formulary and for some twenty years served as permanent secretary

of the American Pharmaceutical Association, editing the voluminous proceedings of that body and making numerous contributions to its literature; and he relinquished this post only when the pressure of duties as Food and Drug Commissioner for Maryland became so great as to render it necessary that he give up some of his other work. He was one of the leading members of the Maryland Pharmaceutical Association. As Pure Food and Drug Commissioner for Maryland, being the first to hold this post after the enactment of the State law, he labored to effect an efficient organization and brought it up to a high standard of excellence. His work in the department was largely confined to the supervision of foods and drugs in the State. He promulgated the regulations abolishing the public drinking cup and requiring the use of paper cups at soda fountains. He supervised dairies, the bottled water industries, packing houses, canneries and other establishments and endeavored in every way to conserve the public health. In addition to his work at the University of Maryland he lectured at the Johns Hopkins Medical School.

Dr. Caspari is survived by his wife, two sons, Charles Edward Caspari, professor of chemistry at the St. Louis College of Pharmacy, and Fred W. Caspari, of this city, and four daughters. The funeral took place on Oct. 15, the body being cremated in accordance with the wish expressed by the deceased.

CARL J. LUTZ

Carl J. Lutz, veteran druggist of Ottawa, Ill., died suddenly on Oct. 4, after a brief illness of pneumonia. He was born in Ottawa in 1858, and had lived his entire life in that city, entering the



CARL J. LUTZ

employ of Dimmock Bros., in the drug business as a boy, and later going with Forbes & Gehring with whom he remained until 1884, when he started in business under the name of Lutz & Briggs, buying out Mr. Gehring's interest in the business in January, 1884. In 1892 he bought out Mr. Briggs' interest at the same location, and for the past twelve years had been assisted in his business by his son Carl. His death came as a severe shock to the whole community in which he had passed his entire life, and where he was held in the highest esteem as a helpful friend, a good neighbor and an upright citizen. He was married in 1886 to Miss Lena Formhals who, with his son C. W. Lutz, M.D., Ph.G. survive him.

HENRY E. MARVIN

Henry E. Marvin, vice-president of the Walding, Kinnan & Marvin Co., wholesale druggists of Toledo, Ohio, died on Sept. 28 at his home in that city. Born in Wisconsin his early life was spent in Painesville, Ohio, where he conducted a retail drug store under the name of Smith & Marvin. While thus engaged he was married to Miss Agnes E. Bailey, the daughter of J. E. Bailey, a well known resident of Toledo. Soon after his marriage he moved to Toledo, where he associated himself with W. J. Walding and John S. Kinnan, forming the firm of Walding, Kinnan & Marvin, which recently celebrated its 40th anniversary, still being under the active management of W. J. Walding and R. H. Bradley, Mr. Walding being a former president of the National Wholesale Druggists' Association. Mr. Marvin was a trustee emeritus of the First Congregational Church of Toledo, treasurer of

the Adams Street Mission, and was prominently connected with numerous charitable activities. He was a director in various manufacturing institutions and was a member of several prominent clubs. He is survived by his widow and one daughter, Mrs. Henry P. Dodge, of Toledo.

DR. EUGENE F. ROEBER

Dr. Eugene F. Roeber, editor of *Metallurgical and Chemical Engineering*, New York, died at his residence in East Orange, N. J., on Oct. 17, after an illness of several months. He was known widely in the electro-chemical industry in the United States, having been one of the founders of the American Electro-Chemical Society in 1902, and president of the organization in 1913-1914. He was born in Torgau, Germany, in 1867, and was educated at the universities of Jena, Halle, and Berlin, receiving the degree of doctor of philosophy from the Berlin institution in 1892. He came to the United States in 1894. He was a member of the American Institute of Mining Engineers, American Chemical Society, and the Chemists' Club of New York. He is survived by his wife and three sons.

ADOLPH VON BAEYER

Adolph von Baeyer, an honorary member of the American Chemical Society, and a prominent German professor of organic chemistry, best known as the discoverer of the process for making synthetic indigo, died recently at Starnberg, Germany. His research work attracted much attention throughout the scientific world, and he was awarded the Davy medal by the Royal Society of Munich. He was born in Berlin in 1835, and after studying in various elementary schools he entered the University of Berlin. Later he studied at Heidelberg University. In 1860 he became professor of chemistry in the *Gewerbe-Akademie*, and subsequently was in charge of the department of chemistry at the University of Strasburg.

RECENT DEATHS

—FRANK L. TUPPER, member of the firm of Curtis & Tupper, druggists of Bangor, Me., died on Oct. 3 from ptomaine poisoning. He was 63 years of age, a native of Harrington, and was engaged in the drug business at Lincoln some years before locating in Bangor about 25 years ago. He served as representative in the legislature in 1904, was a member of the board of aldermen, and common council, and for fifteen years was chairman of the republican city committee. He was also long active in the Bangor Board of Trade, and was a member of the Maine Pharmaceutical Association and many other organizations. A daughter survives him.

—EDWARD H. RISING, director of the General Chemical Co., died at his home in Saugerties, N. Y., on Oct. 4 after a short illness and following an operation. He was born at Worthington, Mass., in 1848, and moved to Cleveland when a young man. In 1893 he organized the National Chemical Co. which was later merged into the General Chemical Co., when he moved to New York, and became chairman of the Executive Committee. In 1907 he was elected president of the company, serving in that capacity for three years. He is survived by his widow, a son and a daughter.

—DR. JOHN M. GROSVENOR, well-known as a chemist and a manufacturer of plasters, died at his home in Boston, on Sept. 20. He was born in Danvers, in 1839. He was a graduate of Dartmouth College and of the Harvard Medical School. During the Civil War he served as an army surgeon. He was the father of County Commissioner John M. Grosvenor, Jr., who was associated with him in business. He was a member of many clubs and medical and other organizations, although for a number of years previous to his death he was active only in the Masonic order.

—EDWARD G. STETZEL, 43, proprietor of a drug store at Fifth and Walnut streets, Louisville, Ky., died at St. Anthony's Hospital on Oct. 12, following an operation for intestinal trouble. He had been in poor health for a number of years. He was a native of Louisville and had been engaged in the drug business from early boyhood. For a number of years he was the manager of one of the

Taylor stores, and last May embarked in business for himself. He was a member of the Masonic fraternity. He is survived by his widow and a daughter.

—JOHN A. BLAKE, druggist of Ipswich, Mass., died on Sept. 19, after an illness of several weeks. He was born in 1852 and conducted the pharmacy which he owned at the time of his death for 42 years. He was a director and vice-president of the Ipswich Savings Bank, a director of the Ipswich Gaslight Co., and was a member of the I.O.O.F. and Masonic fraternities. He is survived by his widow, his mother, a brother and nephew, all of Ipswich.

—GEORGE WARREN NYE, for 17 years an employe of the George L. Claflin Company, wholesale druggists, Providence, R. I., and during recent years, head of the company's surgical department, died on Oct. 9 from heart disease. He was born in 1866 and after graduating from the city schools became a registered pharmacist. He was a member of Rising Sun Lodge of Masons. He is survived by his widow and a married daughter.

—MARCUS R. MANDELBAUM, 67, for many years, New York State representative of the William S. Merrell Chemical Co., of Cincinnati, O., died recently at the Presbyterian Hospital, New York City. Mr. Mandelbaum was a well-known member of the New York State Pharmaceutical Association, having joined the organization in 1900. For many years he had served as chairman of the association's committee on transportation.

—OSCAR SILVIUS, one of the proprietors of the Westminster Pharmacy, Providence, R. I., is dead after an illness of five months. He was born in Sweden in 1873, and came to the United States about 26 years ago. He was a member of Maccabees, the Knights of Pythias, the Rhode Island Ph.A., and was prominently identified with several Swedish societies. He is survived by his widow.

—WILLIAM P. NICHOLSON, proprietor of a drug store at 3201 Howard street, New Orleans, La., died on Sept. 29 from potassium cyanide poisoning. The physician who was called to attend him was unable to say whether Nicholson had taken the poison with suicidal intent or had taken it by accident. He was 25 years of age, and had been suffering with spinal trouble for some time.

—SANFORD B. SCIDMORE, 48, general manager of the chain of Buck & Rayner drug stores, Chicago, died on Sept. 16, in the Jane McAllister Hospital, Waukegan, following an operation for appendicitis. He had been connected with the Buck & Rayner stores for about ten years, and was prominent in Masonic circles. A widow and one son survive.

—WILLIAM A. BERRY, a pharmacist of Wilkesboro, N. C., is dead from cancer of the face from which he had been a sufferer for some time. He was 66 years of age, and had been a resident of Wilkesboro for 29 years, being connected with the Brame Drug Co. at the time of his death. He is survived by two sons and one brother.

—ALEXANDER GIBSON CAREY, a member of the wholesale drug firm of James Bailey & Son, Baltimore, Md., died on Sept. 9 after an illness of about a year. He was born in Baltimore, 74 years ago, and had been identified with the wholesale trade for a long time. He is survived by his widow and one daughter, Strehlau.

—MRS. ELIZABETH P. JADWIN, widow of the late Orlando P. Jadwin, wholesale druggist of New York City, died recently at her home in Glenburn, Pa. She leaves three daughters and three sons, Palmer H., Paul O., and Stanley P. Jadwin, all members of O. H. Jadwin Sons, Inc., wholesale druggists, New York City.

—HENRI MENAGE, one of the oldest druggists of New Orleans, La., died recently aged 77. He was a native of Joslin, France, and settled in New Orleans 47 years ago, establishing a drug store at Prieur street and Esplanade avenue, which he operated until illness caused him to retire a few years ago.

—JAMES T. VAN HORNE, a prominent physician and druggist of Monroe, Ga., died recently, aged 67. He settled in Monroe prior to the 80s, and was one of the county's most progressive physicians and business men. The funeral was held at Covington. He is survived by three children.

TAXES PAID BY WHOLESALE AND RETAIL DRUGGISTS UNDER THE WAR REVENUE ACT

Facts Gathered in Washington by Secretary Holliday of the N. W. D. A., Bearing upon Inventories and Explaining Obscure Sections—Floor Taxes.

Francis E. Holliday, Secretary of the National Wholesale Druggists' Association, went to Washington immediately after the national convention of the association at Chicago and has since been in daily conference with the officials of the Internal Revenue Department from whom he obtained illuminating facts regarding the War Revenue Act with particular reference to the taxes imposed on wholesale and retail druggists. A summary of these facts as they relate to the taxes on cigars and tobacco, war excise taxes, "floor" taxes and the method of making inventories, date for paying taxes, etc., is given herewith as follows:

War Excise Taxes

Title VI, Sec. 600, Page 18.—The manufacturer, producer or importer of phonographs, talking machines, etc., and all records used in connection with any of them, will pay a tax of 3 per cent. of the price for which so sold.

(E) The manufacturer, producer or importer of any article commonly or commercially known as jewelry, whether real or imitation, will pay a tax of 3 per cent. of the price for which so sold.

(F) The manufacturer, producer or importer of sporting goods, including rods and reels, and all games and parts of games, except playing cards, will pay a tax of 3 per cent. of the price for which so sold. Children's toys and games are exempted.

(G) Upon all perfumes, essences, extracts, toilet waters, cosmetics, toilet soap and all articles which are used or applied or intended to be used or applied for toilet purposes, the manufacturer, importer or producer will pay a tax of 2 per cent. of the price for which so sold.

(H) This subdivision covering proprietary medicines should be carefully examined by every one engaged in the drug business, whether manufacturer, producer, importer, wholesaler, or retail druggist, for whoever produces, imports and sells any of the articles enumerated will be required to pay a tax of 2 per cent. of the price for which so sold.

All articles under subdivision (G) and (H) manufactured by a jobber should not be included in the so-called floor tax to be paid by the jobber, as the tax must be paid on all goods of his own production, as a manufacturer and not as a dealer. These comments also apply to Subdivision (G).

(I) The manufacturer, producer or importer of chewing gum, or any substitute therefor, will pay a tax equivalent to 2 per cent. of the price for which so sold.

(J) All cameras sold by the manufacturer, producer or importer will be taxed 3 per cent. of the price for which so sold.

Section 601, Page 20.—Each manufacturer, producer or importer of any of the above enumerated articles must make monthly returns under oath in duplicate, and pay the taxes imposed on such articles to the Collector of Internal Revenue for the district in which is located the principal place of business. Such returns shall contain such information and be made at such times and in such manner as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may by regulations prescribe.

Forms of making such returns are now in preparation, and it is the intention of the Bureau of Internal Revenue, as soon as it is possible to do so, to send out such forms from Washington, in order that the officials of the Bureau may be in close touch with the taxpayer, although the law provides that the taxes shall be paid to the collector of the district.

These taxes will be levied and collected from the morning of October 4, 1917, and manufacturers should so arrange their various businesses that they will be prepared to make prompt returns on "the price for which so sold" after deducting the customary discounts connected with their sales.

No decision has yet been reached, but it is altogether

probable that the Internal Revenue Department will rate the person, firm or corporation, marketing "Name Goods" and preparations which are bought in bulk and prepared for distribution and sale, as the manufacturer or producer of such articles and the tax will be levied on and collected from such persons, firms or corporations.

Will again mention that manufacturers or producers are required to make returns to the Collector of Internal Revenue of all alcohol held by them on October 4th, and to pay the additional tax, regardless of the character of the preparations in which the alcohol is to be used.

Floor Taxes

Section 602, Page 20.—All articles enumerated in Subdivisions (B), (E), (F), (G), (H), (I), or (J) (these being the ones in which the drug trade is interested), which on the day after this act is passed (October 4, 1917), are held and intended for sale by any person, corporation, partnership or association, other than a retailer, who is not also a wholesaler, or the manufacturer, producer, or importer thereof, shall pay a tax equivalent to one-half the tax imposed by each subdivision upon the sale of the article therein enumerated. This tax shall be paid by the person, corporation, partnership or association so holding such articles. This means that the wholesale dealer must pay a tax of 1½ per cent. upon the musical instruments, jewelry, athletic goods, etc., and cameras; and a tax of 1 per cent. upon all cosmetics, etc., and all proprietary medicines, etc., and chewing gum, in his possession at the time the law was passed.

Inventories should be made AS OF OCTOBER 4th, but may be taken down at the time you reach each article in the regular course of taking the inventory, and in case of doubt as to whether an article is taxable or not, do not include it with the articles to be taxed, but make a supplementary inventory of such goods to be adjusted later. Separate inventories should be made for Subdivisions (B), (E), (F) and (J), but Subdivisions (G) and (H), which contain both toilet goods and medicinal articles, may be taken together, for the reason that in many cases it would be difficult to know in which subdivision they belong. Chewing gum in Subdivision (I) may also be combined with (G) and (H), although it is to be preferred that a separate inventory be taken. It will be noted that the three latter subdivisions all pay the same amount of tax, which is 1 per cent.

It was the intention of the Internal Revenue Department to require that all these inventories be taken in duplicate, and that they should be filed with the Collector of Internal Revenue, in accordance with previous custom, but on account of the great scarcity of help in wholesale drug houses, and because of the great number of items covered by these subdivisions, wholesalers will be permitted to make inventories in such form as they may choose, which will serve the purpose intended, and the total footings are to be filed with the collector under oath in such form and under such regulations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe. Returns should be made within thirty days after the passage of the act, and payment of the taxes may be extended to a date not exceeding seven months from the passage of the act, upon the filing of a bond for payment in such form and amount as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury may prescribe.

The inventories, in whatever form taken, must be carefully retained by the wholesaler, as they will be subject to inspection by duly authorized officials of the Bureau of Internal Revenue, and must be accessible at all times for that purpose. We have been advised by several wholesale drug houses that they would utilize their latest inventory sheets for this purpose, using a different color of ink or pencil from that used in the original inventory, putting down quantities and prices in new columns prepared for the purpose.

The prices to be used in making inventory must be those which were paid for the goods, as Section 602 is governed by Section 600, and provides that the tax must be equivalent to a certain percentum "of the price for which so sold." This means that all goods must be inventoried at the price paid for them, regardless of whether they are dead stock worth less than the price originally

paid, or have advanced in price since they were purchased. Do not make returns of any taxable goods which you hold on consignment, as the manufacturer or owner of same will pay the tax when making his returns when goods are sold by him.

Your inventory should not contain any articles of your own manufacture, as you will be required to pay a monthly tax of 2 per cent. upon all such goods when sold.

A wholesaler who is also a retailer need not pay tax on his retail stock, if the business is conducted in a separate building or room, provided goods are billed from the wholesale to the retail department in the same manner in which they are sold to other retailers.

There will be no labels, stamps or other identification of tax-paid goods enumerated in Section 602. This is mentioned in order that various rumors and statements in this connection may be set at rest.

Goods in transit, billed previous to Oct. 4th, and not received by you, should be included in the inventory, as the courts have always held that after the consignor has received receipt from transportation companies, the ownership passes to the consignee.

It will be interesting to note for future reference how many of the various concerns throughout the United States, claiming to be wholesale druggists, will qualify under this law as wholesalers.

TAXES ON SOFT DRINKS

Section 313, Page 14.—Upon all prepared syrups or extracts for use in the manufacture of beverages, commonly known as soft drinks, sold by the manufacturer, producer or importer thereof, a new tax is levied as follows: 5 cents per gallon if sold for not more than \$1.30 per gallon; from \$1.30 to \$2.00 per gallon, 8 cents per gallon; from \$2.00 to \$3.00 per gallon, 10 cents per gallon; from \$3.00 to \$4.00 per gallon, 15 cents per gallon; and for more than \$4.00 per gallon, 20 cents per gallon.

On all unfermented grape juice, soft drinks or artificial mineral waters (not carbonated) and fermented liquors containing less than one-half per cent. of alcohol, sold by the manufacturer, producer or importer, in bottles or other closed containers, and upon all ginger ale, root beer, sarsaparilla, pop, and other carbonated waters or beverages, sold by the manufacturer, producer or importer of the carbonic gas used in carbonating the same, a tax of 1 cent per gallon. On all natural mineral waters or table waters sold by the producer, bottler, or importer thereof, in bottles or other closed containers, at over 10 cents per gallon, a tax of 1 cent per gallon.

Section 315, Page 14.—All carbonic acid gas in drums or other containers intended for use in the production of carbonated waters and other drinks, sold by the manufacturer, producer or importer, will pay a tax of 5 cents per lb. Such tax shall be paid by the purchaser to the vendor and shall be collected, returned and paid to the United States by such vendor.

Section 314, Page 14.—Each manufacturer, producer, bottler, or importer will pay the taxes above named on monthly returns to the Collector of Internal Revenue for the district in which is located the principal place of business. No floor taxes will be paid by the dealer in soft drinks, as the new tax is to be collected wholly from the manufacturer, producer, bottler or importer.

TAXES ON CIGARS AND TOBACCO

The taxes on cigars, tobacco and manufactures thereof are given in a circular issued by the N. W. D. A. to members of the Association as follows:

Title IV, Section 403, Page 15.—Shows the floor taxes to be collected from all dealers in manufactured tobacco, which is equal to one-half the tax imposed. Inventories of stock on hand on October 4th should be taken promptly and returns made immediately on blank forms, which will be furnished by Collectors of Internal Revenue, and which will show amount of taxes to be paid on each class of goods and the exemptions allowed under the law.

NEW POSTAL RATES NOVEMBER 2

Instructions to postmasters on increased letter mail rates, effective Nov. 2, under the War Tax Bill have been issued by Postmaster General Burleson. They apply to

all domestic mail, including that to Canada, Mexico, Cuba, Panama, the United States Postal Agency at Shanghai, and all persons in the United States military service in Europe.

Letters and other first-class mail matter, except drop letters, will be required to carry postage at the rate of three cents an ounce or fraction thereof. Drop letters, that is, letters for delivery in the city in which they are posted, must carry two cents an ounce or fraction thereof.

One cent postal cards must have an added one cent stamp attached, and post cards bearing written messages will carry two cents postage.

HIGHER PARCEL POST RATE

The new parcel post law in the War Revenue Act provides for the following increase in rates:

Schedule (A) 14.—Every parcel or package from one point in the United States to another by parcel post, on which the postage amounts to 25 cents or more, a tax of 1 cent for each 25 cents or fractional part thereof is charged for such transportation. This tax is to be paid by the consignor, and packages or parcels will not be transported until the stamps have been affixed thereto.

SUBSCRIPTIONS TO LIBERTY BONDS

Samuel W. Fairchild, chairman of the Drug and Chemical Trade Committee of the Liberty Loan Committee made a statement that up to the eve of Liberty Day there had been a total subscription of \$19,056,950. Following is a lists of the leading subscribers to the date he spoke:

U. S. Industrial Alcohol Co.....	\$2,000,000
National Aniline and Chemical Co.....	500,000
International Agricultural Corporation.....	500,000
Corn Products Corporation.....	500,000
Mutual Chemical Company.....	250,000
American Dyewood Company.....	200,000
Lehn and Fink.....	170,000
E. Bedford.....	100,000
Dr. W. H. Nichols.....	100,000
John Anderson.....	100,000
Charles Pfizer.....	100,000
William Erhart.....	100,000
Emil Pfizer.....	50,000
Employees of Pfizer & Co.....	60,000
William S. Gray & Co.....	50,000
Fredrick Ladenburg.....	50,000
Charles S. Huston.....	50,000
Thurston & Bradich.....	25,000

The du Pont Company subscribed \$45,000,000 to the Liberty Loan on Oct. 23, this bringing their total subscription to \$50,000,000.

NEW JERSEY BOARD REVOKES CERTIFICATE

An important meeting of the New Jersey Board of Pharmacy was held at the State House, Trenton, on Oct. 4, when a hearing was granted to a pharmacist who had been summoned to appear before the board to show cause why his certificate of registration should not be revoked. After full consideration had been given to all the facts presented, the following resolution was unanimously adopted, and was ordered to be given to the pharmaceutical press for publication.

Whereas, Max H. Siegel, of Newark, who was granted a certificate of registration by this (the New Jersey) Board of Pharmacy on July 20, 1916, bearing the number 4964, has declared before this Board at a hearing granted to him on Thursday, October 4, 1917, at Trenton, that he submitted false affidavits to this Board regarding the period of apprenticeship served by him and has confessed that he had not served four (4) years' apprenticeship as required by the pharmacy law of this State and

Whereas, If the above facts had been known prior to the granting of the said certificate, such certificate could not legally have been granted, and

Whereas, It is the sworn duty of this Board to declare that the said Max H. Siegel was ineligible for the examination which he attended on July 20, 1916, therefore

Be it Resolved, That the certificate of registration granted to the said Max H. Siegel be and the same is hereby revoked.

MONTGOMERY CO. DRUGGISTS ORGANIZE

The Drug Merchants' Association of Montgomery County was organized by thirty druggists of the county at the Alonquin hotel, Dayton, Ohio, on Sept. 12, and the following officers elected; President, Otto Moosbrugger; vice-president, J. R. Miller; secretary and treasurer, William Shultz. Committees on press, entertainment and trade interests were also selected. The association is considering a banquet to be given in the near future.



SALESMEN OF NORWICH PHARMACAL COMPANY ASSEMBLE IN NEW YORK

Twenty-five salesmen, representing the New York Branch of the Norwich Pharmacal Company, and covering the territory of Greater New York and the Atlantic States to the Gulf, recently assembled at the Hotel Albert, New York City, for their annual sales convention. Branch manager Currens presided, and addresses were made by R. C. Stofer, president of the company; W. P. McNulty, production manager; J. P. Snyder, chief chemist, and W. L. Marsters, manager of the cost department. Members of the sales staff also delivered addresses and took part in the general discussions. A feature of the convention was an exposition of the analytical and physiological work of the company's scientific staff, illustrated by apparatus and animals from the laboratories. A photograph of those in attendance at the convention is reproduced in the above cut.

NO RIGHT TO USE CRITTENTON NAME

An announcement of the incorporation of the C. N. Crittenton, Jr. Company in the State of Delaware for \$200,000 to deal in proprietary products, was made to the drug trade recently. The opinion was hazarded among the trade that some of the younger generation were going to continue the Crittenton business under the old and well-known name.

A representative of the ERA called at the Park Place office, where the affairs of the old Crittenton Company are being wound up, and obtained the following statement from T. E. Delano:

"The announcement was a surprise to us as we have not given the use of the name Crittenton to anyone and this new incorporation has no connection whatsoever with ourselves. We have notified a party supposed to be a representative of the Delaware incorporators of the C. N. Crittenton, Jr. Co., to this effect."

Mr. Delano refused to explain further, but it is surmised from his statement that the Delaware incorporators have used the name, Crittenton, unlawfully. Whether the Crittenton Company would proceed against the users of their name could not be learned.

SMITH DRUG CO., INCREASES CAPITAL STOCK

The C. D. Smith Drug Co., St. Joseph, Mo., wholesale druggists, and one of the oldest jobbing houses on the Missouri river, recently filed notice of increase in its capital stock from \$250,000 to \$400,000. The assets amount to \$305,985.94 and liabilities \$55,986.94. The stock as increased is divided into 4,000 shares of \$100 each, of which 2,500 shares are preferred and 1,500 common. The common stock is held as follows: Lewis M. Smith, St. Joseph, 88 shares; Edward C. Smith, Kansas City, 81 shares; Elizabeth Smith, Kansas City, 36 shares; Bickley Street, Kansas City, 35 shares; R. D. McBride, St. Joseph, 10 shares.

The preferred stock is held as follows: Lewis M. Smith, 1,088 shares; Edward C. Smith, 81 shares; Elizabeth Smith, 36 shares; Bickley Street, 35 shares; R. O. McBride, 10 shares.

N. Y. QUININE & CHEMICAL RE-INCORPORATE

Announcement has been made of the incorporation of the New York Quinine & Chemical Works, Inc., to manufacture drugs and chemicals, the capital stock to be \$10,000. The incorporators are C. L. Rimlinger, F. A. Armstrong, Wilmington, Del., and Clement N. Egner of Elkton, Md. The New York Quinine & Chemical Works was formerly a branch of McKesson & Robbins, New York, and a statement from the latter says that the N. Y. Q. has not passed out of their hands.

FIRE DESTROYS CAPSULE PLANT

The plant of the T. W. Ready Co., manufacturers of capsules, Niles, Mich., was practically destroyed by fire recently, the loss being estimated at \$75,000, with only about \$18,000 insurance. The fire started on the third floor of the building, which was largely of frame construction, and rapidly spread through the factory. About 100 hands were employed, and these will be taken to the company's plants in South Bend, Ind., and Chicago. The Niles factory may not be rebuilt.

NARCOTICS STOLEN FROM ARMY DEPOT

Agents of the Department of Justice made arrests of employees at the Army Medical Supply Depot, 537 Greenwich street, New York, for the theft of 150 bottles of cocaine, which was to be shipped to France, 50 tubes of neosalvarsan valued at \$3,000, and other drugs and surgical supplies. The cocaine is valued at \$4,000. A Brooklyn druggist was arrested for receiving the stolen goods. Bail in every case was fixed at \$7,500.

NEWS OF THE ASSOCIATIONS

NEW YORK BRANCH SEASON'S WORK

At the initial meeting of the New York branch of the A. Ph. A. for the season of 1917-18, held last month at the New York College of Pharmacy, a resolution was introduced providing that branch meetings be divided into two sessions, one for business and extending from 8 to 8.30 o'clock P. M., and the other for the scientific program and discussion, to begin immediately after the first session. The resolution was discussed at some length, but no action was taken, the members deciding to bring the subject up at the next meeting. In the meantime an effort will be made to determine whether the object to be obtained should be effected by the introduction of a resolution or proposed as an amendment to the by-laws. It is expected that the secretary will report on the subject at the next meeting.

Dr. Jeannot Hostmann, speaking on pharmacists in the army, asserted that pharmaceutical organizations should do more than endorse the Edmonds bill. The members of the branch should get at the Congressmen from New York and New Jersey. Dr. Hostmann also stated that many pharmacists think the bill does not go far enough. Some of the delegates in attendance at the N. A. R. D. convention objected to army pharmacists being put under a doctor. The amendment proposed to counteract this, according to the speaker, might kill the measure.

Dr. Wm. C. Anderson took pains to point out that the N. A. R. D. attitude toward the Edmonds bill had not been one of "all or nothing" That attitude had been assumed only by a few members on the floor of the convention. The convention was greatly in favor of the bill. A committee of three to further the passage of the bill was authorized.

Dr. Jacob Diner, chairman of the committee on Fraternal relations, announced that committees representing the branch and the county medical society would confer to arrange a joint meeting to be held by the two bodies at an early date. Dr. George C. Diekman presented an interesting report on the progress of pharmacy.

The treasurer reported a balance on hand in the sum of \$46. Branch funds amounting to \$179, are held up in the estate of the late treasurer Dr. Joseph Weinstein, but this money will be soon available.

The starting of a new set of books, to be dated from January 1, next year, was provided for by resolution. This was done to avoid duplication of bills.

PHARMACEUTICAL SERVICE ACTIVITIES

Fifty new members, representing twenty-two states, the District of Columbia and Canada, were elected into the National Pharmaceutical Service Association at the regular monthly meeting, held October 8, at the Philadelphia College of Pharmacy. Dr. F. E. Stewart, who had been sent to the convention of the Pennsylvania Medical Society by the Association, to secure its cooperation in the movement for the organization of a Pharmaceutical Corps, reported that the matter would be taken up in the Pennsylvania Medical Journal, which is the official organ of the Society.

The report of Treasurer J. C. Peacock showed a balance of \$65.15.

A letter from C. A. Mayo, recommending a concerted effort to obtain publicity in the lay press for the organizing of a Pharmaceutical Corps, was read and referred to the Executive Committee. President George M. Beringer read an extremely interesting paper on "The Pharmaceutical Service in the French Army". The paper is to be published and distributed to the members of the Association and to others interested.

It was reported that the Edmonds Bill, which seeks to create a Pharmaceutical Corps in the Army, would not be brought to the floor of the House by the Committee on Military Affairs until the December Session of Congress. At that time, it is hoped a hearing will be ar-

anged, so that representatives of the pharmaceutical profession can present their opinions in detail.

The Association desires particularly to keep in touch with pharmacists who have enlisted, or who have been conscripted, so that if the Bill should pass, provision can be made to have them transferred to the Pharmaceutical Corps.

KRAEMER ADDRESSES DETROIT BRANCH

At the October meeting of the Detroit Branch of the American Pharmaceutical Association, Prof. H. Kraemer of the College of Pharmacy of the University of Michigan, gave a very interesting talk on "Obligations and Opportunities of Retail Druggists." With the aid of lantern slides, Prof. Kraemer showed methods of microscopically identifying a number of the more common drugs, pointing out the opportunity of the druggist to obtain full value when purchasing crude drugs, and his obligation to the public to supply a pure product.

Dr. A. B. Stevens, dean of the College of Pharmacy of the University of Michigan announced that original research work will now be a part of the curriculum of the senior student and any druggist who has a problem of this sort, the more difficult the better, is asked to send it to him. A motion was carried unanimously to extend a vote of appreciation to Dr. Stevens for his faithful work in, and loyalty to the American Pharmaceutical Association.

BROOKLYN C. P. TO CELEBRATE

For a second time in its history the Brooklyn College of Pharmacy has occasion to celebrate a twenty-fifth anniversary. This year finds that the college has been served by two teachers who were appointed to the teaching staff just twenty-five years ago, and both have served continuously to date. The professors who have this record to their credit are D. C. Mangan and H. W. Schimpf, and the officers, trustees and teachers of the college will celebrate the event with a banquet at the Elks Club, South Oxford street, near Fulton street and Hanson Place, Brooklyn, on Wednesday evening, Nov. 21. The various committees appointed have arrangements well under way, and prominent invited guests will address the gathering and take part in the celebration. The Press Committee announces that tickets for the banquet will be \$4 per plate and that all who desire to participate in the affair should communicate with the Dinner Committee, or the treasurer, Thomas J. France, 265 Nostrand avenue, Brooklyn, at the earliest possible date, so that proper table reservations may be made.

DEMAND FOR ORCHARD WHITE GROWING

Druggists are advised to stock Orchard White, a new massage cream for the complexion, the demand for which by women is becoming greater and greater. It is just being advertised, and considering its short period on the market, promises to be a leader among popular toilet articles. Orchard White retails for 40c. a bottle and wholesalers charge \$3.20 per dozen for it, less 5% in six dozen lots. Druggists should save this discount; there is no danger of overstocking, as the goods can be returned at the price paid at any time. For particulars, see the Orchard White advertisement in this issue.

PFADLER CO.'S NEW BRANCH OFFICE

The Pfadler Co., manufacturers of glass enameled steel tanks, Rochester, N. Y., have recently established branch sales offices at 1502 Oliver Bldg., Pittsburgh, Pa., James H. Charity, representative, and at 1946 Penobscot Bldg., Detroit, Mich., George M. Scott, representative. By the establishment of these offices the company believe that they can give their patrons and prospective patrons within the vicinities affected, the maximum of prompt and efficient service.

Credit and Commercial Decisions

By GEORGE H. MURDOCH, Newark, N. J.

Carbon copies of letters are admissible in evidence as duplicate originals.—*McLendon v. Ebbs*, 92 S. E. (N. C.) 498.

A bill of sale is prima facie, but not conclusive, evidence of the passing of title.—*Simpson v. Perfett*, 162 N. W. (N. D.) 900.

An ordinary business corporation has no power to become surety for another corporation or individual.—*Edwards v. International Pavement Co.*, 116 N. E. (Mass.) 266.

One who holds a note by assignment for the purpose of collection is the real party in interest in his own name.—*Utah Implement-Vehicle Co. v. Kenyon*, 164 P. (Idaho) 1176.

Generally, delivery to a common carrier is not such a delivery to the purchaser as satisfies the statute of frauds.—*Spedding v. Griggs, Fuller & Co.*, 162 N. W. (Mich.) 956.

An indorsee, who is in possession of a promissory note, is the "holder" thereof, and may sue thereon in his own name.—*Utah Implement-Vehicle Co. v. Kenyon*, 164 P. (Idaho) 1176.

A fire insurance policy provision prohibiting insured from taking out other insurance on the property insured, or its contents, is valid.—*Hurst Home Ins. Co. v. Deatley*, 194 S. W. (Ky.) 910.

A merchant is bound to maintain his storeroom in a reasonably safe condition for customers who come into it for the purpose of transacting business with him.—*Reese v. Abeles*, 164 P. (Kans.) 1080.

A mercantile partnership which sells its entire stock of goods and thereafter ceases to do business is dissolved by operation of law.—*Citizens' Trust Co. v. Tindle*, 194 S. W. (Mo.) 1066.

A general partner is agent for the partnership, and has authority to do whatever is necessary to carry on its business in the ordinary manner.—*First Nat. Bank of Ann Arbor, Mich. v. Farson*, 165 N. Y. S. 119.

A general partner in a trading business can borrow money in the usual course of business for the benefit of the firm and sign the firm name to note so as to bind all other members.—*Citizens' Trust Co. v. Tindle*, 194 S. W. (Mo.) 1066.

The mere fact that a creditor receives less than the amount claimed, with knowledge that the debtor denies indebtedness beyond that amount, does not in itself constitute an accord and satisfaction.—*Dimmick v. Banning, Cooper & Co., Ltd.*, 100 A. (Pa.) 871.

A sales contract made on Sunday will not be enforced against either party, and, after it has been performed, a party who has paid money or delivered property under it cannot recover what he has parted with.—*Mann v. United Motor Boston Co.*, 116 N. E. (Mass.) 239.

The gist of the legal wrong of unfair competition is the invading by one of the right of another by procuring the sale of his own goods through express or implied misrepresentation that they are those of his competitor.—*Luminous Unit Co. v. R. Williamson & Co.*, 241 F. (U. S.) 265.

The private individual knowledge of an officer of a corporation, acquired in the transaction of his own business, while dealing as if he had no official relation to the corporation, will not operate as notice to the corporation.—*Bank of Florida v. American Nat. Bank of Pensacola*, 75 So. (Ala.) 310.

The consignee of perishable goods arriving at destination in bad condition discharged its whole duty to the carrier to save it from resulting loss where it sold the damaged goods for the best price which they would bring.—*Gulf, Colorado, & Santa Fe Ry. Co. v. Texas Packing Co.*, 37 Sup. Ct., (U. S.) 487.

A sales agreement that the buyer should sell the goods only within a certain territory and engage in no other business violates Rev. St. 1911, arts. 7796—7798, prohibiting combinations to maintain prices and prevent competition in a certain territory.—*Newby v. W. T. Rawleigh Co.*, 194 S. W. (Texas) 1173.

Where a purchaser has been induced to make a purchase by fraud, he has an election of remedies, and may retain the property, and when sued for the purchase money may set up fraud as a defense, or he may rescind the contract, and thus defeat the action for the purchase money.—*Sonneborn v. S. F. Bowser & Co.*, 116 N. E. (Ind.) 66.

A pretended agent contracting without authority renders himself liable to the other contracting party unless he at the time makes a full and honest disclosure of the nature and extent of his authority, so that the other contracting party may be said to have acted on his own judgment as to such authority.—*O'Rear v. Walker*, 75 So. (Ala.) 353.

Where a mortgage is taken on a stock of goods with an understanding that the mortgagor is to continue in business in charge of the goods, necessarily disposing of them from time to time, such mortgage is fraudulent and void as to present and subsequent creditors of the mortgagor.—*Gray & Dudley Hardware Co. v. Guthrie*, 75 So. (Ala.) 318.

Where a loose-leaf ledger was admitted as a book of original entry, mere presence of unexplained pencil notations in one column, pertaining to payment of interest, and evidently made for the convenience of the bookkeeper, did not render the account suspicious on its face so as to render its admission erroneous.—*Gentry v. S. A. Rider Jewelry Co.*, 194 S. W. (Mo.) 1057.

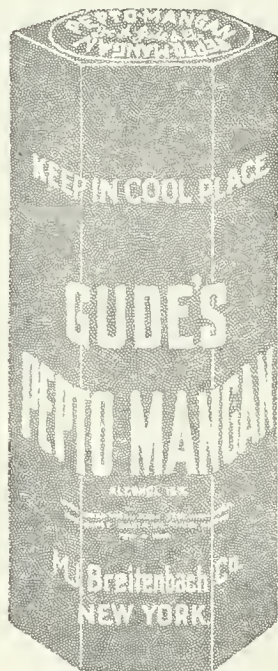
If, under a contract for the sale of specific goods, the seller is bound to do something to the goods for the purpose of putting them in a deliverable state, that is, into a condition in which the buyer is bound to accept them, unless a different intention appears, the property does not pass until such thing is done, and this is the law even where a bill of sale is given.—*Simpson v. Perfett*, 162 N. W. (N. D.) 900.

Where goods are delivered in good condition to a warehouseman for hire and it is shown that they have not been delivered on demand and payment of charges by the depositor, but have been destroyed by fire while in the custody of the warehouseman, the burden is upon him to absolve himself from negligence by showing a lawful excuse for his failure to deliver the goods in compliance with the demand.—*Caldwell v. Skinner*, 164 P. (Kans.) 1166.

Where the buyer of personal chattels discloses to the seller the particular purpose for which such goods are desired, and trusts to the latter's skill, judgment, and experience as to what articles shall be furnished, and the seller accepts the order upon these conditions, there is an implied warranty that the articles supplied shall be reasonably fit and appropriate for the use to which they are intended to be applied.—*Schaffner v. National Supply Co.*, 92 S. E. (W. V.) 580.

A buyer's check attached to a receipt "in full for the above account" did not amount to an accord and satisfaction, where there was no express statement in the attached letter that the letter and check were to be considered as a compromise of the claim, or that it was tendered as such, or that acceptance thereof would be considered a waiver of the seller's right to the balance of its claim, but, on the contrary, expressly stated that payment was made in settlement "of the difference between" the amount of the seller's claim and the buyer's loss.—*Dimmick v. Banning, Cooper & Co., Ltd.*, 100 A. (Pa.) 871.

No Advance in Price of Gude's Pepto-Mangan



In view of the general increase in the prices of proprietary remedies, we desire to *emphasize the fact that the price of Pepto-Mangan is the same as heretofore.* We will continue to assume the burden of the very material increase in the cost of labor, materials, etc., as well as the heavy taxes recently imposed, for *two principal reasons:*

- 1** In order to maintain the retail price of our standard remedy at the standard price of \$1.00 per bottle.
- 2** To insure the active and cordial co-operation of both jobber and retailer, in view of our widespread newspaper advertising campaign recently inaugurated, which cannot fail to make it distinctly profitable to the dealer to use every effort to increase his sales of Pepto-Mangan.

In view of the above, we respectfully request the dealer to carry ample stock at all times, in order to promptly meet all demands without delay.

M. J. BREITENBACH CO. Manufacturing Chemists NEW YORK

THE DRUG MARKETS

PRICES ON PROPRIETARIES ADVANCING

War Revenue Act Affects Market in Effort of Manufacturers to Meet Increased Taxes—Alcohol, Quinine, Morphine and Other Staples Higher—Few Declines Reported.

New York, Oct. 25.—Since our last report price changes have been numerous, although the volume of business on new orders has been rather under the average, due to various conditions arising out of the passage by Congress of the War Revenue Act, the continued uncertainty of transportation facilities, also export licensing requirements. There has also been a general advance in the prices of proprietary goods, manufacturers generally marking up their goods, owing to the taxes imposed on these articles by the War Revenue Act. As a matter of fact, the new law has had a certain and positive effect on the market. Manufacturers must provide to meet taxes on profits, on corporations, and on so many other things, that those who did not raise their prices in anticipation of the passage of the law were soon compelled to do so as soon as the act was approved. Not all of the questions pertaining to the application of the law have yet been definitely settled, and until that time comes, the adjustments to meet the new conditions are sure to cause an upward trend in the prices of many drugs and chemicals.

Prominent in the list of advances are alcohol, carbolic acid, alkanet root, bay rum, cannabis Indica herb, chloroform, cloves, codeine, diacetyl morphine, Dover's powder, glycerin, guaiacol carbonate, hydrogen peroxide, jalap root, lycopodium, various mercurials, morphine and its salts, various essential oils, potassium carbonate and prussiate, quinine, and its salts, Castile soap, spirits turpentine, Belgian valerian, and distilled extract of witch hazel. A few staples, such as acetphenetid, cream salicylic acid and its salts, camphor, chrysarobin, cream of tartar, oil of cade, essential oil of mustard, phenolphthalein, potassium permanganate, rape seed, sandarac, sodium benzoate, sulphothyol, and fused zinc chloride are lower, in a few cases the changes being a revision of prices only.

OPIMUM—The market is bare of supplies and trading in a large way is restricted. According to Government statistics, the imports of opium for the seven months ending with July amounted to 73,193 pounds, valued at \$821,344, as compared with 68,636 pounds, valued at \$523,479, in the corresponding period a year ago, and 284,719 pounds, valued at \$1,401,703, in 1915. Jobbers continue to quote \$30 @ \$32 per pound for natural, and \$32 @ \$35 per pound for granulated and U. S. P. powdered, respectively.

MORPHINE—Owing to scarcity of raw material, manufacturers recently advanced their prices for the alkaloid and its salts, the higher quotations being also accentuated by the urgent demand by the Government and its allies for this narcotic. The following schedule shows the prevailing jobbing quotations: Alkaloid, $\frac{1}{8}$ -oz. vials, per ounce, \$18.70 @ \$19.70; acetate, $\frac{1}{8}$ -oz. vials, per ounce, \$15.85 @ \$16.10; hydrobromide, $\frac{1}{8}$ -oz. vials, per ounce, \$15.85, @ \$16.10; hydrochloride, $\frac{1}{8}$ -oz. vials, per ounce, \$15.85 @ \$16.10; sulphate, $\frac{1}{8}$ -oz. vials, per ounce, \$16.55 @ \$16.80; in 1-oz. vials, per ounce, \$16.30 @ \$16.50.

CODEINE—While the market reflects no increased demand for this alkaloid, yet the increased cost of the basic material and the high prices maintained by manufacturers have caused jobbers to advance their quotations to \$14.50 @ \$14.75 per ounce for alkaloid, salts being quoted as follows: hydrochloride, \$13.25 @ \$13.50; nitrate, \$13.25 @ \$13.50; salicylate, \$11.40 @ \$11.60; phosphate, \$11.40 @ \$11.65; sulphate, \$12 @ \$12.25 per ounce, respectively.

QUININE—Recent large purchases by the Government are said to have made heavy inroads in the available stock

supply, and this has served to create a firmer feeling in the market. Jobbing prices have been advanced to 85 @ 86c. per ounce for sulphate in 100 oz. tins, 90 @ 95c. in 5-oz cans, and 95c. @ \$1 in 1-oz. cans. Alkaloid is held at \$1.69 per ounce, while quotations on the various salts are as follows: Acetate, \$1.86; arsenate, \$1.65; arsenite, \$1.65; citrate, \$1.53; glycerophosphate, \$2.53, hydrobromide, \$1.47; hydrochloride, \$1.47; hypophosphite, \$1.65, phenol-sulphonate, \$1.65; lactate, \$1.66; salicylate, \$1.39. The imports for quinine sulphate for the seven months ending June 30 amounted to 762,909 ounces, as compared with 907,223 ounces for the corresponding period of 1916, and 593,503 ounces in 1915.

COD LIVER OIL—Norwegian is in scanty supply, while the demand is increasing as winter approaches. Quotations show an advance over those of a month ago, jobbers quoting \$125 @ \$128 per barrel. Newfoundland is quoted at \$3.40 @ \$3.50 per gallon.

ALCOHOL—The imposition of the new revenue tax, along with the unsettled conditions previous to the passage of the act, have served to unsettle the market, but prices have now become steadier. Cologne spirit, 95% U. S. P., being held at \$5.55 @ \$5.60 per gallon by the barrel, and \$5.80 @ \$6.30 per gallon for less; commercial, 95% U. S. P., is held at \$5.50 @ \$5.55 per gallon in barrels, and \$5.75 @ \$6.25 for less. An easier market is reported for denatured alcohol, with quotations lower, jobbers asking 95c. @ \$1.20 per gallon by the barrel or less. Wood alcohol remains at \$1.20 @ \$1.25 per gallon.

GLYCERIN—The market has been advancing for some time, while the demand is steady and active, particularly for the C. P. grades. Present prices are 71 @ 72c. for C. P. in bulk, drums and barrels added, 73 @ 74c. in cans, and 79 @ 85c. for less. Powder makers are reported to be in need of supplies for the manufacture of explosives.

CAMPHOR—Early in the month reports from primary sources indicated an easier market and prices declined, jobbers quoting 77 @ 85c. per pound for refined, 77½ @ 83c. for ¼-lb. squares, and 86 @ 91c. for powdered.

CHLOROFORM—Owing to the enhanced cost of raw materials, manufacturers announced an advance in prices, with dealers asking 78 @ 85c. per pound.

CLOVES—This spice commands high prices and is in active demand, with quotations advanced to 60 @ 65c. per pound for Zanzibar, powdered being 5c. per pound higher.

DOVER'S POWDER—Has again been advanced, following the higher cost of basic materials, jobbers now quoting from \$6 @ \$6.50 per pound.

GOLDEN SEAL—Is in better supply at \$5.50 @ \$5.75 per pound for whole, and \$5.60 @ \$5.75 for powdered.

GUAIACOL CARBONATE—Scarcity and a strong seasonable demand have caused higher prices, \$5 @ \$5.25 per ounce being asked.

HENNA LEAVES—An increasing demand is reported with stocks steadily decreasing, the market reflecting a strong undertone. Jobbers are now asking 35 @ 38c. per pound.

HOPS—Pressed in ¼ and ½-lb. packages are higher at 46 @ 48c. per pound.

HYDROGEN PEROXIDE—Increased cost of bottles for packing and an active demand are responsible for the higher prices for standard preparations, medicinal being held at 21 @ 30c. per pound, according to brand, technical solution continuing to be quoted at 15 @ 22c. per pound.

JALAP ROOT—In some quarters stocks are practically depleted and prices have been rapidly advancing, 45 @ 50c. being asked for whole, and 55 @ 60c. for powdered.

LYCOPodium—Reports from Russia are not reassuring, and the local market is unsettled, prices having advanced to \$2.50 @ \$2.75 per pound.

MERCURIALS—Higher prices are noted for ammoniated (white precipitate), \$2.45 @ \$2.75 per pound being asked. Corrosive sublimate is held at \$1.90 @ \$2.20, powdered being 10c. per pound less. Calomel has also advanced, prevailing quotations being \$2.10 @ \$2.30 per pound.

ESSENTIAL OILS—The market for these products with but one or two exceptions shows an upward trend, traceable to a variety of causes, as scarcity in producing countries, embargoes, difficulty in making shipments, advanced freight rates, insurance, etc. Caraway is in scanty supply and higher at \$8.75 @ \$9 per pound; for similar reasons, cedar leaf has been marked up to \$1.20 @ \$1.30 per pound; oil of cloves in sympathy with the higher cost of raw material has advanced to \$3.25 @ \$3.50 per pound; pennyroyal is held at \$1.85 @ \$1.95, and sassafras at \$1.25 @ \$1.35. Smaller stocks and stronger markets for crude material are responsible for the advance of oils of wormseed and wormwood, the former being quoted at \$8.75 @ \$9 per pound, and the latter at \$8.25 @ \$8.50.

PHENOLPHTHALEIN—Offerings by new producers are reported in this market, and quotations have eased off to \$1 @ \$1.20 per ounce.

POTASSIUM SALTS—With few exceptions, the market continues firm for most salts, permanganate showing a decline to \$4.75 @ \$5 per pound. Refined carbonate, U. S. P., is higher at \$1.75 @ \$1.85, and yellow prussiate at \$1.60 @ \$1.75.

SANDARAC—This gum is in better supply, with prices reduced to 60 @ 70c. per pound for clean.

SARSAPARILLA ROOT—All varieties are reported to be in scanty supply, and higher prices are noted. Honduras, cut, is held at 75 @ 80c. and Mexican, cut, at 65 @ 70c. per pound; powdered, 75 @ 80c.

SODIUM SALICYLATE—There is good inquiry, and domestic manufacturers are in a position to supply all demands in sight. Jobbers have recently reduced their prices to \$1.10 @ \$1.20 per pound.

SPIRITS TURPENTINE—An upward swing in prices has been noticeable for some weeks, this tendency being attributed to bullish advices coming from primary centers. But little export business has been reported, the most of this being with South American countries. The prevailing quotations range from 57 @ 67c. per gallon.

VALERIAN ROOT—Belgian continues to advance and the market is firm at \$1.30 @ \$1.40 for whole, and \$1.40 @ \$1.50 for powdered. The Japanese variety is reported to be in small supply in this market.

WITCH HAZEL EXTRACT—The increased cost of alcohol used in manufacturing the distilled extract is reflected in the quotations on this article which is now held at \$1.25 @ \$1.35 per gallon by the barrel, and \$1.50 @ \$1.75 for less.

BAY RUM—Owing to the higher tax on spirits, this article has also advanced in price, Porto Rican by the barrel being held at \$3.50 @ \$3.60.

DISPOSITION OF PEROXIDE PROBLEMS

When a customer asks for hydrogen peroxide, what do you offer him? An inferior peroxide at a low price—or a peroxide that justifies its name; a peroxide that you can sell without apology; that will give you a decent profit; that will bring the buyer back to your store? Does it pay—in dollars and cents, or in any other way—to meet cheap competition in hydrogen peroxide?

These are pertinent questions—questions that every retail druggist should ask himself sharply. Perhaps logical answers to them may be found in the advertisement "Truth About Peroxide," that appears elsewhere in this journal over the signature of Parke, Davis & Co.—an announcement to which the pharmacist may well give serious consideration.

WHY FREEZONE SELLS

The manufacturers state that druggists can conscientiously recommend Freezone to their customers as the best corn and callus remover known, a few drops applied to a tender corn or painful callus instantly relieving the soreness and loosening the corn or callus so that it can soon be lifted away with the fingers without any pain. Freezone sells for 35c., one sale being equal to two or

three sales of the average corn remedy, while the profit is proportionately greater. The customer is enthusiastic with the results, and his recommendation with the wide advertising publicity being conducted in the newspapers, has put this specialty in the front rank of big sellers. Druggists are advised to buy the quantity which nets the biggest discount, and are informed that Freezone can be returned for cash at any time the druggist finds that it is not moving fast enough.

OPPORTUNITY TO INCREASE SALES TO WOMEN

In the countries affected by the great war experience has demonstrated that social activities are greater everywhere than they were in piping times of peace. In these activities women have taken a leading part, and the desire for personal adornment has caused them to be more extravagant in their purchases of the little vanities and luxuries which contribute to this attainment. The unusual work that many women are now doing makes it necessary for them to take better care of their health and personal appearance, and this condition favors druggists who can supply the toilet articles the average woman needs. Here is your opportunity. The Goodrich Drug Company, manufacturers of Velvetina Toilet Specialties, in their advertisement in this issue of the ERA call attention to this opportunity for druggists to increase their sales to women 200 per cent.

CALCIDIN FOR COUGHS AND COLDS

Calcidin (Abbott) is a remedy that has been tried and found efficacious in practically all acute diseases of the upper respiratory tract, such as coughs, colds, bronchitis, influenza, catarrhal or spasmodic croup. A new preparation of this character recently put upon the market is the Calcidin Troche, a large, deliciously flavored lozenge, to be dissolved in the mouth. The Calcidin taste is entirely covered, and the medicament is one which appeals to children of all ages, as well as to the seniors. Its use gives prompt results. Every druggist should be supplied with Calcidin tablets and with Calcidin Troches. Jobbers have them in stock.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

Of The Pharmaceutical Era, published monthly at New York, N. Y., for October 1, 1917, State of New York, County of New York—ss:

Before me, a notary public in and for the State and county aforesaid, personally appeared D. O. Haynes, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Pharmaceutical Era, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business manager are: Publishers, D. O. Haynes & Co. Editor and Managing Editor, E. J. Kennedy, Business Manager, D. O. Haynes, all of No. 3 Park Place, New York, N. Y.

2. That the owners are: (Give names and addresses of individual owners or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) D. O. Haynes & Co. and D. O. Haynes, 3 Park Place, New York, N. Y., F. J. Haynes, St. Paul, Minn., E. King, 15 William St., N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) There are none.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner, and this affiant has no reason to believe that any other person, association, or corporation has an interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

D. O. Haynes, Business Manager.
Sworn to and subscribed before me this 1st day of October, 1917.
(Seal) JOHN F. COUCH, Notary Public, Kings Co., Certificate filed in N. Y. Co. (My commission expires March 30, 1918.)

ESTABLISHED 1887

THE PHARMACEUTICAL ERA

AN ILLUSTRATED MONTHLY PUBLICATION FOR THE DRUG TRADE

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MAKE A RED CROSS WINDOW DISPLAY

Various suggestions have been advanced in the endeavor to aid business men to do something specific to help win the war. It is true that while druggists in common with other merchants have been helping the cause while successfully conducting their businesses, they have felt that they might do something more. They have subscribed for Liberty bonds, for the Y. M. C. A. and the Red Cross, yet many of them have been waiting for a practical suggestion as to how they might "go over the top."

One of the big things now before the country which needs the help of everybody is the Red Cross Christmas Drive, a project in which all druggists should be interested. The plan is to make a Red Cross and Christmas window display during the week of December 10, which comes before the Red Cross Drive, and also the week of December 17, which is the week of the "Big Push." The local Red Cross chapters will provide posters for such displays while the druggists themselves will have no difficulty in devising special decorations to emphasize such publicity. The cumulative effect of such displays throughout the country will, besides aiding a worthy cause, go far toward convincing everybody that druggists are giving practical help to win the war. An ERA correspondent writes. "Can you imagine what an impression will be created if 35,000 druggists make a Red Cross window display for two weeks? A million dollars couldn't buy this display, but it is actual war service and as real and vital as that of shouldering a gun." Nobody can claim exemption in the Red Cross draft, and we are sure that druggists will do their utmost to devise a window display that will materially aid the objects of the great work to which the Red Cross is pledged.

ORGANIZATION, THE KEYNOTE OF THE FUTURE

Recent reports from the Department of Commerce indicate that the American manufacturer is making after-war preparations of his own, but in the effort to hold his own in the great trade expansion that is likely to follow the cessation of hostilities, Secretary Redfield counsels not imitation of, but familiarity with the German theories of foreign trade and the artful and formidable organization that with Government aid at every turn has been built up in Germany during the last twenty years to dominate the world's market. The

drug trade of this country is especially interested in this declaration of the Department of Commerce. For more than twenty-five years members of the trade have largely contributed to the distribution of German synthetics, new remedies and medicinal specialties, often without commensurate profits to themselves as pharmacists, but with exorbitant returns to the foreign manufacturers.

The disturbance of the trade routes of the world brought about by war conditions, and the restrictions placed upon the enormous chemical manufacturing industries of Germany, have caused us to inventory our own resources and to take such steps as we might to supply our pressing needs in more ways than one. That research workers and manufacturers are making some headway is evidenced on every hand. Since the war eliminated Germany from the world trade, the United States has improved its position in foreign markets in spite of the shipping shortage and other abnormal restrictive features. Domestic production is keeping in sight of consumption, although all individuals are being constantly admonished to practice conservation in every possible way.

That the experiences of the present war presage a new era of activity in all lines of human endeavor no one pretends to deny. The keynote of the future in all trades seems to be that of organization, the principal problem to be solved being that of securing the greatest economy and efficiency in the manufacture and distribution of commodities of all sorts. The retail pharmacists in limited number have been preaching organization and greater co-operation among themselves for years, but never have they yet risen in their might to protect their interests as a united trade. The necessity of such organization is now forcing itself upon druggists whether they will accept the situation or not, and if they are not to be in the line of after-the-war progress, they must assume their share of disappointment and failure. The trend of the immediate future is toward a greater development of organization in all of the activities of civilized life. There will be greater developments in industry, science and all that contributes to material advancement. To meet these coming conditions will require from each pharmacist a mightier effort and a re-dedication of himself to the scientific advancement of his profession. Will he awaken to the unmistakable voice of progress now calling upon him to advance?

THE NECROLOGY OF 1917

The toll exacted of the pharmaceutical profession by the Great Reaper during the current year has been unusually heavy, the number of prominent members of the calling going to their last resting place, perhaps, exceeding that of any single year within the last decade. The realization of this fact will be suggestive of various thoughts to members of the profession who remain, and to many of them it will doubtless bring home the conclusion that as much as pharmacy needed the devoted services of those who are gone, the call to those who remain to continue the work is as imperative as ever. No

branch of pharmacy has been exempted from this universal summons, and the roll of those who have answered carries the names of many who stood high in their respective lines of work.

The American Pharmaceutical Association, especially, has suffered in these losses, death claiming not only its president, Charles Holzhauer, who died in November, but also Prof. C. Lewis Diehl and Dr. William C. Alpers, both of whom had served as presidents of the organization and were equally noted for the eminence they had attained as educators. The colleges of pharmacy, too, have had their losses, death removing from the roster of faculties some of the most distinguished teachers of the present generation. In this list appear the names of Dr. Charles Caspari, Jr., Dr. J. O. Schlotterbeck, Prof. George A. Ferguson, Bower T. Whitehead, N. Gray Bartlett, F. M. Goodman and others who had given their best to the educational side of pharmacy. The N.W.D.A. has lost such men as the late Thomas F. Main, who contributed mightily in more than one direction to advance the general interests of the trade, while in organization work, the names of such men as Robert K. Smither, Dr. Joseph Weinstein, Frederick T. Gordon and other familiar figures at pharmaceutical gatherings will readily suggest themselves. Pharmacy should hold these names in grateful remembrance and they are entitled to a foremost place in the records of their day and generation.

A-189 AND SCIENTIFIC PROGRESS

The announcement of the discovery of cures for two dread diseases of the human race has attracted the attention of medical men and pharmacists throughout the country, as the remedies evolved are believed to be of worldwide importance in the future conquest of syphilis and tetanus. As told elsewhere in the ERA, the discoveries were made at the Rockefeller Institute in New York under the direction of Dr. Simon P. Flexner, who made the announcement at the annual meeting of the National Academy of Sciences, held recently in Philadelphia. It is said that the announcement relating to the cure for syphilis was made "amid the cheers of the scientists in attendance, as they regarded the discovery as a triumph over the scientists of Germany who had given the world '606', the only other cure for the dread disease."

More details concerning this discovery will be forthcoming in time, for druggists will want to know all about its effectiveness and use, as well as all about its commercial manufacture, method of marketing, etc. The greatest interest in the remedy for syphilis relates to the scientific phases of the discovery. The remedy was sought for because of the danger attendant upon the injection of salvarsan, and also, because the war had made the German remedy practically unobtainable in the United States. Another most important feature of the new "organic arsenical compound," for convenience called "A-189," is the fact that it is said to develop greater resistance to the spirochaetal infections without doing as much damage to the cells of the body, relatively, being about one-third as

poisonous to the human system as the German remedy, but acting with the same intensity as the latter compound upon the causation of the disease.

The other discovery announced relates to the treatment of tetanus or lockjaw, which disease, it is claimed, can be cured by an injection into the veins of the patient of a per cent. solution of Epsom salt, showing again, that while we have many apparently well known drugs and chemicals, there are a large number whose therapeutic application has never been fully understood. This phase of the subject brings home the fact that while investigators are reaching out into unexplored regions, they are also endeavoring to gain more information concerning the material closest at hand. This quest for new knowledge augurs well for the future. Never in all history has there been such a demand for new agencies and inventions as at the present time. The exigencies and necessities of war have always accelerated such forward movements, and it is possible there may come other discoveries which will wholly or partially relegate some of the present practices and accepted theories of medicine and pharmacy into the discard of the past.

DRUGGISTS AND DRUG STORE CONSERVATION

Reports from various sections of the country indicate that druggists are wide awake to the need for conserving all of the energies of the nation to win the war, and that as patriotic citizens they must do their share to bring the contest to a speedy and successful conclusion. The Council of National Defense has stated that in a general way the resources of the country may be said to consist of men, money and material, and any new enterprise or undertaking should be tried and justified by the test:

“Will the men, money and materials so applied best contribute in this way to the winning of the war?”

It is to be expected that not many druggists will start new enterprises during the mobilization of the country's resources, but there are a number of avenues along which the druggist as a proprietor can contribute his share of aid in the general conservation scheme. The boards of appeal in considering claims for exemption from service have very generally held that drug stores do not contribute directly to the military efficiency of the country, but no one can say that druggists do not have an important place in the complex activities of modern civilized life. The druggist who contributes to the well-being and wants of the people who supply the sinews of war must, therefore, accommodate himself to the general scheme and do those things which make for united effort.

Various suggestions will occur to the average druggist of how he can conserve pharmaceutical supplies, by uniting with the druggists in his locality to use up surplus stocks, to buy more carefully, and to endeavor to prevent waste in every line. He will at this time have a very good excuse to cut out useless deliveries, for every druggist who has studied his service at all knows that too often the demands for such deliveries have been out

of all proportion to the value and number of the parcels delivered. Economy in delivery service will release a large number of men and vehicles for military or other service that is essential to the welfare of the country.

Another expense which offers an opportunity for curtailment is that relating to the long hour system maintained by druggists in many communities. When studied in the aggregate, even under the most favorable conditions, it is doubtful whether the returns from keeping the average store open till midnight, as many have done and are doing, ever paid for the labor and expense of maintaining such a service. For years druggists have discussed and resolved in favor of early closing and shorter hours, but as a rule, each has been afraid of the other, when it came to the actual work of putting the plan providing for a shorter day into operation. The corner druggist would keep his pharmacy ablaze with light so long as his competitor on the opposite corner did likewise, each trying to outdo the other, both keeping themselves and their clerks on duty, regardless of expense and of whether the sales warranted it or not.

The continuation of such a policy at the present time is not in line with the conservation of effort or resources. Druggists are beginning to understand that they are wasting both their energy and substance in keeping open to the small hours of morning, and local associations are already taking up the question of retrenchment in this direction. Never in the life of the present generation has there been so good an opportunity for the drug trade to rid itself of a burden fastened upon it, usually not to meet any demand on the part of a purchasing public, but accepted largely from the fear that one druggist, if he did not keep open, might lose a cent to his competitor.

Women in increasing numbers are entering all lines of industrial activity, the scarcity of labor brought about in large measure by the war being responsible for this condition. Pharmacy is no exception to these accessions. While it is true that in some cities pharmacists have employed women as clerks, and the profession has been heralded as a suitable vocation for women, the number who have entered the business is relatively insignificant when compared with the total number of pharmacists in the country. Not many women have yet elected to become drug store proprietors, but reports indicate that the number who are assuming the responsibility is increasing. The average man is willing to concede that the woman pharmacist will stop at nothing short of owning her own drug store once she gets started. In other lines of work women are no less active. Many of them, it is said, have entered the chemical profession since the beginning of the war, and not a few employers state that the women are the equal of men in many departments, while in numerous instances they show superior qualities of neatness and order, are regular in their work, and exhibit a satisfactory freedom from distraction from duty. In the field of medicine they have been none the less versatile.

BOOKS REVIEWED

SYSTEMATIC COURSE OF QUALITATIVE CHEMICAL ANALYSIS OF INORGANIC AND ORGANIC SUBSTANCES, with explanatory notes. By Henry W. Schimpf, Ph.G., M.D., professor of analytical chemistry in the Brooklyn College of Pharmacy. Third edition, revised. 8 vo., 187 pages, cloth. New York, John Wiley & Sons, Inc.

This edition of Schimpf's "course" shows a considerable number of improvements over its predecessor, the scheme for acids and the incorporation of many charts being particularly noticeable and tending to add to the usefulness of the book. The first part explains the elementary principles of chemistry, notation and nomenclature, the second part describes the analytical reactions of the metals and acids of pharmaceutical interest, including schemes and tables for use in analytical work, and the third part treats of the qualitative analytical reactions of organic substances, including tests for official alkaloids, synthetic compounds and other organic substances used in medicine. For a small work endeavoring to encompass most of the inorganic and organic qualitative reactions the student of pharmacy is required to know, this book has always received many commendations.

MEDICAL BACTERIOLOGY. By John A. Roddy, M.D., associate in hygiene and bacteriology, Jefferson Medical College; chief assistant, department of clinical medicine, Jefferson Hospital; Professor of hygiene and bacteriology, Philadelphia College of Pharmacy, etc. 6½ x 9¼ inches, 285 pages, cloth, \$2.50 net. Philadelphia, P. Blakiston's Son & Co.

The application of bacteriology to the solution of many important problems arising in medicine, pharmacy, agriculture and industry has created a demand that some knowledge of this science be possessed by those engaged in diverse occupations. More particularly is it necessary that practitioners in medicine, pharmacists and those engaged in the foodstuff industries should have such knowledge, and it is largely to this end that the author has endeavored to present his work as a text book on the subject. Thus Part I takes up the classification of bacteria, microscopy, staining, sterilization, culture media, following with a consideration of the various types and species of bacteria. In Part II the bacteriological examination of water and milk and the determination of the germicidal power of chemical disinfectants are described, followed by an exposition of the application of bacteriology as an aid to diagnosis, a description of bacterial vaccines, therapeutic sera, Wasserman and other tests, immunity, etc. The pharmacist far removed from his college days will find a great deal of information in this book, and especially is this true with reference to the chapter on immunity.

PLANT CHEMISTRY FOR CHEMISTRY STUDENTS. By Nellie Wakeman. Published by the University of Wisconsin, Madison, 1917.

This bulletin is not claimed to be a textbook or laboratory manual, but to be merely a guide to both instructor and students who are taking up the study of plant chemistry. In the University of Wisconsin, pharmacy students are required to take this subject as a three credit study throughout the senior year, during the first semester experiments that do not involve a knowledge of advanced organic chemistry being selected, such as the isolation of starch, esterification of fatty and volatile oils, etc., while during the second semester definite chemical compounds are studied, such as the constituents of the volatile oils, the alkaloids, glucosides, etc. The study begins with water and its role in the living plant; enzymes and their classification; inorganic constituents and ash; phytochemical analysis by selective solvents; resins; oleoresins; fatty oils; carbohydrates and related compounds; volatile oils; glucosides; alkaloids; tannins; plant pigments; proteins. Under each of these divisions appears a discussion of each topic giving definitions, classifications and various laboratory experiments, followed by exercises which require in addition to his own investigations reference reading on the part of the student. That this book will be

helpful to the student in his progress through this most interesting subject we are very sure, while the systematic and logical development of the "guide" will appeal to the instructor.

MINERAL RESOURCES OF THE UNITED STATES, 1915. In two Parts, 8 vo.; Part I, Metals, 1,000 pages; Part II, Nonmetals, 1,084 pages. Washington. Government Printing Office.

The report on the mineral resources of the United States in 1915, covers the thirty-fourth year for which the published reports of this division of the United States Geological Survey has been issued. Probably at no time in the history of our country has there been such a demand for information concerning the mineral wealth of the United States, and in this particular we have in the volumes before us a wealth of data and knowledge unsurpassed in any other field of Government work. As in preceding reports of the series, the mineral production in the present report is treated primarily by subjects. In compiling the statistics of mineral production the value of the metallic products is fixed upon the refined or partly refined metals and is, of course, much greater than the value of the ores from which those products are obtained. The growth of the metallic products made a marked advance during 1915, and for 1916, it is predicted, the mineral products of the United States will undoubtedly run well above \$3,000,000,000, or three times the total value for 1900, only sixteen years ago.

Among non-metals, bromine is of interest, the great increase in the output and value for 1915 is significant, the suggestion being made that the manufacture of bromine into fine chemicals offers an opportunity for the American chemist which should not be neglected. The production of bromine in 1914 amounted to 576,991 pounds, valued at \$203,094, while in 1915 the production reached 855,857 pounds, valued at \$856,307, more than four times the value of the product of any individual year since 1880. The price of bromine during the first five months of 1916 ranged from \$4.75 to \$6.50 per pound in New York, the result in part at least of the unprecedented demand from abroad, where it is said to be used in asphyxiating gases. Direct importations of ichthyol have not been possible since the outbreak of the war, and that which has been used has been furnished by foreign dealers who had accumulated stocks prior to August, 1914. As there are no known deposits in the United States of asphaltic material of the peculiar type from which ichthyol is derived, the report states that it is a pleasure to know that American chemists have solved the problem of supplying the domestic needs in this regard and that favorably recommended substitutes for ichthyol, prepared from domestic materials by synthetic methods, are now available in the markets.

Studies from the Research Laboratory of Parke, Davis & Co., Detroit, Mich.; Facts and Fallacies in Disinfection, by Herbert C. Hamilton; Digitalis Thapsi Lin., by O. A. Farwell and H. C. Hamilton; Biological Standardization, by Herbert C. Hamilton; Pituitary Standardization, by H. C. Hamilton and L. W. Rowe; The Variability of Strophanthin with Particular Reference to Ouabain, by L. W. Rowe.

"Analysis of Ragweed Pollen." by Frederick W. Heyl. Reprinted from the Journal of the American Chemical Society.

Nikalgin

Answering a similar query a short time ago, a writer in the *Journal of the A. M. A.* stated that "nikalgin" is said to be the 'invention' of Gordon Edwards, an engineer. Large claims for its anesthetic and antiseptic virtues have been made. While no very definite information seems to be forthcoming regarding this preparation, it has been said to be 'composed of quinine, hydrochloric acid and urea.' This would indicate that 'nikalgin' may be nothing more wonderful than the wellknown local anesthetic, quinine and urea hydrochloride, the Quininae et Ureae Hydrochloridum of the Pharmacopoeia, or a modification of it."

Correct Mental Attitude Necessary.

By WILLIAM F. KAEMMERER, Ph.G., Columbus, O.

IN ANY GAME of skill you play, mark well the value of self-confidence. Sometimes you play well, sometimes badly—due to varying mental attitude. Andrew Carnegie once said: "Lack of confidence is responsible for more failures than any one thing."



W. F. KAEMMERER

Just recently I noticed in a circular by a well known fountain pen manufacturer to his agents the following: "Some men attain the habit of success and all things come their way. Other men, expecting ill luck, always talking and acting pessimistically rarely meet with success." This is but another way of stating a well known natural law.

How does a physician obtain his medical degree? Is it awarded to him without any effort on his part, or does it just happen? Most certainly not! We all know that every professional man worthy of the title has done in his time a lot of intelligent thinking, and years of hard work before he was

qualified to practice the art of healing.

The Things we Strive For

Most of the time in our lives, the things that we strive for are apparently so unimportant and the effort required to obtain them is so slight, that we do not realize, or are unwilling to admit, that we had a desire, or that we have expended any energy whatever.

Now, as a matter of fact, there is hardly a moment of our lives that we are not accomplishing something that required an effort of some kind on our part. The greater part of the time, we do these things unconsciously. The thing that we desire, we may have had a glimpse of for only a moment, or we may have had it in mind for months or years before the actual materialization of it took place.

You are here at this meeting to-night because some time previously you had a glimpse, or an image, wherein you saw yourself here, and it made a sufficient impression upon you to cause you to make the necessary effort to get here. You either walked here or rode here. The image may have come to you only a few minutes ago, or you may have had it a week or a month ago. It is immaterial when the image occurred to you, the fact is that you saw yourself here first before you made the effort to get here.

Attitude a Determining Factor

It is our attitude towards a thing or the use we make of it which determines its character. We look upon President Wilson as the most important man in the world today, and the greatest exponent of democracy because we think it, and thinking it, we believe it. It is our attitude towards the president which in our minds determines his character. The ruling powers of Germany do not think of President Wilson as we do. Their attitude towards him is quite different. Therefore in their minds he is not the most important man in the world and he is not the greatest exponent of democracy. In their minds the Kaiser is the greatest man in the world because they think so, and believe it. It is their attitude towards the Kaiser and the President which in their minds determines the character of either.

Take a gallon bottle, fill it with alcohol and seal it. As long as it is not put to any use, it will be only a bot-

tle of alcohol. We cannot say that the alcohol contained in the bottle is either good or bad. If we take a portion of alcohol and use it to dissolve sufficient camphor to prepare spirit of camphor, we can truthfully say that alcohol is good. If we take another portion of alcohol, dilute it about half with water, color it, and then use it to excess as a beverage, we say that alcohol is bad. It is the use we make of it that determines its character. Alcohol in itself is neither good nor bad.

Use of Pharmacy Determines its Character

Pharmacy is like the alcohol in the sealed bottle. It is an important, useful and specialized branch of medical science, or it is not. It all depends upon the way we think about it; in other words, our attitude and the use we make of pharmacy is what determines its character. To the druggist who looks upon his business purely as a cold, commercial proposition and treats it as such, pharmacy is not a profession. In this country, at least, who looks upon all druggists purely as commercial men, pharmacy is not a profession. In this country, at least, to the general public pharmacy is not regarded as a profession because it bases its judgment on pharmacy largely upon the external elements which it can see and feel.

Problems Confronting Pharmacy

I have often wondered whether the medical profession really knew what the druggist or pharmacist is up against. Our business like that of the old dry goods merchant has changed. We have been confronted by numerous and tremendous problems. In order to keep our business on a successful financial basis, we have to follow the trend of the public demand. Possibly you professional men have not realized, that had druggists confined their business to the compounding of physicians' prescriptions and the purveying of drugs and sick-room necessities, the great majority of them would have starved to death. Instead of having a hundred drug stores supplying drugs and medicines and a thousand and one other things which the public demands of us today, you would have had only one or two stores which confined their business strictly to the compounding of physician's prescriptions and the selling of drugs and medicines. The public would soon miss the convenient little corner drug store where it is so handy to step in and use the telephone, buy a postage stamp or dozens of other things which father forgot to bring home, or mother forgot to buy when she was shopping, and "it is Sunday, too, and every other store is closed."

In order to keep our business going and growing, we have had to follow progressive methods as are used in other lines. Take for instance, for many years a certain magazine operated at a loss, because the publishers tried to make a magazine according to their ideas, without finding out what the public wanted. All of a sudden they woke up and adopted the motto: "Give 'em what they want." And these five words have made millions for the magazine.

Accomplishments of Professional Pharmacy

In the face of all these necessary commercial changes, great credit is due to many druggists, who have never changed their mental attitude toward their profession. It is because druggists, and also medical men, have assumed a professional attitude towards pharmacy that we have pure food and drug laws, pharmacy laws, anti-narcotic laws, a United States pharmacopoeia, a National Formulary, dispensatories, pharmaceutical journals, schools and colleges of pharmacy. It is because of this professional attitude, that druggists have an American pharmaceutical association, with its various branches.

There was a time when the great change was taking place in the drug business that I felt just a little discouraged about its future. I doubted very much if a professional attitude in a drug store was going to be profitable. Just then I ran across four verses written, so I am told, by a Toledo druggist, which entirely changed

* Read at the monthly meeting of the Columbus General Practitioners Medical Society, and contributed by the Author for publication in the ERA.

my view-point. With your consent I am going to read you these four verses, entitled:

"Thinking"

If you think you're beaten, you are;
If you think you dare not; you don't.
If you'd like to win, but think you can't
It's almost a cinch you won't.

If you think you'll lose, you're lost
For out in the world we find
Success begins with a fellow's will;
It's all in the state of mind

If you think you're outclassed, you are;
You've got to think big to rise;
You've got to be sure of yourself before
You can ever win a prize.

Life's battle don't always go
To the stronger or faster man;
But soon or late the man who wins
Is the one who thinks he can.

Side Lines do not Eliminate Professional Character

The reading of these verses convinced me that there was no reason for a druggist to change his professional attitude towards the retail drug business just because it was necessary to add side lines to make it a financial success. If his mental attitude is correct he will realize that the pharmaceutical service which he renders is of a professional character and is to be valued accordingly.

A few days ago I took the trouble to look in the show-windows of some of our very high-class dry goods stores, and what do you suppose I saw? One dry goods store had a window full of hardware; another had a window full of queensware; still another had a window full of shoes. These dry goods stores also conduct a restaurant in connection with their business where they serve meals, and yet, the men back of these institutions never lose sight of the fact that they are in the dry goods business and that they are conducting a dry goods store above everything else. They do not allow the public to lose sight of this fact. By the same token, you will find men conducting drug stores, and, notwithstanding the fact that they find it advantageous to deal in numerous side-lines and thus increase the volume of their business, they never lose sight of the fact that they are conducting a drug store and are pharmacists, primarily and above everything else.

Attitude of the Physician

The attitude which the physician assumes towards his patient, and in turn, the attitude which he causes that patient to assume towards him, if it is in the right direction, is half the battle. If the physician's personality and his attitude does not inspire confidence he will find it difficult to successfully treat his patients. Everything that the physician does, either consciously or unconsciously, from the time he decides to take up the study of medicine to the time he decides to retire, has a bearing on this point. His success, as a physician, and by this I do not mean mere financial success, depends upon the degree in which he can bring himself and those who seek his aid to believe that he can effect a cure or relieve suffering.

The druggist who regards pharmacy as a profession, either consciously or unconsciously, does everything within his power to create for himself a favorable atmosphere. It causes him to acquire all the knowledge and skill that he can, and to utilize it in the proper manner. He puts his whole soul into his work and endeavors to be of real service to the physician and the public in general.

Mental Attitude in Compounding

I believe that a very great service which the pharmacist can render to the physician and the patient as well, in the compounding of prescriptions, is for him to assume the proper attitude while compounding the prescription and while it is in his charge. He should consciously and intentionally bring himself to believe and feel that he is compounding the prescription just exactly the way the physician would like to have it, and that it is surely going to have the desired effect. This attitude can certainly do no harm, and it costs nothing.

Now, I am going to step on dangerous ground. If it will cause you to think and take notice, I shall have ac-

complished my object. I am going to break the seal of this bottle which you see here. I am going to pour part of the contents into a pint graduate and touch a match to it—it won't burn like ordinary alcohol—and now I am going to drink about four fluid ounces of it.

The effect of this demonstration will cause you to change your attitude towards what is in that bottle. Instead of alcohol, which in your mind it was, it will be water, and yet, had I not made this demonstration, you would have left this room believing that you had really seen a gallon bottle filled with alcohol.

Pharmacy is a profession, or it is not a profession, according to the attitude we assume toward; pharmacy and the use which we make of it. The *seemingly unimportant* thing in the compounding of prescriptions, is for the pharmacist to assume the right attitude while doing the compounding. He should, intentionally and on purpose bring himself to the point where he believes and knows that he is compounding the prescription just as the physician would like to have it and that it certainly, without fail, will do what the physician wants it to do. This, as I said before, costs nothing in the way of money and can do no harm.

COLOMBIA CULTIVATING CASTOR OIL PLANT

By CLAUDE E. GUYANT, U. S. Consul

Considerable interest is being shown in Colombia and in the Department of Santander in the castor-oil plant. This plant has been grown for several years in a small way in Santander, but its possibilities as a money producer have only recently become evident as a result of the high prices of castor oil. The present interest has been largely through the discovery of a local druggist, who has found he could produce his own castor oil much cheaper than its cost when imported. The first yield was so satisfactory that others commenced to plant, and at present there are approximately 350 acres under cultivation near Barranquilla (Department of the Atlantic) and about 1,500 acres in the Department of Santander.

The Santander bean is larger than that grown on the coast, but is said to yield a smaller percentage of oil. The coast bean gives a yield of 50 to 60 per cent in oil, while that from Santander gives only 40 per cent.

The plant grows best in sandy soil well watered, but it has been found that too much water is not good for it. Some planting done in land that was almost marshy gave very poor results. The seeds are planted two meters (6.56 feet) apart and the plant matures in from 3½ to 4 months. Estimates on the cost and profit of cultivating this bean were based on a yield of 2 pounds of seed per plant per year, but actual results have shown that this yield will be around 4 pounds.

Cost of Producing the Beans

It is calculated that the cost of planting and harvesting one hectare (2.47 acres) for one year is \$40. One hectare contains 2,500 plants, which, at the low estimate of 2 pounds per plant, will yield 5,000 pounds of castor beans. At 2 cents per pound the crop would be worth \$100, leaving a net profit of \$60. The price mentioned, however, is much too low, as the seed is now bringing 4 cents in Barranquilla.

The harvesting of the crop is done by children who are sent out daily to gather the ripe pods. These are placed in the sun to dry and when brittle are broken up by hand. This method is satisfactory at the present prices and on small farms, but the larger growers are interested in obtaining a satisfactory machine to thrash the pods. It is said that such a machine was formerly purchased in England for service in India but that it can not now be obtained.

Two shipments of castor-seed meal, weighing 32,000 pounds, and one shipment of the beans, weighing 30,000 pounds, have recently been made to New York, and it is expected that larger shipments will be made in the future, especially if a satisfactory method of thrashing can be found.

No castor oil is imported into Colombia at present except occasional small shipments of the odorless or aromatic product.

The U. S. P. IX for the Drug Chemist

By H. C. FULLER

(Concluded from November ERA, p. 344.)

Status of U. S. P. as Book of Standards

It would appear that one of the principles in the compilation of the present Pharmacopoeia was to base its scope on the therapeutic ideas of a limited number of individuals rather than on medical usage, and this brings me up to a very important subject to which I want to refer at this point—namely, the constitutionality of the clause in the Food and Drugs Act making the Pharmacopoeia a standard for drugs. The argument has been advanced that this part of the law is unconstitutional because by it, Congress improperly delegated legislative authority. The decision of Hough on this point in the Lehn and Fink case is based on common sense and is comprehensive for the case in hand. Unfortunately his decision was not passed upon by the Circuit Court of Appeals or the Supreme Court. He quotes: "The legislature cannot delegate this power to make a law but it can make a law to delegate a power to determine some fact or state of things upon which the law makes or intends to make its own opinion depend. To deny this would be to stop the wheels of government. There are many things upon which wise and useful legislation must depend which cannot be known to the law-making power and must therefore be subject to inquiry and determination outside of the halls of legislation;" and on the point at issue he concludes that "to me there could not be a plainer instance than this act of the legislature's having made a complete and perfect criminal statute, not dependent at the time of its passage on the act of any other power or person and of then providing for changes in the meaning of the word 'adulterated' a word which, in the nature of things, may and should change its signification with advancing knowledge or increasing civilization." It seems to me that in the light of Judge Hough's decision, a dangerous situation has arisen because the wholesale deletions in the new edition must have been brought about for reasons other than medical usage or chemical discovery. We all know the attitude of the courts towards controversies where the merits of the case depend upon therapeutic opinions, and if it should happen that the question of the constitutionality of that clause in the law making the Pharmacopoeia a standard for drugs, should arise in the course of carefully planned litigation where the parties had made themselves thoroughly familiar with the methods of revision, it is to be feared that the courts would not hold in especial favor a standard which might, at one whim or another, every ten years, delete a hundred or more valuable therapeutic agents and carefully provide for the standards of a number of chemical reagents, foods and condiments under the caption of drugs.

N. F. More Tolerant Standard

I realize that the answer to this will be that the National Formulary adopts what the Pharmacopoeia deletes, but this is hardly fair to the National Formulary, and furthermore, the legality of this work has not been passed upon by the courts. From my study of the new edition I think that the National Formulary is a more tolerant standard than the Pharmacopoeia. It includes 789 articles in the text, 7 more than are recognized in the text of the Pharmacopoeia. It presents in Part I a set of excellent formulas of galeucal preparations and in Part II it provides standards for a large number of chemical salts and botanical drugs, all of which might just as well be recognized by the ninth revision of the Pharmacopoeia as the salts and drugs which are recognized. To one like myself who depends upon the Pharmacopoeia as a working basis, it seems a little incongruous to have two books of standards of drugs and medicinal chemicals. As the situation now exists, neither is a complete book of standards. I think that instead of deleting well-established medicinal agents, the Pharmacopoeia ought to recognize more and more drugs and medicinal chemicals, and in this respect the Homeopathic Pharmacopoeia has much to commend it.

The examination of the text indicates to the chemist that there has been lack of co-ordination in the relations between some of the substances admitted and deleted in the ninth revision. Attention is called to the fact that pimento is not recognized though several other well-known condiments are included and the oil of pimento is included; santonica, which is often used in veterinary remedies, is not present but santolin is recognized; distilled extract of witch hazel is an official preparation but witch hazel leaves have been discarded; coca has been deleted and cocaine left in; hops find a place but lupulin is missing; honey is given a place at the official table while invert sugar remains unrecognized; zinc metal is featured but bismuth metal, the purity of which for preparation of medicinal chemicals is as fully important as that of zinc, has not been recognized.

Descriptions and Purity Tests

From the standpoint of the analytical chemist, the ninth revision contains much material worthy of commendation. The descriptions and the distinctive and purity tests are good, and in general they are sufficient. The relegation to the mythical past of some of the old pharmaceutical prejudices is gratifying. Thus we see that Digitalis, to be official, is not limited to the two-year old leaf, and that *Cannibis sativa* can grow somewhere else besides the "East Indies." As a matter of fact, by far the larger quantity of the imported article has, in recent years, come from Greece. The compilers might well have gone one step farther and removed the sex limitations of this drug, for I can state with authority that the tops of the male plants possess physiological properties of the same character and to the same degree as those possessed by the pistillate tops. Methyl salicylate is no longer recognized under three headings, the chemically identical oils of *Betula* and *Gaultheria* being omitted. This is real progress.

The microscopic and macroscopic tests and characteristics of botanical drugs have been carefully revised and leave little to be desired. I think, however, for consistency, the microscopic characteristics of buchu should have been included.

Proximate Assay of Drugs

The chapter on general methods of analysis should be digested by everyone concerned with the testing of drugs and medicines. Especially is this true of the paragraphs relating to the proximate assaying of drugs. The value of the practical advice contained therein cannot be overestimated. Personally, I think the directions in the text for conducting the proximate assays are too loosely worded. They place too much responsibility on the worker, who unfortunately is often too inexperienced to assume the responsibility. I have conducted a great deal of co-operative work on methods of assaying, and I have found that, unless the directions are precise and complete in every detail comparative results on which reliance can be placed are almost unobtainable. The personal equation of the drug analyst, even of wide reputation, is, to quote Kipling "beyond the wit of any man, black or white, to fathom." In respect to detail I think the directions for proximate assays in the eighth revision were more likely to lead to accurate results than those in the ninth. However, I will say this. If the analyst knows something about drug assaying and digests the paragraphs on this subject in the general methods, he ought to obtain concordant and fairly accurate results. But even then, if the results are concordant, they do not necessarily furnish data on the true alkaloidal value of the sample.

The ninth revision has adopted the aliquot assay in place of the total extraction method of the eighth revision. This shortens the time of the analysis and eliminates some of the manipulative features of the old assay, but my experience has shown that an aliquot assay does not give as true an idea of the alkaloidal value of a drug as is given by the total extraction procedure. The weak points

of the assay processes of the ninth revision will be the cause of much confusion in the drug trade. In fact this condition has already developed. A dealer offers for sale a drug, the strength of which has been based on an assay which shows the true alkaloidal value. The buyer accepts the goods on that basis and then proceeds to check up the assay with the ninth revision method which gives him lower results. Then he files a claim against the seller. Thus a situation arises which is unfair to the drug dealer, but which can be settled only by some adjustment on his part, unless the two factors are willing to have a joint assay performed in the presence of a referee.

Physiological Assays

Standards for some of the drugs, based on physiological assay, have been described. This feature is a new one and is to be commended. The standard for Cannabis is too high and the proper labeling of specimens in order to conform to the Food and Drugs Act will cause some hardship to the legitimate drug trade, because the buyer of drugs is disposed to deprecate any lot that the seller cannot guarantee as strictly U. S. P., even though the former knows that the use of a little more drug will yield an extract of full strength. Buyers are quick to take advantage of any situation like this and on the strength of some insignificant technicality will hold the Pharmacopoeia and the Food and Drugs Act as a club to the detriment of the honest drug dealer. Compilers of standards should never lose sight of the economic bearing of their work when they are developing the scientific features.

The introduction of complex methods for assaying essential oils of a purely flavoring nature is of doubtful expediency. These methods are of value to the buyer of oils in case he wants to know the quality of the commodity, but this subject comes more within the scope of food standards and methods for ascertaining them. However, as long as these flavoring agents are recognized as drugs, it is well to have good assay methods for determining their purity.

Individual Descriptions and Tests

Comment will be made on a few individual descriptions and tests. The standard for oil of peppermint is altogether too limited in its scope. Oils of excellent flavoring quality distilled from the plant, often contain much less menthol than the ninth revision prescribes. The menthol in these oils is replaced by menthone which has no other effect in the oil than to take the place of the menthol, and in no way detracts from the real flavoring qualities due to the menthol esters which are still present. The chemical tests for cod-liver oil are really characteristic of the oil from the fresh livers of fish in general. The ninth revision limits the source of oil of theobroma to the seeds, but the shells of the cocoa bean contain an oil with practically the same composition, which can be used for the same purposes. Tons of this oil are annually wasted. No assay has been included for Sanguinaria. The reason for this is not apparent to one who has been familiar with methods for assaying this drug for many years. The assay of spirit of camphor is limited to natural camphor. A perfectly good spirit can be prepared with artificial camphor, but the use of the assay in the ninth revision would be of no value in determining its strength. The assay of spirit of nitroglycerin is open to criticism. The conclusions from the results obtained would depend largely upon the personal equation of the analyst, and if the commercial alcohol used in the preparation of the material contained any inert soluble substance in excess of that prescribed for pure alcohol of the text, the results would be erroneous. There are several good methods for determining accurately the percentage of nitroglycerin.

Drugs for Which Standards are Needed

Before closing this review of the ninth revision, I want to include a few remarks concerning some of the drugs which are widely used but which have not been recognized. My acquaintance with drugs and chemicals has brought me in contact with a number of individual medicinal commodities for which I am often in needs of standards, tests and descriptions, and which are not recognized. Some of these include:

Pinus strobus
Iris versicolor
Acorus calamus
Aletris farinosa
Chamaelirium luteum

Hydrangea arborescens
Melissa officinalis
Rumex crispus
Scrophularia marilandica
Juniper berries

Chelone glabra
Aralia racemosa
Panax quinquefolium
Asclepias tuberosa
Asarum canadense
Baptisia tinctoria
Paracotoin
Brauneria angustifolia
Castanea dentata
Cnicus benedictus
Collinsonia canadensis
Coptis trifolia
Dioscorea villosa

Veronal
Ichthyol
Chloretone
Allypin
Atoxyl compounds
Chinosal
Digitoxin
Lecithin
Novocaine
Acetyl Salicylic Acid
Nucleinic Acid
Coto
Piperazine compounds

They are all drugs which find a place in the *Materia Medica* of this country and are of much more therapeutic importance than the flavoring agents, condiments, chemical reagents, etc., for which standards and tests have been carefully provided. I realize that many of the botanical drugs have been recognized and described in the National Formulary for which much commendation is due the National Formulary. I also realize that some of the others are products, the manufacture of which is covered by a patent, but I see no reason why this should prevent the inclusion of a valuable drug among the standards of this country. No chemical can be patented. Its designation under its true chemical name is always free. A method of manufacture can be patented and a fanciful name can be trademarked. But why does this prevent recognition of a drug under its true chemical designation, giving its fanciful name as a synonym if desirable? It may be argued that the manufacturers object. But what is the force of this argument if the drug is well established in our *Materia Medica* and the control of standards and the traffic in drugs has been recognized by our Congress and the standards for these drugs based on the Pharmacopoeia and the National Formulary? Thus far the compilation of these standards has been delegated to responsible bodies and the results of their work have been upheld by the courts. In this connection I was interested in the report of the Agricultural Appropriation Bill just introduced in Congress, wherein a sum is asked for the purpose of determining standards of drugs not recognized by the Pharmacopoeia.

U. S. P. as Standard for Drugs Limited

My work with drugs and medicines brings me in contact with a great many different substances. When I want information concerning them, their description, their standards, how to test them and the methods to use, I want some authority to which to turn. To what extent does the Pharmacopoeia, ninth revision, furnish the data? This is the test of the Pharmacopoeia from the standpoint of the drug and medicinal chemist. The ninth revision as an analytical work and book of standards is going to be a great help as far as it goes, except for the unfortunate circumstance of the introduction of the loosely worded methods of drug assaying. As a standard for drugs it is going to be altogether too limited in its scope. It has devoted too much space to prescribing standards for chemical reagents, food products and substances which are purely mechanical in their application to pharmacy and which do not fall within the definition of a drug as laid down in the Food and Drugs Act, and has left out a vast number of very important drugs and chemicals in daily use in medical practice, both in this country and those lands to which our drugs are exported.

EMPLOYED AS REGISTERED PHARMACISTS

As a result of the prosecution of the proprietors of five drug stores in Miami by the Florida Board of Pharmacy, on the charge of operating stores without registered pharmacists, F. L. George, John Ettles, W. H. McGleason and Fred Dean, colored, were convicted and fined, and H. Fred Conrad was held for arraignment later. The information against the druggists was filed with the state board of pharmacy by the Miami Pharmaceutical Association, the members of which requested that the druggists named be compelled to observe the law requiring drug stores to be in charge of registered pharmacists during the hours they are open for business.

The Florida pharmacy law requires a registered pharmacist at all stores bearing a sign "drug store." A dealer in drugs who sells proprietary medicines, provided his establishment does not bear such a sign, is not required to have a pharmacist in charge. The convicted men paid their fines and were released from custody.

The Simulation of Disease

Drugs, Chemicals and Septic Materials Used Therefor

By A. G. DUMEZ, Technical Assistant Hygienic Laboratory, United States Public Health Service

THIS paper is not intended to be an expose of all of the various methods of effecting simulation of disease, but is restricted to that phase of the subject involving the use of drugs, chemicals and septic materials. This phase is of special interest at the present time, as it comprises the means most frequently employed by unscrupulous individuals in attempts to evade military duty. For the purpose of enhancing the value of the paper as a source of reference to the medical examiner, the substances enumerated therein are grouped under the diseases the diagnostic signs of which their use is intended to simulate. For the same reason, brief outlines of the methods recommended for the detection of these frauds are also included, where specific information of this kind has been available.

Simulation of Diseases of the Skin and Subcutaneous Tissue.

Erythema: † Certain nettles, poison ivy, squills and some plants of the families *Euphorbiaceae* and *Ranunculaceae*. These are applied to the skin with friction.

Eczema: After abrading the skin, by scraping with a sharp-edged instrument or rubbing with some rough material, one or more, of the following is applied: Croton oil, sulphur, acid substances, oil of cade, ointment of mercury or mezereum bark.

Detection: According to Blum (1916), the eruptions produced may be distinguished from those of the true disease by the fact that they are disseminated and do not form confluent masses. Furthermore, the skin, after the removal of the crust, does not appear red, dry and hypertrophied, as in true eczema.

Herpes: Certain plants of the family *Euphorbiaceae* applied to the skin.

Detection: The location and distribution of the lesions is usually so paradoxical as to indicate fraud at first appearance.

Impetigo: Cantharidal plaster, or ointment of tartar emetic, applied locally.

Other Eruptive Diseases:** Iodides, bromides, arsenic or mercury taken internally. Phenol, cantharides, mustard seeds or croton oil applied externally.

Ulcers: Potash or soda, lye, sulphuric acid, hydrochloric acid, nitrohydrochloric acid, or a strong solution of zinc chloride applied externally. A case of sloughing ulcer caused by the repeated application of a hot copper cent to the skin of the arm is reported by Bispham (1914).

Detection: Ascarelli (1917) states that the diagnosis of fraud is not difficult in these cases. He, however, advises a general examination of the suspect to exclude other conditions which might explain the occurrence of the ulcer, namely: syphilis, diabetes, syringomyelia, varix, etc.

Abscess: Commonly produced by inserting beneath the skin a thread smeared with tartar from the teeth, saliva or faecal matter.

Detection: Blum (1916) states that the pus, obtained upon incision, has an odor similar to that obtained from an abscess of the alimentary tract, this being sufficiently characteristic to identify the fraud.

* Public Health Reports.

† The presence of the diagnostic signs simulating erythema is not always an indication of fraud. Very often workers in various trades may have raw erythematous appearing hands. As examples of this kind, Collie (1916) gives the following: Hair dressers, through the use of alkaline shampooing liquids; French polishers through the use of potassium dichromate; carpenters, working with teak or rose wood; tanners, handling arsenic; masons, through the handling of silicates; photographers, through the action of liquids containing chlorine; painters, and those engaged in handling aniline dyes or strong alkalis.

** The drugs which are known to give rise to eruptions when taken internally are a host in number. Many of them are administered for legitimate purposes, and care should therefore be exercised in pronouncing a case fraudulent.

Plegmons: Gasoline, kerosene, oil of turpentine or a solution of chloride of lime is injected subcutaneously.

Detection: Chavigny (1916), who has made a special study of these artificially produced plegmons, describes their characteristics as follows: They generally occur in epidemics, and the site of the lesions in these epidemics is usually the same, namely, the knee or immediate neighborhood. They resemble true plegmons in outward appearance, but are not painful. When in the region of the knee, the flexion of the joint is not hindered and lymph gland enlargement is absent or only slight. They rarely show a thermal reaction above 38.5° C. The pus is aseptic and shows a predominance of mononuclears. The red blood cells are well preserved and show no evidence of autolytic changes. When the plegmon is the result of the injection of oil of turpentine, the pus is a dirty red in color and contains numerous granular masses. If due to use of gasoline the color is a dirty white. It is homogeneous, and of the consistence of a viscous jelly. In neither case does the pus have the odor of the injected liquid. When kerosene is the agent employed, however, the odor is sufficiently pronounced to be used as evidence of fraud.***

Lipoma: Paraffin injected subcutaneously.

Oedema of the Hands and Feet: Friction between the fingers or toes with a stalk of a species of horsetail (*Equisetum arvense*). The resulting inflammation is said closely to resemble oedema.

Simulation of Diseases of the Eye

Inflammatory Diseases: The following have been placed under the eyelid: ipecac, castor-oil seed, cantharides, lime, silver nitrate, red mercuric oxide, copper sulphate, acid lotions, urine, faecal matter and putrid matter.

Mydriasis: The preparations and alkaloids of belladonna, hyoscyamus and stramonium placed in the eye.

Myosis: Lobeline placed in the eye.

Detection: The simulation of mydriasis, or myosis, by the above means, can be most easily discovered by isolating the suspect and keeping him under close observation.

Simulation of Diseases of the Ear

Otitis: Urine, faecal matter and chemicals (specific names not mentioned) are reported as having been inserted into the auditory canal for this purpose.

Detection: The presence of lesions in the meatus and concha may reveal the artificial nature of the disease (Ascarelli, 1917).

Simulation of Diseases of the Throat

Acute Tonsillitis: Irritating solutions used as a gargle.

Detection: Febrile phenomena are absent. The inflammation is not confined to the tonsils but extends to all parts touched by the liquid (Blum, 1916).

Simulation of Diseases of the Respiratory System

Hemoptysis: Colored substances, such as carmine or beet juice, to color the sputum. The blood of animals (chicken) is also reported as having been used for this purpose.

Detection: Fraud of this nature is, usually, readily detected by a microscopical examination of the sputum.

Simulation of Diseases of the Digestive System

Gastric Derangements: A mixture of oil and tobacco is frequently imbibed for this purpose. Blum (1916), states that the gastric symptoms which follow may be accompanied by a rapid heart and icterus.

Detection: An examination of the stomach contents is the best means of detecting this form of fraud.

*** A method for the isolation of the gasoline, kerosene, or oil of turpentine present in the pus obtained from these artificially produced plegmons has been reported by Ed Lasuasse (1916). Chemical tests for the identification of these substances have also been described by this author.

Diarrhœa: Purgatives are reported as having been employed for this purpose. Another means of effecting simulation is the dilution of the fœces with urine or water. In attempts to simulate dysentery, small pieces of meat and pork fat are added to the fœces thus diluted.

Detection: Procedure of this kind can be most easily discovered by isolating the suspect and keeping him under observation. During this period, the fœces and urine should be collected in separate vessels.

Icterus: * Walnut nice and liquid preparations of curcuma, applied externally, picric acid taken internally.

Detection: Attempts to simulate the diagnostic signs of jaundice by the use of external applications are so crude that they may be detected with ease.

For the detection of the use of picric acid, a number of methods have been devised. Among the best of these are the methods of Le Mithouard (1915), Derrien (see Grimbert, 1916), and Pecker (1916), in which picric acid or its derivatives are identified in the urine, and the methods of Pognan and Sauton (1915) and Tixier and Bernard (1917), in which picric acid or its derivatives are sought for in the blood. The last-mentioned method is given here because of its simplicity and sensitiveness. It is carried out as follows: Add 15 drops of blood, drawn from the tip of the finger of the suspected simulator, to 3 cubic centimeters of salt solution (0.95 per cent.), contained in a small glass tube, and shake two or three times. After allowing the mixture to stand at room temperature for 24 hours, draw off, by means of a pipette, 1 to 2 cubic centimeters of the salt solution. The latter will be colored faintly yellow, in case the icterus is due to the ingestion of picric acid. Add an equal volume of a solution of methylene blue (1:50,000) and shake vigorously, then 15 drops of chloroform ** and shake again. If picric acid derivatives are present, the chloroformic solution, which separates on standing, will appear light green to deep green (bottle green) in color, depending on the quantity of the acid derivatives present.

Simulation of Diseases of the Circulatory System

Rapid Heart: Cordite (an explosive consisting of a mixture of guncotton and vaseline) is reported as having been chewed for this purpose.

Note: Newspaper reports indicate that perhaps other substances are being employed for this purpose. Attention is, therefore, invited to some of the substances which might be used, namely: Nitroglycerin in the form of the spirit or tablet, atropine or belladonna and its preparations, or caffeine.

Simulation of Diseases of the Kidneys

Albuminuria: Sodium chloride and milk, consumed in large quantities for several days Blum (1917), states that this is the method commonly employed by those who are predisposed to the disease. Another method consists of the injection of albumin into the bladder.

Detection: Isolate the suspect and keep him under observation. In case of fraud, the albumin will disappear from the urine in a few days.

Simulation of Diseases of Metabolism

Diabetes Mellitus: Phloridzin taken per os or injected subcutaneously, ammonium oxalate per os, or glucose injected directly into the bladder.

Detection: Phloridzin is excreted in the urine, and may be identified therein by the method of Marcuse (1897), which is as follows: To 5 cubic centimeters of the suspected urine, contained in a test tube, add a few drops of ferric chloride test solution. The mixture will assume a bright red color, if phloridzin is present.

Certain other substances giving a similar color reaction, namely: Acetoacetic acid, phenacetin, antipyrin and salicylic acid.

In case the color is due to the presence of salicylic acid the mixture will be decolorized on adding a few drops of hydrochloric acid and shaking with ether.

To test for antipyrin, add a few drops of Lugol's solu-

* A recent report of the Royal Society of Medicine shows that toxic jaundice in munition workers may be due to the handling of trinitrotoluene or tetrachlorethane. A sufficient amount of these substances to produce the symptoms of jaundice is stated to be absorbed through the skin.

** If ether is substituted for the chloroform, there is less danger of forming a troublesome emulsion.

tion to a small quantity of the urine, previously diluted with 20 volumes of water and acidified with hydrochloric acid. The presence of antipyrin will be indicated by the formation of a characteristic precipitate.

To determine whether or not glucose has been injected into the bladder, empty the latter and wash out with a solution of boric acid. Collect a sample of urine two or three hours later and examine. The absence of sugar indicates fraud.

General Debility or Physical Exhaustion: Vinegar consumed in excessive amounts; tobacco (excessive use of); arsenious acid, mercury, or lead salts, taken internally for a period of time sufficiently long to cause the appearance of toxic symptoms.

Simulation of Other Diseased Conditions

Fever: A peeled tooth of garlic inserted into the anus and allowed to remain for 24 hours, or the same substance crushed and rubbed into the axillae (Perez, 1917).

Hernia: Paraffin injected into the scrotum.

WHY JOIN YOUR STATE ASSOCIATION?

Co-Ordinated Effort on the Part of All Pharmacists Needed to Combat Pernicious Legislation—Membership a Dollars-and-Cents Proposition.

By RICHARD A. AUSTIN,
President of the N. Y. State Ph.A.

The various State legislatures will soon begin their annual sessions, each of which will doubtless receive the usual number of bills affecting pharmacy to be passed, some good, some bad and some only foolish, but all requiring close scrutiny and careful analysis. As a rule, the average druggist never hears of these attempts to regulate his business, and he therefore does nothing to aid the passage of meritorious bills nor help to defeat the measures which are obnoxious or unnecessary. He may know in a general way that there is a State pharmaceutical association, and perchance, may have heard of its "Legislative Committee," but as to how the organization or its committee does its work, how its expenses are paid, if paid at all, or what the association has done or can do to protect his interests, is to him too frequently a matter of small interest or profound indifference.

This indifference to the things that affect all druggists should not exist, and there is reason why every pharmacist should join his State association. The drug trade has been singled out as a special target for legislative attack, and security from such inroads can only come by co-ordinated effort on the part of pharmacists, whose salvation depends primarily upon their ability to be ever on the job and ready to act together. There are many self-styled reformers and faddists whose prime idea, aside from making themselves conspicuous, is to re-create the world and especially to free mankind from the pernicious (?) practice of buying something from the druggist without first consulting a physician, as shown in the fact that they are continually attempting through the introduction of bills in the various state legislatures to circumscribe and materially restrict the legitimate function of the retail druggist in supplying the public with simple remedial agents. Here it is by united action that the druggists must show their strength to defend their rights and privileges.

It is possible that some of this attempted legislation is conceived in good faith, but its sponsors become over enthusiastic and as a result, it is very difficult to convince them that they are in error or that the legislation they propose is unnecessary or actually against public policy. It is right here that the State association comes to the rescue and through its legislative committee combats these forces of what may be charitably called "well-meaning ignorance."

Failure to support your State association and to promptly pay your dues is a crime against the body of pharmacy, for it places you without the pale of organized effort to protect your own interests and thus gives opportunity for aggressors to rob your own cash register.

I do not ask you to accept this statement without proof; just read the report of the legislative committee of your State pharmaceutical association published in the last annual proceedings. If you are not a member of that organization and have no proceedings, borrow a copy from a member you know, or send to the secretary for one. The men who have legislative matters in charge in New York State and, so far as I know, in all other States, comprise among their number some of the ablest and most conscientious members of the profession, who have had wide experience and also have the respect of legislators. But they cannot do it all. They need both your moral and financial support. Your individual influence is needed to protect the interests of your business and the drug trade throughout the country. It is necessary to show the legislators that pharmacy represents a large class of voters, and that the membership of the organization for which the legislative committee speaks includes a large percentage of the men engaged in the drug business.

Now listen: You want to make money, that is commendable; you want to be rid of petty annoyances, that is natural; you want to be law-abiding and self-respecting, that is honorable. One of the surest ways to bring about these results is to join your state association. The men who have been doing all of this work for you do not get one penny for the time, energy or ability they contribute to the welfare of all. It takes money to successfully conduct the affairs of the association and to pay the legitimate expenses of the men who labor so unselfishly for your good. Are you helping to defray this expense by being a member and paying the dues of your State Association?

I wish every druggist could read the admirable paper presented at the last meeting of the A. Ph. A. at Indianapolis by Harry B. Mason on "What Compulsory Health Insurance would Mean to the Retail Druggist" (published in full in the October, 1917, ERA, page 309). This is one of the legislative problems we must meet in many States, but not the only one. There will be many more measures which, if not of such vital importance, will still require most careful attention and will tax to the utmost the ability and resourcefulness of our legislative committee who represent our interests on the firing line. The "liberty bonds" of this campaign which you and I must buy are represented by the receipts we hold for membership fees and dues. The enemy is massing his forces for a great drive on the fortifications which protect your money till. If you do not enlist and do your part, you face the imposition of vexatious restrictions, financial loss and ultimate defeat.

In the above I have purposely emphasized the sordid dollars-and-cents side of why it pays to be a member of your State pharmaceutical association because I want to drive home the fact which contributes most to your success, although much could and should be said of the professional and social benefits that accrue to those who hold membership in such an organization. Let me close as I began; join your State association.

UNIVERSITY OF WISCONSIN

Several acres of drug plants of various kinds were cultivated and harvested in the new medicinal plant gardens which were opened this year by the pharmaceutical experiment station of the University of Wisconsin. The year's harvest includes one acre of belladonna, one-half acre of hyoscyamus, and one-half acre of digitalis—plants that are in great demand at the present time—one acre of peppermint and one-half acre of wormwood.

A. G. DuMez, formerly assistant professor of pharmacy and director of the course in pharmacy in the University of the Philippines, who returned to Madison more than a year ago to complete his graduate studies for the doctor of philosophy degree with pharmacy as a major study, the examination for which he successfully passed, has been appointed technical assistant in pharmacology at the Hygienic Laboratory of the Public Health Service at Washington, succeeding the late Martin I. Wilbert.

Fritzsche Bros., New York, have generously provided the Pharmaceutical Experiment Station with a fellowship of \$500 for the year 1917-18, to be devoted to the study of problems relating to the production of thymol from *Monarda punctata*.

REDUCING THE EXPERIENCE REQUIREMENT

(Dr. Willis G. Gregory, dean of the Buffalo College of Pharmacy, sends us a copy of the following open letter addressed by him to the Legislative Committee of the New York State Pharmaceutical Association, which is self-explanatory. He states that this seems to be an appropriate subject at this time for discussion, as the topic is a live one not only in New York, but through the action of the American Conference of Pharmaceutical Faculties, it is a live one throughout the country. His argument is sure to interest many readers of the ERA.—Editor.)

High school graduates; do we want them in pharmacy?

At the June meeting of the New York State Pharmaceutical Association, the Board of Pharmacy recommended that the four-year practical experience requirement for pharmacists be reduced to two years in the case of high school graduates. With the prerequisite law in New

York, this means that the minimum practical experience would consist of sixteen months in a college of pharmacy and eight additional months in a registered pharmacy.

To those of us who have been brought up on the four-year experience requirement this seems like a radical change. But there must be substantial reasons for such action or it would not have been taken by such a body as the State Board of Pharmacy is known to be. Five of the nine members are proprietors of successful pharmacies which they are actively conducting, while the other four have all had



DR. W. G. GREGORY

many years experience behind the retail drug counter and all of their present interests are tied up with retail pharmacy. Let us therefore carefully look for the reasons back of this proposition.

First, let us note that the minimum requirements will apply to comparatively few apprentices:

A. Only high school graduates will be affected.

B. Many of these will accept the advice freely given by the colleges and pharmacists, and will secure one year's experience before commencing the college course.

C. Many more will have acquired considerable practical experience by working in drug stores while taking their high school course.

D. Others will finish their high school course before they are nineteen years old and so will have to wait for their pharmacists examination till they are twenty-one, the period of waiting increasing their practical experience.

E. One of the largest college classes in the state attends three years to secure the degree necessary for the pharmacist's examination.

F. Other individual circumstances will occur to further decrease the number who will only attain the minimum requirement of two years.

G. In addition, if a young man under such a minimum experience requirement should fail to profit sufficiently by it, he is very likely to show it and be forced to extend his practical experience by failing in the practical examination before the board of pharmacy.

It is easy to see therefore that this proposition is no wholesale throwing down of the bars in the pathway of youthful pharmacists. But comparatively few can tread this road.

But now for the arguments in favor of making it easier and more inviting for those few who may enter the ranks of pharmacy in this way.

First, it is a constant complaint of proprietors that it is difficult to secure satisfactory clerks. It is stoutly

claimed that a marked shortage exists at the present time. Be this as it may, the war will take a considerable number of licensed men.

It is known that a number of the members of this Spring's graduating classes in our colleges of pharmacy enlisted. It is known that a number of the members of last year's junior classes have enlisted, so that next Spring's graduates will be fewer by ten or more per cent. It is certain the draft will materially increase the numbers thus taken out of our stores, so it cannot be far from the truth so say that about twenty per cent. of the material available for clerks will be claimed by the war. For various reasons probably only one half of this number will ever come back into pharmacy. Therefore, we not only have a temporary condition to face but also one that will become more or less permanent. Is it not then highly desirable to secure in every reasonable way an increase in the number of those selecting pharmacy as a vocation?

Here comes the question: Will this proposal increase the number of apprentices? It is believed that the answer is "yes." Here are a few thoughts that apply:

A. All our colleges of pharmacy have had cases of high school graduates who declined to matriculate when told of the four-year experience requirement. It looked too far ahead for the rewards in sight.

B. How many of us honestly think a high school graduate should spend two or three years running errands, washing bottles and tending soda fountain? The conditions of apprenticeship are not the same in any calling as they were in the youth time of many of us.

C. Some of us have had experience with high school graduates beginning behind the counter. Not always satisfactory of course, but in many cases the experience was sufficient to prove that a short period of training gave us comparatively safe and efficient helpers.

Next, is it not self evident that if the proposed change does increase the number of those yearly coming into pharmacy this accession will be of the most desirable character? Will it not be a distinct advantage to pharmacy to increase the number of high school graduates joining its ranks? This question seems hardly worth discussing. It is not believed that an affirmative answer will be disputed.

Now for analogies. Credit for education is not at all a rare thing. A. In Europe where three years compulsory military service has been the rule, the college graduates have been credited with two years and obliged to serve only one.

B. In America where pharmacists are obliged to enlist as privates, medical graduates are at once given a lieutenant's commission.

C. In our new army where pharmacists have enlisted as privates, many of them have been transferred to the medical corps where they not only are of more service to the nation but where also they are relieved of much military drudgery.

D. In this state, three years of study in a practicing lawyer's office is required for admission to the bar examination, but in the case of a law college graduate this period is reduced to one year.

Instances of this character could doubtless be multiplied. The world over, education is recognized as increasing a man's power and value and as enabling him to accomplish any intellectual training in less time than can be done by one less thoroughly trained. Why should not this principle be recognized and applied in pharmacy?

WILLIS G. GREGORY.

DRUGGISTS PROPOSE SHORTER HOURS

The Pierce County (Wash.) Retail Druggists Society, which met recently at the Commercial Club, Tacoma, may adopt new closing hours, if the discussion and sentiment expressed at the meeting materialize into definite action. The majority of druggists were in favor of fewer working hours, particularly on Sunday. It is said that the average drug store in Tacoma keeps open fully fifteen hours, making two shifts of employes necessary. G. C. Morton and Frederick D. Marr, members of the State Board of Pharmacy were present, and made a report of the recent meeting of the State Pharmaceutical Association.

MISS BARBAINE DOING HER "BIT."

If Miss Rhea E. Barbaine had had a group of brothers and sisters, it is possible that she might not have studied pharmacy. As it was, however, she grew up the best sort of chums with her father, spending much time in the drug store with him and learning many things.

She graduated from the Saginaw E. S. High School with the class of 1915, entering the University of Michigan the following fall, where she took two years of pharmacy together with some special study in literary work.

The State Board examinations for Michigan were held in Ann Arbor in June and Miss Rhea found it convenient to try them. The result was that she received assistant registration papers with credit for full registration as a pharmacist as soon as she is of age and has completed the required amount of actual practice.



MISS R. E. BARBAINE

This is an unusually good record, and when the young lady's majority arrives and the law will permit her to be a full-fledged pharmacist, nothing will stand in the way.

Contrary to her plans, she did not return to the University of Michigan this fall, but is working in her father's drug store in Freeland in order to get the before-mentioned practice and also to do her "bit" by helping her father and serving her country. She enjoys the work very much, finding the prescription part particularly fascinating. It is always pleasing to see father and son or father and daughter working together in the same line and much larger success may be built up by such means than where each generation makes an initial venture of its own.

MANUFACTURE OF WINTERGREEN OIL

The Indian Government *Trade Journal* says of the manufacture of wintergreen oil in India:

The distillation of *Gaultheria* oil presents certain difficulties. By ordinary steam distillation the writer had little success. The notes made by him as to the best method of distillation are, briefly, as follows: Entire branches of *Gaultheria* should be taken for distillation, as it does not pay to separate the leaves from the stalks. The *Gaultheria* branches should be chopped fine before putting them in the still. The still should be provided with a closed coil inside it for maintaining and increasing the heat. This may be done by admitting steam at about 80 pounds pressure. The pressure in the boiler should be kept uniformly at 70 to 80 pounds. It takes about 6 hours for a charge to distil over. The catch still will render the oil almost colorless, requiring no further rectification. The most economical scale of work will be to take about 1 ton per charge. If it be not possible to set up a steam distillation plant (which is by far the most economical arrangement), crude distillation is advocated in 200 to 400 gallon whisky stills. The latter size gives better results than the former unless the steam is used at high pressure. The oil, being heavier than water, settles at the bottom of the Florentine receiver and not on the top, as is generally the case.

The distillation of wintergreen oil promises to be a profitable industry in Assam, provided adequate arrangements are made to cultivate the plant, in order to obtain a constant and sufficient supply of leaves.

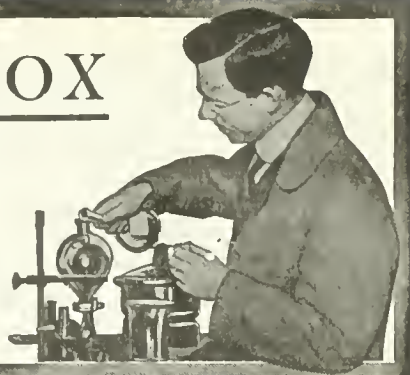
The executive committee of the American Drug Manufacturers Association has set Jan. 29 and 30, 1918, as the dates of its seventh annual meeting, which is to be held at the Waldorf-Astoria, New York City. The annual meetings of the biological section and the committee on standards and deterioration will be held on Jan. 28.

THE QUESTION BOX

The "How to Do It" Department

CONDUCTED BY PHARMACEUTICAL EXPERTS

For the benefit of ERA Subscribers



Uses of Cerium Compounds

(R.)—One of the uses of cerium is for making spark-emitting alloys, it being stated that an alloy of cerium and iron containing about 70 per cent. of the former gives an abundance of sparks when struck with a hard substance, such as carborundum. The alloy is employed in igniting illuminating gas, in the manufacture of cigar lighters, etc. The oxide of cerium is used in connection with thorium in the manufacture of Welsbach mantles for gas lights, these oxides having the property of emitting an intense light when heated. Besides its use in the making of lamp filaments, it is one of several elements of the mixture employed in making the rods of the Nernst incandescent lamp. In analysis, the oxide is used to a limited extent as a test (strychnine), and as a contact substance in the analytical combustion of organic substances. Certain cerium compounds have been recommended in the tanning of leather, etc.

The element itself is found in cerite (a mixture of orthosilicates of several rare elements), and in monazite (a mixture of phosphates of cerium, thorium and some other rare elements). The only official salt is cerium oxalate, usually obtained as a by-product in the separation of thorium from monazite. As defined by the Pharmacopoeia, the oxalate of cerium is a mixture of the oxalates of cerium, didymium, lanthanum and other associated substances, cerium oxalate being usually present to the extent of 50 per cent. It is used chiefly in chronic vomiting, especially the vomiting of pregnancy, its action being mechanical and resembling that of salts of bismuth. Other salts of cerium used medicinally have properties allied to those of bismuth also.

Formation of Dichloramin-T

(M. A. S. F.)—Considerable has been published on this substance recently on account of its extended use in the treatment of infected wounds, especially those resulting from gun fire in the European war. One of the most recent articles on the subject is that by Dr. H. D. Dakin, of the Herter Laboratory, and his associates, read before the American Surgical Association in Boston last June, and printed in the July 7 issue of the *Journal of the American Medical Association*. In this paper it is stated that the authors made use of dichloramin, first prepared by Kastle, Keiser and Bradley (*Amer. Chem. Jour.*, 18, 491, 1896), and later by Chattaway (*Journal of the Chemical Society, London*, 87 (1); 145, 1905), the systematic name for which is toluene-parasulphondichloramin, which Dakin and his colleagues call dichloramin-T. The details for Chattaway's method of preparation are given as follows:

Chlorinated lime (from 350 to 400 gm.) of good quality is shaken with 2 liters of water on a shaker for half an hour, and then the mixture allowed to settle. The supernatant fluid is siphoned off and the remainder filtered. Powdered toluene-parasulphonamid, 75 gm. (the crude product may be used), is then added to the whole of the hypochlorite solution and shaken till dissolved. The mixture is filtered, if necessary, placed in a large separating funnel, and acidified by the gradual addition of acetic acid (100 c. c.). Chloroform (about 100 c. c.) is then

added to extract the dichloramin, and the whole well shaken. The chloroform layer is tapped off; dried over calcium chloride, filtered, and allowed to evaporate in the air. The residue is powdered, and dried in vacuo. It is sufficiently pure for most purposes without re-crystallization. Dakin states that the sodium toluene-parasulphochloramin, which is sold under the trade name of chlorazene, may be used instead of the toluene-parasulphonamid.

The authors give another method of preparing dichloramin-T as follows: Fifty gm. of para-toluenesulphonamid are dissolved in 500 c. c. of water, and 100 gm. of sodium acetate and 100 c. c. of chloroform are added. The container is immersed in cold water, and a rapid stream of chlorine is passed in until the mixture is saturated. The mixture is allowed to stand a few hours and, if the odor of the chlorine disappears, more of the gas is passed in. If necessary, more chloroform can be added to dissolve the dichloramin. From this point the procedure is the same as in the preceding method. Dichloramin-T, as marketed by the Abbott Laboratories, Chicago, has been accepted by the Council on Pharmacy and Chemistry of the American Medical Association as conforming to the rules of that body, a report on the remedy, together with definition, tests, action, uses and dosage, etc., appearing in the *A. M. A. Journal* for Sept. 29, which see.

Cost of Tincture of Iodine

(G. B.)—"Various pharmaceutical houses are listing tincture of iodine U. S. P. at prices varying from \$6 to \$7.50 per gallon. We are at a loss to account how the U. S. P. tincture can be sold for this price. Kindly let us know what alcohol is used or what process is employed that will produce a tincture that will meet the official requirements at the prices named?"

The statement that various manufacturers are listing U. S. P. tincture of iodine at the above prices is correct, their ability to make the tincture being due to the fact that they take advantage of the Government regulation which provides for denaturing alcohol, iodine being a denaturant of alcohol, its use in preparing the tincture making it impossible for one to recover the alcohol thus employed and use it for beverage purposes. It is thus possible for the manufacturer to reclaim from the Government the duty that was paid on the alcohol; in other words, the regulation makes it possible for the manufacturer to use alcohol duty free. The formula authorized for the purpose by the Internal Revenue Department is as follows:

Formula No. 25—To every 100 wine gallons by volume of ethyl alcohol add 20 pounds of iodine; for exclusive use in manufacturing tincture of iodine.

Certain formalities must be observed by such manufacturers who desire to make use of the formula, which must be done under the regulations and in the manner required by the Internal Revenue authorities. For this information you can communicate with the Commissioner of Internal Revenue, Washington, D. C., or the collector of your revenue district. In this connection we note that under date of Sept. 28, the Commissioner of Internal Revenue has extended the use of Formula No. 25 so that

it may be employed in the manufacture of 3½ per cent. (half strength) tincture of iodine, without the addition of potassium iodide, the half strength tincture being in considerable demand by the medical profession for use as an external antiseptic (Treasury Decision No. 2527).

Hair Drying Powder

(G. C. E.)—The method usually followed is to dry the hair after washing and then to remove the oil, to dust the hair with powdered orris root or various mixtures containing orris root, which may be applied with a powder puff. The powder is allowed to remain 10 or 15 minutes or better, over night, and then brushed out thoroughly. Here are two formulas:

(1)

Orris root 5 parts
White corn meal 5 parts
Both should be in fine powder and intimately mixed.

(2)

Orris root 2 ounces
Talcum 3 ounces
Starch 5 ounces
Tincture of musk.....20 minims
Oil of lemon.....15 drops
Oil of bergamot.....15 drops
Oil of neroli.....6 drops

Reduce the first three ingredients to a fine powder separately, then mix, thoroughly incorporating the perfume substances.

Perfumed Bath Powder

(G. C. E.)—The following formulas have been published:

(1)

Crystal carbonate of sodium is now generally used. Color and perfume, dissolve aniline violet 2 grains and ionone ½ dram in one ounce of spirit; spray over two pounds of crystals, stirring well all the time.

(2)

Borax 4 ounces
Oil of lavender.....10 minims
Cassia extract.....1 dram
Jasmine extract.....1 dram

Use a heaped teaspoonful for the bath.

(3)

Sodium carbonate, monohydrated..... 8 ounces
Tartaric acid..... 3 ounces
Orris root powder..... 1 ounce
Oil of lemon..... 1 fl. dram
Oil of orris or solution of ionone.....10 minims
Oil of ylang-ylang.....10 minims

Mix well. Use a few teaspoonfuls to a bath.

(4)

Sodium bicarbonate.....12 ounces
Borax12 ounces
Potassium carbonate..... 3 drams
Ammonium chloride..... 3 drams
Oil of anise.....30 minims
Oil of cloves.....30 minims
Oil of sassafras.....30 minims
Oil of wintergreen.....30 minims
Oil of bergamot.....30 minims
Oil of rose geranium.....30 minims
Oil of lavender flowers.....30 minims

Mix the salts thoroughly with the oils and keep the product in well-stoppered wide-mouthed bottles.

Repairing Rubber Goods

(Clerk)—We have had no practical experience in repairing the various articles sold by druggists, such as rubber goods, sundries, etc., which have become damaged, but usually the same methods are employed as those used in repairing the inner tubes of automobile tires. Some hints are given on this subject in the following directions, published in a contemporary a year or so ago:

First, clean off all adherent matter and dry thoroughly. Varnish or lacquer may be removed with sand or emery

paper, or even with a file, in the absence of one of these.

The surface thus produced is then rubbed with benzine. A solution of para rubber in benzine is then painted over the surface around the break or tear, and a strip of natural rubber fitted over it. Then prepare a vulcanizing solution as follows:

Sulphur chloride..... 18 parts
Benzine 400 parts
Carbon disulphide..... 300 parts

This solution is applied to the edges of the joint by means of a pledget of cotton wrapped on the end of a little stick; then press the jointed parts well together.

To repair rubber bulbs: Put some pure gum in three times its bulk of benzine, and cork tightly. Let stand several days. Get some rubber in sheet form; it will be better if it is backed with cloth. To make a patch, dampen some little distance around the hole to be mended with benzine. After a moment scrape with a knife; repeat the process several times till the site to be patched is thoroughly clean. Cut a patch from sheet rubber a little larger than the hole to be mended and apply to its surface several coats of the benzine solution. Then apply a good coat of the solution to both patch and about the hole, and press the patch firmly in place. Again apply the solution to make a coating over the patch, and allow to dry till it will not stick to the finger. Do not use for several days.

Cracked rubber goods may be successfully mended in the following manner: Before patching, the cracked surfaces to unite well, must be dried, and entirely freed from all dirt and dust. In case of a waterproof coat, or rubber boots, etc., take a moderately thick piece of India rubber suited to the size of the object, cut off the edges obliquely with a sharp knife moistened in water, coat the defective places as well as the cut pieces of rubber with oil of turpentine, lay the coated parts together and subject them for twenty-four hours to a moderate pressure. The mended portions will be just as waterproof as the whole one. Rubber cushions or articles containing air are repaired in a very simple manner, after being cleaned as aforesaid. Then take colophony, dissolve it in alcohol 90 per cent., so that a thick paste forms, smear up the holes, allow all to harden well and the rubber article, pillow, ball, knee caps, etc., may be used again.

Copaiba Mixture

(H. G. M.)—Various formulas for copaiba mixtures in paste form have been published, this form of administration being much in vogue a quarter of a century or more ago. Here are three formulas for mixtures of this character:

(1)

Sweet almonds6 drams
Mallow paste1 dram
Catechu½ dram
Copaiba3 drams

Rub together in a paste. Dose, a spoonful.

(2)

Copaiba4 ounces
Oil of sandalwood1 fl. ounce
Gum turpentine4 ounces
Powdered cubebsufficient

Melt the turpentine with the copaiba and incorporate the other ingredients. Dose, a piece the size of a pea 3 or 4 times a day.

(3)

Powdered cubeb3 ounces
Copaiba1½ ounces
Alum2 drams
White sugar1 ounce
Magnesia1½ drams
Oil of cubeb1 dram
Oil of wintergreen1 dram

Mix and make an electuary. Dose, a piece the size of a walnut after each meal. This formula is taken from Potter's *Materia Medica* (1901) where it appears under the name of "Black Paste."

WOMEN IN PHARMACY

The Holiday Season and its Opportunities

By EMMA GARY WALLACE

MERRY CHRISTMAS

Christmas greetings, Christmas cheer,
To our friends, both far and near.
May your lives this Christmastide,
Be filled with service ocean wide.

May your New Year be the best
Spent thus far in earnest quest,
May true brotherhood be born
And pierce the darkness, finding morn.

Chemistry holds high its light
Beckoning onward all in sight.
Laboratory, nature, all,
Giving at their country's call.

Pharmacy, the handmaid brave
Of Sciences which aim to save,
Has won a place in foremost ranks;
We'll keep it there—and all give thanks.

A CHRISTMAS GREETING

As I turn my thoughts toward the Christmas season and mentally review the great and splendid army of the ERA family, the Christmas season is still several weeks distant, for of course it takes some time for magazines to be made and carried to their destination.

There are many, many of these our friends, to whom the last year has brought great change. All have found that business has reacted to the existing world-wide conditions and that we as individuals as well as a nation, have been called upon to sacrifice heavily in behalf of the principles of democracy.

Our Christmas celebration this year will have even more of heart interest and sincere appreciation in it for the blessings of a Christian land than ever before, and our New York plans will be made with an even higher purpose in mind than in past years, for the American people are learning the great and needed lesson of unselfishness, of sectional unity, and of placing right before all else.

Each and every one of us is being brought face to face with the realities of life and with the greatness of our individual responsibility. We do not belong to that class of people who think it wrong to smile when a war is in progress, and we do hope that every one of our ERA friends will have a Christmas season of happiness attended by a full measure of creature comforts. Greater, however, than material bounties, is the knowledge that we as a people are having the high privilege of co-operating with the Creator of the Universe in working out the ultimate happiness of mankind. Regrettable as is the war in which we are engaged, it is the fire which will refine the gold.

Again it is our hope that all in the ranks of Pharmacy will be prospered in the year to come—if prosperity *really* is the best thing for the individual. There are those, however, who will lose their lives and perchance their property, and in losing both, will find great riches.

My Christmas wish to you in a single sentence is that the greatness of our service and the loftiness of our purpose may be greater and higher than ever before. For then I know that all succeeding Christmases and New Years will be increasingly glorious, and that the white field of our flag will be purer, the red stronger, and the blue finer and truer because we have done our full part.

Sincerely,

EMMA GARY WALLACE.

THE LAST AND THE FIRST OF THE YEAR

The Old Year is drawing to a close. We started it with the determination to make it the best year from every point of view of any in our history and in a measure most of us have succeeded. There is only left the final Round Up, and that is immensely important.

All too many people start out very strong, weaken toward the middle, and fall down entirely at the end. If you doubt this statement, remember the people who planted war gardens and harvested weeds.

The Christmas season is an exceedingly busy time with little opportunity to think out new plans or to digest the results of old ones, yet it is profitable to take a little leisure every day and to employ it in a thoughtful review of the business situation. To be *so busy* that one does not have time to know whether the right road or the wrong road is being taken, is mighty poor economy. In fact, it fails to be true business and becomes confusion.

The Christmas buying public this year will be more interested in utility gifts than ever before. This means that the regular staple stock of the drug store can be featured even to the last moment—hot water bottles, thermos bottles, fountain pens, perfumers, toilet water and perfume, confectionery, toilet sundries, brushes of all kinds, soaps, creams, lotions, tooth paste, sponges, chamois, physicians' bags, manicure implements, leather goods, etc.

One advantage of selling staples is that left-over goods do not have to be carried a whole year before they are seasonable again. The using of boxes and wrappings decorated with holly and poinsetta will dress up many an article and make it suitable for gift purposes. It is always a good plan to have something in the way of an attractive leader which can be brought forward *just the week before Christmas*. This brings the crowd *your way*. Those who have already bought will think of others to remember or will be wandering through the stores perhaps to find bargains for themselves. Here are a few such items which should be money makers.

Housekeepers' First Aid Kit

Let this be composed of a box of suitable size containing four or six bottles of choice extracts. You can prepare these of three, four or six ounce size as you think will be most salable. Vanilla, lemon, almond, orange, celery and onion will make a good collection, or any variation from this line which is desirable may be made—extract of Kitchen Bouquet instead of onion, pineapple instead of lemon, etc. The bottles of course should be of uniform size, neatly wrapped in tissue, fastened with Christmas seals, and the interspaces filled with crumpled tissue. Most housekeepers would much rather receive a gift of this nature which will help make good meals possible during the present food conservation movement than senseless ornaments which only make litter.

The same idea can be worked out in other household supplies also—a can of high grade baking powder, mustard, pepper, cinnamon, ginger, curry, saccharine, etc. The success of the plan will be greatly aided by having these dry ingredients in plainly labeled boxes or shaker top cans.

Good Health Insurance

The sale of books which will assist in keeping the family in health or in enlightening the mother of a family of children as to the proper care of them in order to avoid sickness and expense can be used at Christmas and carried over into the New Year. This movement is especially

timely now on the part of druggists when the whole country is trying to make the best use of everything and to prevent sickness.

Dr. Holt's 1917 edition of *Care And Feeding of Children* and several similar books of that character should sell readily and can be shown to those purchasing infant supplies, or if there is no time at the Christmas season to call attention to this, a printed circular listing such books can be enclosed in packages. If I were a young mother with children, I would infinitely rather have such a book for my information and guidance than fancy articles of doubtful value.

Do Not Forget

Do not forget if you have had a good holiday trade to thank your patrons through your newspaper mediums or even by window cards. The store which shows it is thoughtful and appreciative in such matters makes a pleasing impression and wins friends.

In place of letting trade sag after the holidays and taking it easy, why not be ready the very first of the New Year to arrange Special Sales, to get rid of broken lines and soiled goods? People who have not sent gifts to their soldier friends can now get remembrances at small cost and they will not be less appreciated because they are a little late. In fact, they may reach the recipient almost as soon having waited to avoid the rush. It is like going on to a car crowded with strap-hangers or waiting for the one just behind with plenty of empty seats.

Above all things insist that every individual in connection with your establishment Keep Sweet. There will be times when weariness will threaten one's amiability but it *doesn't pay* to get cross, and from a business standpoint it is poor policy. Those in front of the counter may be over-tired also, and so there is all the more reason for self-possession on the part of all of the store force.

AROUND THE CIRCUIT

The Chicago Retail Druggists' Association and the Women's Organization of the C. R. D. A. gave a reception and supper on Thursday evening, Nov. 8, in honor of Mr. and Mrs. Samuel C. Henry of Philadelphia, whose future home will be in Chicago, as Mr. Henry is now serving the N. A. R. D. as secretary. The affair was given at the Hotel La Salle and was attended by more than two hundred druggists and their wives.

Cleveland Chapter, No. 21, held its second meeting the last Friday in October. About an hour previous to the meeting, a severe storm broke preventing many of the ladies from attending, yet there was an enthusiastic gathering of forty-two in attendance. At the November meeting the new constitution will be submitted for approval. The baby Chapter is growing finely.

The Women's Organization of the Boston Association of Retail Druggists held its first meeting of the season on October 18, at the Women's City Club, with the president, Mrs. Mary B. Green in the chair. Interesting reports of the annual conventions of women's bodies connected with pharmacy were read. Mr. Perkins gave a short talk on Red Cross work. The Chapter made an appropriation from its treasury for assisting in this patriotic organization. A social hour and tea followed.

Mrs. J. V. Calver, national organizer of the W. O., is spending some time in Chicago.

Chicago Chapter, No. 2, sent delegates to the Illinois State Federation meeting, which took action to bring before the women of the clubs of the entire state, the present system of lack of recognition of a Pharmaceutical Corps in the Army. A resolution to remedy this weak spot was presented.

Philadelphia Chapter, No. 2, is doing a great deal in the line of Red Cross work.

A DRUGGIST SOLDIER'S DAUGHTER

When the father of Mabel Johnson of Ogdensburg, Wis., enlisted in the Officers' Medical Reserve Corps and began his training at Fort Worth, Texas, his ambitious daughter was compelled to bring her pharmacy course to a temporary pause, so far as its regular progress goes.



MISS MABEL JOHNSON

Miss Mabel had already won her registration as an assistant pharmacist with the State Board in July, having finished one year of work at the University of Wisconsin. When her father departed, however, to serve his country, she gladly remained at home and is conducting the Johnson Drug Store to the best of her knowledge in the absence of her father. Most girls as young as Miss Mabel would think this sufficient, but she is going to continue her work through a correspondence course from the University Extension Division.

All of the fighting is not done in the trenches. More than we realize is accomplished by those who remain at home and do their part to let others go.

Rock Island Chapter, No. 15, held its November 8th meeting at the home of Mrs. Charles Straight.

Mrs. Edward Ferger, president of the Indianapolis Chapter, gave a delightful reception at her beautiful home in honor of Mrs. W. E. Lee, the National Financial Secretary. Mrs. Lee was also entertained by the members of Cincinnati Chapter, No. 5, during her recent Western trip.

Eleven women students are registered this year at the Queen City College of Pharmacy. Dr. Frank Cain praised highly their industry, conscientiousness, and adaptability.

Louisville Chapter, No. 11, is active in Red Cross work, one afternoon each week being set aside for this purpose. Mrs. Henry Cohn, Miss Stella Heil and Miss Clara Hulskamp, form the committee in charge of the work.

DRUG STORE SWEETS

When the Government urges us to cut down our use of sugar, it does not mean that we shall deprive ourselves of needed nourishment, but rather that we may replace the ordinary sugar with other sweets which are available. The drug store has some of these which it can now sell to its own profit and for the community betterment. One druggist who purchased a couple of kegs of strained honey for use in a cough syrup, set one aside for the medicine and bottled the other keg and sold it at a good profit.

Stuffed dates, candied fruits and particularly molasses confections, all offer the same nourishment and are delectable to the taste. They belong to the drug store and should be featured now.

PUSH EDIBLE OILS

Now that fats are such an item, the drug store should make the most of its opportunity and push edible oils. Olive oil, cottonseed oil and peanut oil all have a distinct place of their own in the family dietary. The cheaper oils make very good salads and may also be used for shortening and frying. People have been deterred from using edible oils on account of the supposed high cost of them, but the cheaper oils give good results and the expense is not at all prohibitive. It is a good plan to make a comparative table of costs of oil per pint, using a pint of melted butter as a unit of comparison, for most housewives are more familiar with butter than with oil values. Of course the edible oils do not all take the place of butter, nor does butter take the place of edible oils, but good sweet oils may be used to excellent purpose to make butter go farther and so conserve the price of living.

CUBAN GIRL GRADUATES OF THE UNIVERSITY OF HAVANA



The young ladies shown in the above reproduction are grouped as follows: 1, Ofelia Sotolongo; 2, Adelaida Martinez; 3, Clara Luz Delmonte; 4, Africa Fernandez; 5, Leonila Smith; 6, Concepcion Ledon; 7, Carmen Estorino; 8, Rosa Pola; 9, Maria Luisa Martinez; 10, Maria Otilia Becerra; 11, Josefa Gonzalez Freixas; 12, Perseveranda Rodriguez; 13, America Fernandez; 14, Estella Valdes Lafont; 15, Angeles Causa; 16, Aracelia Lopez Villalonga; 17, Ana Teresa Recio.

CUBAN WOMEN SHOW SCHOLARSHIP

The number of young women who are studying pharmacy at the University of Havana is growing steadily larger. This year seventeen young ladies obtained the diploma of Doctor in Pharmacy and several of them were successful in winning special prizes.

The records of the Havana School of Pharmacy of the past three years show that the women students have been among the leaders in their respective classes. In the accompanying picture, those who were successful prize winners are marked with the letter "X." Dr. Africa Fernandez, marked "X-4," deserves special mention, for although closely followed in excellence of scholarship by her colleagues, she managed to win no less than four prizes in the subjects of Pharmacognosy and Practice of Pharmacy.

If the young women of Cuba keep up the splendid standard of scholarship which they have raised for themselves, there will soon be a large number of highly efficient women pharmacists in Cuba. At the present time, the office of assistant of the chemical laboratory is jointly held by Drs. Lajomasino and Calonge, and one of the assistants of the practice of pharmacy laboratory is Dr. Bustillo, all of them distinguished students during their courses of study.

Miss Beatrice Ingram Raggie of Netcong, N. J., has proved herself a singularly earnest and capable student in pharmacy at Columbia University. Miss Raggie received the Lillian Leiterman medal for the woman making the highest average; the Max Breitenbach cash prize of \$200 presented to the student standing highest the last year of the University course; the Kappa Psi medal and the special prize in pharmacy—a "National Dispensatory" presented by Dr. Diekman to the student receiving the best rating in his department.

Mrs. Minnie M. Whitney of the Kansas City College of Pharmacy, had the honor of being elected first vice-president of the Missouri Pharmaceutical Association. She is the first woman ever to have held office in this body. She once served as "second vice." Mrs. Whitney was chairman of the Membership Committee during the past year, and 169 members were admitted, the largest number of new members in a single year in the history of the association.

The Waltham (Mass.) Druggists' Association was recently organized in that city with the object of keeping its members thoroughly informed of existing conditions, particularly with reference to market prices. More than half of the druggists of Waltham were present at the initial meeting, and an effort will be made in the near future to have all of the druggists of the city included in the membership. Eben J. Williams was elected president, and Ralph Redfern, secretary-treasurer.

NEW ORGANO-ARSENIC COMPOUND "A-189"

Dr. Simon P. Flexner Announces Discovery to Supplant "606."—Process Perfected and Drug Ready for Immediate Manufacture—Claimed to be Cheaper, Safer and More Effective.

Two discoveries of world-wide importance in the treatment of syphilis and tetanus were announced at the annual meeting of the National Academy of Science held at the University of Pennsylvania, Philadelphia, on Nov. 20, which are of transcendent interest to physicians, pharmacists, and all those who have followed the present trend of medical progress. Both discoveries were made at the Rockefeller Institute in New York, under the direction of Dr. Simon P. Flexner, who announced the discovery of the new cure for the blood disease amid the cheers of the scientists. They regarded the discovery as a triumph over the scientists of Germany, who had given the world "606," the only previous cure for the dread disease.

Discovery of the new drug, known as "A-189," was made at the Rockefeller Institute after collaborative experiments, dating from the outbreak of the world war. In announcing the discovery, Dr. Flexner explained that it was sought for because of the danger attendant upon the injection of salvarsan, or "606," and owing to the fact that the war had made it virtually unobtainable in the United States.

The new drug, an organic arsenical compound, can be prepared in this country at a nominal cost of five cents a dose wholesale, whereas the price of salvarsan is almost prohibitive. But the most important feature of the new discovery is the fact that it develops greater resistance for the spirochaetal infection without doing as much damage to the cells of the body.

Dr. Flexner pointed out that, although salvarsan has been of much benefit to thousands of sufferers, many experiments with it have resulted fatally, due to the potency with which it attacks the body cells while combating the spirochaeta of the disease.

Salvarsan is about ten times as poisonous to the spirochaeta as to the body cells. A great deal more of the potency of the new drug will be concentrated on the disease germ than was the case with salvarsan. It will be from one-half to one-third as poisonous to the human system as the German-invented cure, while acting with relatively the same effect on the causation of the disease. Hence, the drug can be used in smaller doses. It may be much more easily produced than salvarsan. Dr. Flexner said that the German cure still could be manufactured, but that the cost was prohibitive. He said that the cost of the German drug, even prior to the war, was too great, due to the German royalties collected on each sale.

The new drug has been perfected and is ready for immediate manufacture. It is soluble in water and may be injected into the veins the same as salvarsan.

The several scientists who collaborated in the discovery of the drug have given all the credit to Dr. Flexner for his perfected organization at the Rockefeller Institute.

Announcement that tetanus, or lockjaw, can be cured by an injection into the veins of a 4 per cent. solution of ordinary Epsom salt amazed the scientists and prepared them for the announcement by Dr. Flexner that America had discovered its own cure for blood poison. Dr. Samuel J. Meltzer also of the Rockefeller Institute, made the announcement of the simple tetanus cure.

NEW U. S. DRUG LAW PLANNED

Police Commissioner Woods of New York City, has sent letters to United States Senator William M. Calder and United States Attorney General Gregory asking their co-operation in stamping out the drug habit in New York. The Commissioner asks for adequate Federal legislation restricting the sale, exportation, importation and distribution of all habit forming drugs. He said the use of heroin and cocaine during the last ten years has become prevalent to an alarming degree. About 2,000 persons are arrested annually in New York for selling habit-forming drugs or having them in their possession.

Commissioner Woods states that notwithstanding the close co-operation with the State and Federal authorities,

these drugs are easily obtained in New York. He would have a law passed putting the sale of drugs directly in the hands of the Federal Government. The Commissioner suggests that zone districts for the distribution of drugs be established and he would make the alteration of a certificate a serious offense as it has been found in numerous instances that certificates given in receipt of drugs have been altered.

Both Senator Calder and Attorney General Gregory have promised the Commissioner that a bill covering all of the Commissioner's opinions will be drawn and introduced in Congress at its next session.

DRUG FIRM'S LABELS COUNTERFEITED

Revenue Agents Discover Plant for Re-Bottling Narcotics Stolen Here and Using Printed English Labels—Adulterated with Sugar of Milk.

While engaged in tracking down a gang of drug peddlers in New York, an agent of the United States Department of Internal Revenue accidentally stumbled upon evidence which reveals the ingenious method used by peddlers in deceiving addicts and securing exorbitant prices for the forbidden drug which they sell. Narcotics which come into the hands of unlicensed distributors in this country, and which are secured by theft, smuggling or illegal purchase, are diluted with about 50% of milk sugar. The drug is then rebottled, relabelled and sold to the habitue as the pure article. In the raid in New York the officers of the revenue department discovered an outfit for diluting and rebottling heroin.

Among the articles found by the raiders were hundreds of small bottles, large quantities of sugar of milk, bottles of morphine and heroin, and thousands of counterfeit labels and trademarks. J. F. MacFarlan & Company of London and Edinburgh, probably the most widely known manufacturer of narcotics in Europe, seem to be the most popular with the drug peddlers and addicts in New York. In one small box there were found thousands of clumsy counterfeits of the MacFarlan label, even to the thistle plant trade-mark used on the stopper of the bottle. In most cases, no matter who the manufacturer of the original material, domestic or foreign, the diluted drug was relabelled as a MacFarlan product and offered to the addict as such. The rebottled drug was wrapped in wax paper and labelled with great care so as to resemble as nearly as possible the original package. In this manner, the peddler not only secured a double price for all his "dope" but, because of the label, was able to find a ready market at a higher price than that paid for unlabelled goods. The habitue was furthermore deceived by the appearance of the goods having been smuggled into the country, and, because of the label, felt that he was purchasing the best in its original package.

For some time past agents of the revenue department have been apprehending supplies of morphine and heroin bearing the MacFarlan label, but until recently they were not aware that the trade-mark and label were counterfeit. It was supposed that these goods had been smuggled into the United States by way of Mexico and Canada. The discovery of the box of labels with cuts for printing has opened the way of investigation in a new direction.

Agents of the revenue department explain the use of the MacFarlan label by the fact that this concern is in Europe and would not be as liable to run across the fraudulent use of their name as quickly as one of the domestic manufacturers. This counterfeiting plan was tried not very long ago on the label of Merck & Company, but the fraud was soon discovered when an agent of the revenue department presented a confiscated bottle of heroin for identification at the office of the company.

The MacFarlan label has become fairly well known among local drug peddlers and addicts, it is explained, through quantities of goods bearing this label which have been smuggled into the United States across the Canadian and Mexican borders.

MacFarlan & Company have been notified of the fraudulent use of their label and the authorities here are awaiting their reply.

MODERN MERCHANDIZING METHODS

Louis K. Liggett Discusses Success of One-Price System—Service an Essential of Good Business—Monthly Inventories—Development of the Chain Store.

Louis K. Liggett, of Boston, was the principal speaker at the November meeting of the New York Branch of the American Pharmaceutical Association held in the New York College of Pharmacy, his presentation of the subject of "Modern Merchandizing," being characterized by some present as truly a scientific effort as any address ever made before that body. The speaker was charged with real American enthusiasm, and he was frequently applauded by the three hundred or more druggists present.

Modern merchandizing, said Mr. Liggett, could be discussed from many angles. His experience covered two lines of the industry, dry goods and the drug trade. He would stick to them. John Wanamaker, was the father of modern merchandizing. In 1860 he had established a small store, in Philadelphia, in which he did business on the one-price basis. Previously, goods on sale bore tags quoting the cost and retail selling price in hieroglyphics. The clerk gauged the ability or inclination of the customer to pay, starting at the retail price on the tag and coming down to the cost, until a price was reached at which the sale was made. Ability to barter was the basis of retail business, and the customer made the price.

John Wanamaker did away with hieroglyphics. One price was plainly stated on the tag, and that price was firmly adhered to. Because other firms did business old style, Wanamaker was led to put in other lines of merchandise than his original stock of clothing. He originated the department store.

In New York City, A. T. Stewart moved uptown to 9th street and Broadway. He had a problem on his hands, that of maintaining trade in his new location. He adopted John Wanamaker's one-price system, and his success was great.

Manufacturers Sell to Retailers

John Wanamaker's expansion was so great that he went into the jobbing business, which became greater than his retail establishment. He was soon financing the manufacturer, his great retail cash feeder making this easy. Price advantages were his, the fixed price method was soon adopted by the manufacturer, and then came the elimination of the jobber. The manufacturer could do better selling direct to the retailer. There were 11 drug jobbers in Boston 20 years ago; there are now two. The business of those eliminated was absorbed by the manufacturer selling direct to the retailer.

There was jealousy and great antipathy in the drug trade 20 years ago for the cut price druggist, and attempts were made to boycott him. The speaker remembered the first cut rate drug store in Detroit. This store was not noticed until a large grocery store in that city put in a drug department, and sold \$1,000 a day of patent medicines. Local druggists clubbed together and picked Gray & Worcester, then Hurd & Gray, doing a business of \$100 a day, to buck the grocery store. The members of the druggists' association were to chip in on the loss. Hurd was a member of the State board, and Gray was high in pharmacy. At the end of the first six months, Hurd & Gray were asked to reckon up their losses. Mr. Hurd then said that the firm would stand the losses for the first six months, providing the members were willing to stand them for the next six months. After the first year the business of Hurd & Gray had attained the proportions of \$175,000. After the second year, the profits were sufficient for each partner to buy a new home. Both retired millionaires.

Beginning of the Hegeman Development

Mr. Liggett recalled the early history of Hegeman & Co. Cutter bought the original Hegeman store to get a downtown location for his business. He cut prices on the drug stock in order to sell it out, but found that he was making money and stuck to the new game. The

old-time drug store training, washing bottles, etc., was a penny-saving training, and the drug business was a penny-saving business. Fifteen years ago one could count the drug stores doing a \$100,000 a year business on the fingers.

Speaking on service, Mr. Liggett asserted that the question of price may be a factor five years or so after the war, when the inevitable depression comes, but it has not been such during the past five to seven years. Service is primary. Ability to overturn stock as often as is expedient with good merchandizing, counts for drug store success. Having goods on hand when called for is essential. The druggist can back his business by advertising schemes which may prove boomerangs, and he may overplay his hand on new schemes but service must always be considered. Location also is essential. A drug store in the back of Grand Central Station on Park avenue would "starve to death." "You must have location to get volume. People are not going out of their way these days."

Over-clerking and too high rent for the volume of business must be faced. Special drives have an effect on gross profit. "You must inventory your business completely before you know what gross profit is."

Charging Expenses and Taking Inventories

Not so very long ago, the Riker & Liggett business was receiving but 95 cents out of every dollar reported to the bank. The five-cent loss was due to unreported breakage, the unreported transfer and unreported depreciation of merchandise. This loss has been cut by the working out of the inventory system to seven-tenths of a cent per dollar.

Mr. Liggett told of an interview with a retailer-manufacturer in New York some years ago. The latter declared he had no overhead, for he manufactured in his building used for retailing. He had no "labor," for he used his retail clerks. Many druggists today are carrying heavy burdens because they do not charge up their expenses. "Not one druggist in a hundred gets his total expense and looks it 'squarely in the face': he should do this monthly." The speaker said that in his experience many druggists had not inventoried their businesses since they started. "It is almost a daily occurrence for a druggist not to have totaled his inventory during the past year." "We never got correct inventories on our own stores until we sent out inventory crews. Then we got after that five-cent leakage."

Evolution of the Chain Store

With modern merchandizing came the chain store, first the one-price Atlantic and Pacific stores, then the five and ten-cent stores, the chain grocery stores, and finally the drug stores, all based and operated on the principle of one price. Mr. Liggett asserted that, despite the occasional prediction that the chain store system would "break of its own weight," the development of the chain store was only limited by its ability to get the right men. "It is not always the man who is most ethical who makes the greatest success; it is generally the man who is most capable, who can shift men about so as to get the most out of them."

Cause of Failures

Mr. Liggett's replies to queries submitted to him were as interesting and pertinent as was his talk. In the course of these replies he said that according to Bradstreet for the past year 4.2% of drug store failures had been due to chain store competition, and 34% to lack of business ability on the part of the management. During the past year there had been fewer failures, and the greatest development yet of the chain store.

"Where there is personality in a given community, there the chain store has its hardest fight," was one reply, a golden text for the independent retail pharmacist.

The average gross profit in New England is 33%, in New York City 37%, in Toronto 22%, Denver 31%. There are no large cigar stores in New England, the drug stores sell cigars. A high margin of gross profit and high expense go hand in hand. The operation of the soda fountain in New York City means many clerks; cigars in New England mean few clerks. Mr. Liggett's impression was that the average gross profit for the United States is 35%.

Average of Gross Profit Going Down

An analysis conducted in the Liggett stores and those of others in five states was carried out, five men working on the job. In Georgia, outside of Atlanta, a full price State, 60 cents was the average price for a four-ounce prescription in 1910. One hundred four-ounce prescriptions were taken from each druggist's files to arrive at this average. Since 1910, the average has dropped from 60 to 50 cents, and the cost has increased considerably. Every man in Georgia is losing on prescriptions because he isn't charging enough. The average of gross profits is going down because druggists haven't increased prices to the trade. The speaker doubted if druggists made an average of 33% in 1916.

As volume goes up the retail merchant should speed up his turnover. One Liggett store makes 52 turnovers a year. Every man in the store should know the turnovers expected of his department. "More men go broke by over-buying than from under-buying." Four turnovers a year is the least that should be made.

According to Mr. Liggett, the penny sale was brought forth during the period of depression in 1914 as a sort of "hypodermic" to hold the volume of business. Such things he said are not always beneficial. Nothing adds so much to an inventory as a one-cent sale, yet it is the biggest business-getter he has ever known.

PERMANENT CASPARI MEMORIAL PROPOSED

Pharmacists and Friends Gather in Chemical Amphitheatre to Honor Memory of Distinguished Leader Who Never Shrank from any Duty—Committee Appointed to Suggest Plan.

Seldom has a greater tribute been paid to the memory of a member of the faculty of the University of Maryland than was given at a meeting at the university on Oct. 23, to praise the work of Dr. Charles Caspari, Jr., late dean of the college of pharmacy, who died at Baltimore on Oct. 13. The exercises were held in the chemical amphitheatre which was filled with students, pharmacists, professors of medicine and others who had come to pay their respects to the memory of one who in life was recognized as a leader of pharmacy. His career as a teacher, as a business man, as a friend and as a husband and father was spoken of in the highest terms.

Dr. John F. Hancock presided, and the speakers were Prof. J. W. Sturmer, of the Philadelphia College of Pharmacy; E. G. Eberle, editor of the *Journal of the A. Ph. A.*; John B. Thomas, Dr. Timothy O. Heatwole, Dr. Randolph Winslow, Dr. A. R. L. Dohme, Dr. Henry P. Hynson, John C. Muth, Dr. D. M. R. Culbreth and Dr. Hancock.

Dr. Culbreth said that for 30 years he had been associated intimately with Dr. Caspari and that his industry, broad knowledge and unselfishness were manifested at all times. He told many instances of Dr. Caspari's high sense of honor and honesty, even to his going to the City Hall to declare that he was liable to further taxation the night before a \$300 silver service was presented to him.

"His honesty was an inalienable birthright," said Dr. Culbreth, "and Dr. Caspari could not alienate himself from it. I once asked him what was his strongest characteristic and he replied: 'Championing the just cause and seeing its consummation.' His word was his bond in all matters. He loved his work inordinately and gave more than his contract called for. He was magnanimous with his knowledge and hated untruthfulness. He shared others' burdens and never shrank from any duty."

Prof. Eberle declared that Dr. Caspari's frankness, love of truth and dependability made anything he said valuable to the entire pharmaceutical world. He told of the great help the Baltimorean had given the A. Ph. A. when he was its secretary from 1894 to 1911.

Dr. Dohme told of how in his father's store young Caspari had influenced those around him to be honest and accurate, and of the many valuable contributions to

pharmacy that Dr. Caspari had made and his high ideals in the profession.

Mr. Muth spoke of his generosity and model home life, and his endeavor to make all his friends and relatives happy and contented.

As one of the regents of the University, Dr. Winslow said the institution had lost one of its most valued teachers. He declared the city and state also had suffered a distinct loss in the passing of the services of Dr. Caspari.

Prof. Sturmer said that pharmacy would be a long time recovering from the loss and that one of its really great men had passed away.

Dr. Heatwole related many pleasant conversations he had with Dr. Caspari and how on all occasions the noted pharmacist was ready and willing to give his advice and put his knowledge at the disposal of younger men.

Dr. Hynson asked that the audience stand in silence as a tribute to Dr. Caspari and all arose.

Messages from the following wellknown pharmacists and others were read at the meeting; J. D. Stotlemeyer, Fred W. Sultan St. Louis College of Pharmacy, Meyer Brothers Druggist, Dr. William H. Welch, Dr. J. M. Francis, W. B. Day, general secretary of the A. Ph. A.; University of Illinois School of Pharmacy; Dr. J. H. Beal, Dr. H. V. Army, John T. Milliken & Co.; Prof. Charles H. La Wall, Dr. Alfred B. Husted; Massachusetts College of Pharmacy; Dr. Louis Schulze, Dr. H. A. B. Dunning, George M. Beringer, Charles H. Ware, J. L. Lemberger, Dr. Henry Kraemer and Dr. H. H. Rusby.

The establishment of a permanent memorial to Dr. Caspari was proposed in several of the tributes, and Dr. Hancock, as chairman of the meeting, asked Dr. D. M. R. Culbreth, Dr. A. R. L. Dohme, J. C. Muth, J. B. Thomas and E. F. Kelly to act as a temporary committee of which he will be chairman, to consider the form the proposed memorial should take and to plan means to carry out the idea. The committee, which may be later enlarged, will make an early announcement of their plans, so that all who so desire will be given an opportunity to share in this tribute.

Since the above story was written the ERA has received the following statement from E. F. Kelly, secretary-treasurer of the Charles Caspari, Jr. Memorial Committee:

"The committee on Nov. 8th organized and elected Dr. J. F. Hancock chairman, and E. F. Kelly, secretary-treasurer. After careful consideration and general discussion of the matter, the committee has decided to ask contributions from former students, friends and admirers, to provide an oil portrait of Prof. Caspari, to be hung on the walls of the department of pharmacy, University of Maryland, and a scholarship, or scholarships, for senior students in the department of pharmacy, to be awarded annually by the faculty of pharmacy, and to be known as The Charles Caspari, Jr. Scholarship, or Scholarships.

"The fund collected, after the cost of the portrait and necessary expenses are deducted, will be invested in stable interest-bearing securities, preferably government bonds, and these will be trusted to the faculty of pharmacy of the University of Maryland, the interest only to be used in providing the scholarship, or scholarships, which are to cover the annual tuition fee only.

"It is confidently believed by the committee that a memorial of such practical value would have most appealed to him whom we honor, and who gave his best efforts to the instruction of students. It is impossible to address personally all who may wish to take part in this memorial, but the committee will give the movement the widest publicity and hope that all who may desire to do so, will consider themselves invited to contribute to the fund.

"It is requested that all contributions be made payable to E. F. Kelly, secretary-treasurer, and addressed to him at Lombard and Greene streets, Baltimore, Md."

The committee on the Caspari Memorial consists of Dr. John F. Hancock, Chairman; Dr. D. M. R. Culbreth, John B. Thomas, Dr. A. R. L. Dohme, John C. Muth and Dr. E. F. Kelly.

MEDICINES TAXED AS ALCOHOL

Revenue Department Publishes List of Alcoholic Preparations Held to Be Insufficiently Medicated to Render Them Unfit for Beverages—Beef and Iron Mixtures Included.

The Commissioner of Internal Revenue has published a list of alcoholic medicinal preparations which are held to be insufficiently medicated to render them unfit for use as a beverage. The list contains about 250 articles. The Commissioner ruled:

"Special tax will be required for the sale of any of the preparations herein named, even though such sales are for medicinal use.

"Special tax will be required for the manufacture and sale of beef, wine and iron, unless it contains at least the percentages of beef and iron given in the formula on page 1821 of the nineteenth edition of the United States Dispensatory, or is otherwise sufficiently medicated to be unsuitable for use as a beverage.

"Special tax will also be required for the sale of compounds ordinarily sold under the name of rock, rye and glycerin, and ginger brandy.

"Manufacturers of the preparations listed herein cannot legally use in such manufacture distilled spirits produced from materials fermented after September 8, 1917, nor distilled spirits taxable at the rate of \$2.20 per gallon."

Following is the list:

- Ale and Beef—Ale & Beef Co., Dayton, Ohio.
 Allen's Restorative Tonic—Faxon & Gallagher Drug Co., Kansas City, Mo.
 Amer Picon—G. Picon (Imported).
 Angostura Aromatic Tincture Bitters—E. R. Behlers, St. Louis.
 Arbaugh's Newport Bitters—Daniel Stewart Co., Indianapolis, Ind.
 Aroma Bitters—V. Gautier, 227 Hudson Street, New York.
 Aromatic Bitters—Hanigan Bros., Denver, Colo.
 Atlas Life Tonic—Atlas Medicine Co., St. Louis, Mo.
 Atwood's La Grippe Specific—Excelsior Medicine Co., Chicago, Ill.
 Angauer Bitters—Angauer Bitters Co., Chicago, Ill.
 Angauer Kidney Aid—Angauer Bitters Co., Chicago, Ill.
 Augustiner Health and Stomach Bitters—A. N. August, Milwaukee, Wis.
 Beef, Iron and Wine—The Jarmuth Co., Providence, R. I.
 Beef, Iron and Wine—Lion Drug Co., Buffalo, N. Y.
 Beef, Iron and Wine—Chas. O. Miller, Chicago, Ill.
 Beimers Walnut Beverage—Winona Liquor Co. (Inc.), Winona, Minn.
 Beimers Walnut Bitters—Winona Liquor Co. (Inc.), Winona, Minn.
 Belvidere Stomach Bitters—Loewy Drug Co., Baltimore, Md.
 Bentrovato Blood Bitters and Alternative Tonic—Lyons Bitters Co., New Haven, Conn.
 Best Bitters—A. J. Lukwinski, Cleveland, Ohio.
 Bismark Laxative Bitters—C. Lange & Co., Chicago, Ill.
 Bitter Wine—Struzynski Bros., Chicago, Ill.
 Bitters—The Atlantic Vineyard & Vine Co., Philadelphia, Pa.
 Blackberry—Karl's Medicine Co., Aberdeen, S. D.
 Blackberry Cordial—International Extract Co., Philadelphia, Pa.
 Blackberry Cordial—Irondequoit Wine Co., Rochester, N. Y.
 Blackberry Cordial—Strotter Drug Co., Lynchburg, Va.
 Blackberry and Ginger Cordial—Standard Chemical Co., Fort Smith, Ark.
 Black Hawk Bitters—Meyer Bros., Drug Co., St. Louis, Mo.
 Bon Campo Bitters—Dr. A. H. Doty, St. Paul, Minn.
 Bonekamp Bitters—J. S. Smith & Co., Burlington, Wis.
 Bonekamp of Maagen Bitters—Teuscher & Co., St. Louis.
 Bonus Elixir of Bitter Wine—Bonus Drug Co., Duquesne, Pa.
 Brazer Bitters—Brazer Bitters Co., Chicago, Ill.
 Bradenberger's Colocythis—Standard Chemical Co., Fort Smith, Ark.
 Brod's Celery Pepsin Bitters—John Brod Chemical Co., Chicago, Ill.
 Brown Gin—H. Obernauer & Co., Pittsburg, Pa.
 Brown's Aromatic Cordial Bitters—Chas. Leich & Co., sole agents, Evansville, Ind.
 Brown's Utryme Tonic—A. E. & E. V. Brown, Co., Mobile, Ala.
 Buckeye Bitters—Geo. Albert, Milwaukee, Wis.
 Buhner's Bitters—Weideman Fries Co., Cleveland, Ohio.
 Cardinal Stomach Bitters—P. J. Bowlin & Son, St. Paul, Minn.
 Carmeliter Bitters, Dark, Elixir of Life—Buhrenne & Born, 347 Hamburg ave., Brooklyn, N. Y.
 Carmeliter Bitters, E. Z. Laxative—Buhrenne & Born, 347 Hamburg ave., Brooklyn, N. Y.
 Carmeliter Bitters, Light Tonic and Appetizer—Buhrenne & Born, 347 Hamburg ave., Brooklyn, N. Y.
 Carmeliter Ginger Brandy—Buhrenne & Born, 347 Hamburg ave., Brooklyn, N. Y.
 Cascara Roots—American Bitter Wine Co., Chicago, Ill.
 Cauffman's Ginger Brandy—E. Cauffman & Co., Philadelphia, Pa.
 Celebrated Baja California Damiana Bitters—Naber Alts & Brune, San Francisco, Cal.
 Celery Bitters and Angostura—Frank J. Maus, Kalamazoo, Mich.
 Clarke's Rock Candy Cordial—Colburn Birks & Co., Peoria, Ill.
 Clayton and Russell's Stomach Bitters—Adams & Co., New York.
 Clifford's Cherry Cure—Standard Chemical Co., Ft. Smith, Ark.
 Clifford's Peruvian Elixir—Standard Chemical Co., Ft. Smith, Ark.
 Cocktail Bitters—Milburn & Co., Baltimore, Md.
 Columbo Elixir—Columbo Elixir Co., Philadelphia, Pa.
 Columbo Peptic Bitters—L. E. Jung & Co., New Orleans, La.
 Columbo Tonic Bitters—Lier & Co., Omaha, Neb.
 Cooper's Nerve Tonic—Muller & Co., Baltimore, Md.
 Cordial Panna—The Cordial Panna Co., Cleveland, Ohio.
 Cossack Stomach Bitters—D. Vandewart & Son, New York.
 Cross Bitter Wine—Eugene Parisek Co., Chicago, Ill.
 Damana Gentian Bitters—Milburn & Co., Baltimore, Md.
 Dandy Bracer—Dandy Bracer Co., Philadelphia, Pa.
 Der Doktor—Schloemer & Stoppenbach, Milwaukee, Wis.
 Dr. Bergelt's Mangan Bitters—Imported.
 Dr. Bouvier's Buchu Gin—Dr. Bouvier's Specialty Co., Louisville, Ky.
 Dr. Gray's Tonic Bitters—Central Botanical Co., Cherry Creek, N. Y.
 Dr. Hoffman's Golden Bitters—F. Trandt, St. Louis, Mo.
 Dr. Hopkin's Union Stomach Bitters—F. S. Amidon, Hartford, Conn.
 Dr. Hortenbach's Stomach Bitters—Minneapolis Drug Co., Minneapolis, Minn.
 Dr. Munro's Stomach Bitters—A. Du-Chateau Co., Green Bay, Wis.
 Dr. Rattinger's Bitters—Rattinger's Medical Co., Sappington, Mo.
 Dr. Sherman's Peruvian Tonic and Systematizer—Des Moines Pharmaceutical Co., Des Moines, Ia.
 Dr. Theodore Hartwig's Stomach Tonic—John Behrendt, successor to Dr. Theodore Hartwig, Grafton, Wis.
 Dozier's Apple Bitters—Bitter Apple Bitters Co., Hattiesburg, Miss.
 Dubonnet Wine—Imported.
 Duffy's Pure Malt Whiskey—Duffy's Malt Whiskey Co., Rochester, N. Y.
 Elderberry Tonic—M. P. Kappel & Co., Chicago, Ill.
 Elixir of Bitter Wine—Pleasant Tonic Bitters Co., Chicago, Ill.
 Elixir of Bitter Wine—V. Bokr, Chicago, Ill.
 Eureka Stomach Bitters—Iowa Drug Co., Des Moines, Iowa.
 Excelsior Bitters—Des Moines Drug Co., Des Moines, Iowa.
 E' Laxative Bitters—Carmeliter Bitters Co., New York City.
 Fabianis Marsala Chinato—Fabianis Pharmacy, Philadelphia.
 Famous Wiener Bitters—Foxman Bros., Rock Island, Ill.
 Faxon's Beef, Iron and Wine—Faxon, Williams & Faxon, Buffalo, N. Y.
 Fernet Branca—L. Grandolphi & Co., New York City, (Imp).
 Fernet Carlisi Fernet Bitters—C. Carlisi Co., New York City.
 Ferry Rheumatic Cure—Luis Ferri, Butte, Mont.
 Ferro China Bascall—Basiles & Calandra, New York City.
 Ferro China Berna—W. P. Bernagozzi, New York City.
 Ferro China Bissleri—(Felice Bissler), Imported.
 Ferro China Elette—Vittorio Blotto, New York City.
 Ferro China Carlisi Tonic Bitters—C. Carlisi Co., New York City.
 Ferro China Columbia—Columbia Distilling Co., Albany, N. Y.
 Ferro China Derna—C. Matalone, Chicago, Ill.
 Ferro China Florentino—Commercial Wine & Bottling Co., 182 Commercial St., New York City.
 Ferro China Salus—Italo American Liquor Mfg. Co., New York City.
 Ferro China Trionfo—Basiles & Calandra, New York City.
 Ferro China Universale—Imported.
 Ferro Quina Bitters—D. P. Rossi, San Francisco, Cal.
 Fine Old Bitter Wine—Struzynski Bros., Chicago, Ill.
 F. Miller & Company's Stomach Bitters.
 Fort Henry Ginger Compound—Reed, Robb & Breiding, Wheeling, W. Va.
 Franz Urban Boonekamp of Maag Bitters—Wm. Straue, 1497 24th mercial St., Boston, Mass.
 Gastrophan—Edward Rimsa, Chicago, Ill.
 Genuine Bohemian Malted Bitter Wine Tonic—Edward Rimsa, Chicago, Ill.
 Genuine Herb and Root Bitters—Schloemer & Stoppenbach, Milwaukee, Wis.
 Germania Herb, Root and Fruit Tonic Bitters—Dr. F. G. Nordman, Chicago, Ill.
 German Stomach Bitters—Geo. Kuevers, Granite City, Ill.
 German Stomach Bitters—Wm. W. Torge, Waukesha, Wis.
 Ginger Tonic—Loewy Drug Co., Baltimore, Md.
 Graham's Brand Orange Bitters—Chas. Jacquin, New York City.
 Green's Chill Tonic—M. V. Green, Selma, N. C.
 Gross Bros. Blood and Liver Tonic—Gross Bros., Illinois.
 Harrison's Quinine Tonic—A. L. Chemical Co., Chicago, Ill.
 Health Bitters—H. Bitzegeo, Chicago, Ill.
 Herb Bitters—Otto F. Lenzt, Petersburg, Ill.
 Heublein's Calisaya Bitters—C. F. Heublein & Bro., New York City.
 Himmallo Tonic—C. O. F. Burkstrom & Co., Chicago, Ill.
 Holland Type Bitters—John Bardenbeier Wine & Liquor Co., St. Louis, Mo.
 Holtzermann's Bitters—Arendt & Son's Co., Toledo, Ohio.
 Hop Bitters—Hop Bitters Mfg. Co., Rochester, N. Y.
 Horke Vina—H. Overnauer & Co., Pittsburg, Pa.
 Horke Vino Bitter Wine—Michael Bosak, Scranton, Pa.
 Humbolt Stomach Bitter Tonic—J. B. Scheuer Co., Chicago, Ill.
 Jamaica Ginger—Yough Chemical Co., Connellsville, Pa.
 Jamaica Type Ginger Drops Compound—V. Gautier & Co., New York City.
 Jensen's Celebrated Kidney and Liver Bitters—Han Jensen Co., Chicago, Ill.
 Jensen Laxative Bitters—Han Jensen Co., Chicago, Ill.
 Jones Stomach Bitters—Natchez Drug Co., Natchez, Miss.
 Juniper Kidney Cure—Juniper Kidney Cure Co., Fort Smith, Ark.
 Kaiser Wilhelm Bitters—B. P. Sexton Co., Sandusky, Ohio.
 Kanuziner Kloster Bitters—Union Wholesale Liquor Co., Chicago, Ill.
 Karles German Stomach Bitters—Karle German Bitters Co., Aberdeen, S. D.
 Kennedy's East India Bitters—Iler & Co., Omaha, Neb.
 Kidniwell—Brown Drug Co., Sioux Falls, S. D.
 Katarno—Kartano Co., New York City.
 Kernel Stomach Bitters—Mayer Bros. Drug Co., St. Louis, Mo.
 Koehler's Stomach Bitters—Koebler Bitters Co., New York City.
 street, Detroit, Mich.

Kil-a-Kol—Ponds Bitters Co., Chicago, Ill.
 Kobold Tonic Stomach Bitters—Kobold Medicine Co., R. D. Weisskopf & Co., Proprietors, 1714 South Ashland ave., Chicago, Ill.
 Ko-ca-Ama—The W. Brooks Medicine Co., Russellville, Ark.
 Kola and Celery Bitters—Milburn & Co., Baltimore, Md.
 Kratos Wine Bitters—Rochester Distilling Co., Rochester, N. Y.
 Kreuzberger's Stomach Bitters—H. H. Shufeldt, Peoria, Ill.
 Krummel's Bonekamp Maag Bitters—Hry. Krummel, New York City.
 Kudros—A. H. Hellman & Co., St. Louis, Mo.
 Laxa Bark Tonic—Natchez Drug Co., Natchez, Miss.
 Lee's Celebrated Stomach Bitters—Lee's Anti Trust Medicine Co., Joplin, Mo.
 Leipziger Burgunder Wein Bitters—Hochstadter Co., New York City.
 Lekko Stomach Bitters—Struzynski Bros., Chicago, Ill.
 Liverine—T. C. Mitchell Co., Providence, R. I.
 Lutz Stomach Bitters—Chas. M. Lutz, Reading, Pa.
 Lyons Stomach Bitters—Lyons Bitters Co., Chicago, Ill.
 Magador Bitters—E. J. Rose & Co., Tacoma, Wash.
 Magen Bitters—A. J. Wabersky, Chicago, Ill.
 Magen Bitters—Mrs. Ingeborg Rosmer, Milwaukee, Wis.
 Marks' Famous Stomach Bitters—R. Marks, Milwaukee, Wis.
 Marvelous Sweeping Model Wine Tonic—Marvelous Sweeping Model Wine Tonic Co., Chicago, Ill.
 Mexican Stomach Bitters—Iler & Co., Omaha, Neb.
 Miller Brand Bitters—Pure Food Cordial Co., New York.
 Miod Honey Wine—Struzynski Bros., Chicago, Ill.
 Nature's Remedy for Kidney Troubles and Blood Poisoning—Dr. J. T. Sumpter, Bowling Green, Ky.
 Neuropin—J. B. Scheuer Co., Chicago, Ill.
 New Tonic Bitters—Chas. C. Miller, Chicago, Ill.
 Newton's Nutritive Elixir—Parker Blake Co., New Orleans, La.
 Nibol Laxative Kidney and Liver Bitters—Lohin Distilling Co., St. Louis, Mo.
 Novak's Stomach Elixir—John Novak, Chicago, Ill.
 Old Country Bitters—Hans Jensen Co., Chicago, Ill.
 Oro Kidney and Liver Tonic—J. B. Scheuer Co., Chicago, Ill.
 Our Ginger Brandy—Rex Bitters Co., Chicago, Ill.
 Ozark Stomach Bitters—Lee's Anti-Trust Medicine Co., Joplin, Mo.
 Pale Orange Bitters—Fiel, Son & Co., London, England.
 Panama Bitters—Richardson Drug Co., Omaha, Neb.
 Panama Bitters—W. R. Reeve, Dorchester, Mass.
 Parker's Bitters—Louisiana Distillery Co. (Ltd.), New Orleans, La.
 Pater Emanuel's Herb Wine—The Ambrose Co., Bridgeport, Conn.
 Peppermint Drops Compound—V. Gautier & Co., New York.
 Pepsin Stomach Bitters—E. K. Arp (Imported).
 Peptonic Stomach Bitters—Ross, Flowers & Co., Chicago and New York.
 Peruvian Bitters—Reed, Robb & Breining, Wheeling, W. Va.
 Peter Paul Stomach Bitters—Paul P. Fasbender, Detroit, Mich.
 Peychauds Bitters Wine Cordial—L. E. Jung & Co., New Orleans, La.
 Pilsener Bitter Wine—Prensett Bitters Co., West Texas.
 Pioneer Ginger Bitters—Dr. Koehler Medicine Co., Appleton, Wis.
 Ponds Ginger Brandy—Ponds Bitters Co., Chicago, Ill.
 Ponds Rock and Rye—Ponds Bitters Co., Chicago, Ill.
 Quinquina Dubonnet—Imported.
 Red Jacket Bitters—Monheimer & Co., Chicago, Ill.
 Rex Elixir of Bitter Wine—Rex Bitters Co., Chicago, Ill.
 Rex Ginger and Brandy Tonic—Rex Bitters Co., Chicago, Ill.
 Rex Ginger—Rex Bitters Co., Chicago, Ill.
 Rex Hoarhound Tonic—Rex Bitters Co., Chicago, Ill.
 Rheinstrom's Stomach Bitters—Rheinstrom Bros., Cincinnati, Ohio.
 Richard's Celebrated Tonic Bitters—Minneapolis Drug Co., Minneapolis, Minn.
 Riley's Kidney Cure—Jas. S. Oiley, Hayne, N. C.
 Rimsov Eit Sove Vno Chine—Ed. Rimsa, Chicago, Ill.
 Rockcandy Cough Cure—
 Root Plant Medicinal Gin—Lohin Distilling Co., St. Louis, Mo.
 Rosolio—The Cordial Tanna Co., Cleveland, O.
 Royal Pepsin Tonic—L. & A. Scharff, St. Louis, Mo.
 Royal Pepsin Stomach Bitters—L. & A. Scharff, St. Louis, Mo.
 S B C Essence of Peppermint—Star Bitters Co., Sacramento, Cal.
 S B C Extract of Jamaica Ginger—Star Bitters Co., Sacramento, Cal.
 S B C Ginger and Brandy Compound—Star Bitters Co., Sacramento, Cal.
 S B C Wild Cherry Tonic—Star Bitters Co., Sacramento, Cal.
 Sanitas Stomach Bitters—Sanitas Tonic Medicine Co., Chicago, Ill.
 Sarasina Stomach Bitters—Wm. Blech, New York City.
 Strafrael Quinquina, Imported—Scheetz.
 Schier's Famous Bitters—Wendelin Schier, Alexandria, Ind.
 Schmit's Celebrated Strengthening Bitters—Schmit Pharmacal Co., Evansville, Ind.
 Schroeder's German Bitters—Milburn & Co., Baltimore, Md.
 Schuster's Bitters with Pepsin—The Schuster Co., Cleveland, O.
 Saravallo's Tonic—J. Saravallo's Pharmacy, Trieste, Austria.
 Simon's Aromatic Stomach Bitters—Samuel B. Schein, St. Paul, Minn.
 Sirena Tonic—Sirena Mfg. Co., New York City.
 Smart Weed—Francis Cropper Co., Chicago, Ill.
 Smith's Bitters—Van Natta Drug Co., St. Joseph, Mo.
 Smith's Vitalizing Bitters—Ben Smith, Scranton, Pa.
 Smyrna Bitters Co., Dayton, O.
 Steinkonig's Bitters—Adam Steinkonig, Cincinnati, O.
 Stomach Bitters—Imported by J. G. & J. Baker, New York City.
 Strauss' Exhilarator—Wm. H. Strauss, Reading, Pa.
 Sure Thing Tonic—Furst Bros., Cincinnati, O.

Tatra—B. Zeman, Chicago, Ill.
 Three-in-One Tonic—Fialla & Eppler, Inc., New York City.
 Tokay Quinine Iron Wine—Burger & Erdeky, Chicago, Ill.

Tolu Rock and Rye.
 Tolu Rock Candy Cordial—Meyer Bros. Drug Co., St. Louis, Mo.
 True's Magnetic Cordial—Standard Chemical Co., Fort Smith, Ark.

U-Go—Fritz T. Schmidt & Sons, Davenport, Ia.
 Uncle Josh's Dyspepsia Cure—Dr. Worthington's Drug Co., Birmingham, Ala.
 Underberg's Bonekamp Maag Bitters—Imported by Luyties Bros., New York.

Vermouth Stomach Bitters—Lohin Distilling Co., St. Louis, Mo.

Vigo Bitters—F. C. Altmeier & Co., Chicago, Ill.
 Vigor Olix—Greenbaum Bros., Louisville, Ky.
 Vin de Michael—Imported.
 Vin Mariani—Mariani & Co., New York.

Walker's Tonic—Dreyfuss, Veil & Co., Paducah, Ky.
 Webb's A No. 1 Tonic—Webb's Co-operative Co., Sacramento, Cal.
 Westpasalia Stomach Bitters—E. R. Behlers, St. Louis, Mo.
 White Cross Bitters—V. Gautier, New York City.
 Williams' Kidney Relief—Parker, Blake & Co., New Orleans, La.
 Wine of Chenstopow—Skarzynski & Co., Buffalo, N. Y.
 Wine of Pomelo with Beef and Iron—Irondequoit Wine Co., Rochester, N. Y.
 Wine Zedrowia—American Bitter Wine Co., Chicago, Ill.
 Woodbury Brand Bitters—Steinhart Bros. & Co., New York City.
 Zeman's Medical Bitter Wine—B. Zeman, Chicago, Ill.
 Zien Stomach Bitters—Zien Bros., Milwaukee, Wis.
 Zig Zag—Walker's Tonic Company, Paducah, Ky.

N. Y. BRANCH VOTES DOWN CERTIFICATION

Certification of pharmacists came up as the subject of a brief but strenuous debate at the November meeting of the New York branch of the American Pharmaceutical Association, held at the New York College of Pharmacy. Dr. Jacob Diner, reporting as chairman of the committee on fraternal relations, proposed that the matter of a definite plan for the certifying of pharmacists be laid before the parent body for action. Dr. Wm. C. Anderson believed that it would be a serious mistake to take such a step, and pointed out that the State Board of Pharmacy was the proper body to provide such an arrangement. Why any body of pharmacists should undertake to certify other pharmacists, was something he could not understand. Dr. Diner could see nothing incongruous in the A. Ph. A. working for the gradual purification of pharmacy, an affair which was going to be nation-wide in scope. Jacob Rehfuss and Dr. George C. Diekman expressed opinions concurring with those of Dr. Anderson. The resolution was tabled by a standing vote.

Secretary Hugo H. Schaefer reported that he had found the by-laws of the branch, but that they were rather brief. Dr. Diner, Mr. Rehfuss and Dr. H. V. Arny were appointed as a committee to revise the by-laws and put them in proper shape.

A communication from Robert P. Fischelis, secretary-treasurer of the National Pharmaceutical Service Association, was read, and leaflets explaining the objects of that organization were later distributed.

NORTH HUDSON DRUGGISTS ELECT OFFICERS

The North Hudson Pharmaceutical Association, comprising in its membership druggists residing in Hoboken, Weehawken and adjacent towns in Hudson County, N. J., met at Union Hill recently and elected the following officers for the ensuing year: President, F. H. Eckert, West Hoboken; vice-president, J. Ouritz; secretary, Henry O. Geiss, Town of Union; treasurer, Miss Louise Suhr, West Hoboken; sergeant at arms, William Kyvitz, Weehawken; executive committee, William Kyvitz, H. E. Bischoff and Mr. Sieker. G. W. Buckens, of Whitall Tatsum Co., of New York, addressed the meeting, taking for his topic, druggists' glassware.

DRUGGISTS TO PROTECT PUBLIC

The Johnston and Harnett County Association, having a membership of thirty druggists with stores in the counties of Johnston, Harnett and Sampson, met at Dunn, N. C., recently to discuss the establishment of uniform prices to govern the sale of drugs, etc., in order that the public might be protected and given a square deal. The solution of the problem is being worked out satisfactorily by the organization. In the absence of President Clarence Harper, of Selma, Thomas R. Hood, of Smithfield, presided. The next meeting will be held in Benson some time in January.

WHO'S WHO AND WHAT'S WHAT

IN THE DRUG WORLD

PERSONAL NOTES

SMITH TO OPEN DRUG STORE IN ATLANTA

Charles A. Smith, for more than twenty-five years connected with the Jacobs Pharmacy Company in Atlanta, Ga., has severed his connection with that concern and will open his own store in the same city. He will have associated with him D. R. Wilder, of the D. R. Wilder

Manufacturing Company, who has been well known as an Atlanta business man for the past twenty-five years. The new firm will be known as the Charles A. Smith Drug Company and will be located in the new Arcade building in the very centre of the busiest section of Atlanta. It is expected that the new store will be thrown open to the public about Dec. 15, and plans and specifications are now being completed for the installation of the most modern fixtures, which will include a magnificent new soda fountain. The store will front on Peachtree street and the Arcade thoroughfare, both fronts pro-



CHARLES A. SMITH

viding excellent opportunities to show goods and for window displays.

There is probably no drug man in the South better known than "Charlie" Smith. Through sheer energy and a thorough knowledge of the game he has worked himself up from a minor position with the Jacobs Pharmacy Company to general manager and a stockholder, and during his quarter of a century connection with that company has engineered the sales and promotion of dozens of preparations. That he will be successful in his new venture his friends have no reason to doubt.

MANGAN AND SCHIMPF HONORED BY B. P. C.

An interesting affair out of the line of the ordinary was the testimonial dinner given by the friends and members of the Brooklyn College of Pharmacy to Dr. Daniel C. Mangan and Dr. Henry W. Schimpf, on the evening of Nov. 21, at the Brooklyn Elks' Club, commemorating their twenty-five years of service as teachers in the B. P. C. About two hundred were present, Prof. William C. Anderson, dean of the college acting as toastmaster. Among the speakers were Hon. Luke D. Stapleton, Dr. Albert M. Judd, president of the Kings County Medical Society; Dr. George Wenner, Prof. A. Percival Lohness, secretary of the faculty; Dr. Jacob H. Refhuss, president of the State Board of Pharmacy; Dr. Henry J. Fischer and Henry B. Smith, president of the College of Pharmacy. Letters of congratulation were read from a large number of prominent representatives of pharmacy, including a message from the late Charles Holzhauser.

All of the post prandial speaking was directed at the guests of the evening, some of the speakers being in a reminiscent vein, but all emphasizing the substantial and satisfactory work rendered by the honored guests during their quarter of a century service as teachers. Both Dr. Mangan and Dr. Schimpf responded in addresses punctuated with frequent references to their past experiences and fully appreciative of the courtesies they had received. Each was presented with a silver tea service by Prof.

Lohness on behalf of the friends and students who had arranged the celebration, every one of whom wished that the two professors might live to complete many more years of similar service to pharmacy and humanity.

MATTHEWS PRESENTED WITH SILVER SERVICE

Charles E. Matthews, who served as chairman of the committee on arrangements for the entertainment of the members of the National Wholesale Druggists' Association at the recent annual meeting in Chicago, was presented with a sterling silver coffee service by the executive committee of the N. W. D. A. convention as a token of their appreciation of the efficient manner in which he had provided for the entertainment of the members of the association during the meeting. The presentation took place on Nov. 4, at Mr. Matthews' residence in Oak Park, the gift being presented by retiring president James W. Morrisson. The occasion was also the closing meeting of the entertainment and ladies' committees, the members of which were given a reception by Mr. and Mrs. Matthews. William R. Moss, chairman of the Chicago Association of Commerce, made a patriotic address, and Mrs. James W. Morrisson described the work that had been done by the local committee of the Council of National Defense. There were also patriotic songs sung by the Imperial Quartette. Mrs. Matthews was assisted by Mrs. Sorby, wife of Secretary Harold Sorby, a member of the committee. Mr. Matthews is wellknown to the trade as the manager of Sharp & Dohme's Chicago branch house.

HAYWARD CELEBRATES 25th ANNIVERSARY

Charles E. Hayward, general superintendent of the H. K. Mulford Company, Philadelphia, who recently celebrated the 25th anniversary of his connection with that concern, was presented at a meeting of the board of directors of the company with a handsome gold watch, suitably engraved. Mr. Hayward was born in Cambridge, Md., where he began his pharmaceutical career in the drug store of Dr. Thomas Williams. He entered the employ of the Mulford Company just one year after its incorporation, becoming an assistant to E. V. Pechin, secretary of the company, who at that time was in charge of the manufacturing. In 1900, Mr. Hayward was placed in charge of the tablet department, becoming in 1901, the superintendent of the pharmaceutical laboratories. In 1909 he was made general superintendent, and in 1913, was elected a member of the board of directors. He finds recreation and pleasure in caring for his farm in Chester County and occasionally in helping the Mulford bowling team to defeat its rivals in the Drug Trade Bowling League.

LILLIBRIDGE-WEEKS SALES FORCE DINED

B. S. Green, sales manager of the Lillibridge-Weeks-Thurlow Co., manufacturers of druggists' glassware and sundries, 31 Warren st., New York, gave a luncheon to the sales force of the company at Mouquin's restaurant on the evening of Nov. 3. Before the luncheon began, Mr. Green was presented by Mr. Lillibridge on behalf of the traveling men with a beautiful horseshoe of flowers. Interesting talks were made by Col. E. A. Havers, who had just returned from a lecture tour; by W. A. Balch, sales manager of the Faultless Rubber Co., on "merchandizing;" G. Letts, on "advertising," and R. T. Murphy, on "credits." Other speakers were E. L. Lillibridge, M. R. Thurlow, J. Wagner and B. S. Green.

The following attended the dinner: E. L. Lillibridge, Col. E. A. Havers, A. W. Weeks, M. R. Thurlow, W. A.

Balch, G. Letts, J. Wagner, A. L. Dallery, J. B. Murphy, R. T. Nash, C. F. Ludwig, F. S. Richards, R. T. Murphy, W. H. Brooks, I. J. Kahn and B. S. Green.

DRUGGISTS BANQUET CHARLES W. SNOW

The members of the Syracuse and Auburn Druggists' Associations and their wives banqueted together in the Palm Room of the Osborne House, Auburn, N. Y. recently, the guest of honor being Charles W. Snow, of Syracuse, who had returned from a trip to Alaska. After the banquet an hour was given to songs, with H. H. Schaefer as director and Arthur Glath as pianist. Souvenir programs contained the words of the songs, a song each being dedicated to Albert M. Coling, the ladies; T. Bruce Furnival, president of the Syracuse Association; H. H. Walker and C. W. Snow respectively. Mr. Snow entertained his friends with an interesting account of his journey to the far North, being followed by various speakers who touched upon local problems.

PERSONAL BREVITIES

—S. F. SCHINDEL, who recently sold his drug store at Hagerstown, Md., to Downs & Lindsay, was given a celebration by his friends on his retirement from business. Not that his friends were glad he was leaving the store where he had spent almost every day for fourteen years, but as one of them put it, "they were all sorry that the happy associations of the past would be severed." A band was hired to play in front of Mr. Schindel's store, while suitably inscribed banners borne by Mr. Schindel's friends testified to their appreciation of the druggist's friendship.

—RICHARD D. STEVENSON, of the corporation of Robt. Stevenson & Co., wholesale druggists, Chicago, has been decorated with the Croix de Guerre gold star for gallantry on the French front. Mr. Stevenson is a driver of an ambulance. The decoration was awarded for his work on the night of Oct. 2, when he aided the wounded during a bombardment by aeroplanes. He is the son of the late Robert Stevenson, formerly a wholesale druggist. His brother, Robert Stevenson, Jr., is an assistant to Harry A. Wheeler, in the food administration office.

—MRS. MARY KLUMP, believed to be the oldest person in Allentown, Pa., and also thought to be the oldest woman druggist in the world, was recently tendered a reception by the older citizens of the city in honor of her 96th birthday. She is the daughter of Ludwig Schmidt, Allentown's first druggist, who started a business in 1819. As a help to her father, she learned the drug business when a young woman. She married Lewis Klump, who succeeded to the business, and has remained in harness ever since.

—LISLE R. CARR, of Wichita, Kans., but formerly associated with J. A. Grant, druggist of Augusta, same state, has purchased the building at 120 North Market st., Wichita, for a consideration of \$35,000. When asked by a reporter what he expected to do with his new purchase, Mr. Carr said that it was his intention to install a complete and up-to-date drug store in the building in the near future. Mr. Carr was fortunate in getting in on some good leases in the oil development around Augusta, and is now investing in Wichita property.

—ROBERT JACKSON, a prominent young druggist of Silver City, N. M., rather than wait his turn in the draft, went to Washington recently to enlist in the United States hospital corps. His wife, a bride of a few months, and daughter of Col. J. W. Carter, cashier of the Silver City National Bank and president of the Silver City Savings Bank, has taken her husband's business in charge, and with a partner in the firm, will continue to conduct the drug store.

—W. M. FEDERMANN, proprietor of a chain of drug stores in Kansas City, Mo., has been appointed a member of the Fuel board of that city. One of the first orders

issued by the board requires the Kansas City Railways Company to discontinue the use of one half of the lights in street cars, and that it turn on the heat in cars only when the thermometer has registered a temperature of 32 degrees or lower.

—PATRICK J. H. MULLEN, druggist of Pawtucket, R. I., and Miss Anna E. Gallagher, daughter of Mr. and Mrs. Thomas Gallagher, of the same city, were married on Oct. 6, at St. Edwards church. Following the ceremony, a breakfast was served at the home of the bride's parents, Mr. and Mrs. Mullen leaving in the afternoon for a trip to New York, Washington and other eastern cities.

—ORRIN O. BIGELOW, one of the vice-presidents of the New York State Ph. A., and until recently a member of the firm of Black & Bigelow, conducting the Central drug store at Richfield Springs, N. Y., has purchased and taken possession of the Bishop drug store at Edmeston, N. Y. Mr. Bigelow is a graduate of the New York College of Pharmacy, and was an honor man of his class.

—W. A. BRITTON, for many years with R. Thomas, pharmacist of Thomasville, Ga., recently purchased an interest in the Hardee, Smith Drug Company, of Tallahassee, Fla., and whither he returns to take charge of a business at the same stand in which he first started his career as a pharmacist more than thirty years ago.

—ALBERT G. KOTTENHOFF, previous to his departure for Camp Devens to join the National Army in which he had been drafted, was given a handsome military seal ring by his associates in the employ of the Alderman Drug Company, of Hartford, Conn., where he had been a prescription clerk for some time.

—ALBERT M. TOWLE, druggist of Providence, R. I., was on Oct. 29 sentenced to two years in State Prison for embezzlement from the estate of his daughter. Towle was indicted on four counts, alleging the embezzlement of money aggregating between \$7,000 and \$8,000, and he pleaded nolo to each.

—CLARENCE COUGHLIN, for several years a drug clerk in the pharmacy of E. A. Brewster and Son Company, Dexter, Maine, has received notice of his appointment as a clerk in the department of the interior as the result of a civil service examination taken at Bangor several months ago.

—MELVIN L. LOW, formerly employed in Carroll's pharmacy, Winchendon, Mass., has entered the hospital service in France. He enlisted in the naval medical corps and was stationed at the U. S. Naval Hospital, Chelsea, with the rank of first class pharmacist's mate.

—J. C. HUTHWELKER, a druggist at 218 North Greene st., Baltimore, Md., has been elected to the first branch of the City Council. He has taken an interest in politics for some time, and has held important places in the management of his ward.

—CARL J. REEVES, member of the firm of W. P. Reeves & Son, Pulaski, Tenn., was one of the first men called in the conscription act in his district. He claimed no exemption, was accepted and has been made post pharmacist at Camp Sevier.

—WALTER E. MARS, who has conducted a drug store in Newton, Mass., for twenty-three years, was tendered a farewell reception and dinner at the Elks' Home in that city recently. About half a hundred persons were present. Mr. Mars was presented with a traveling bag.

—GEORGE N. DUNBAR, Jr., of Bristol, a druggist of Providence, R. I., and Miss Mary E. Sarriss were married at Warren, R. I., on Oct. 3. After a reception the newly married couple left on a wedding trip to New York.

—H. C. TINDALL, of Excelsior Springs, has been appointed by Governor Gardner as a member of the Missouri Board of Pharmacy for a term of three years to succeed E. G. Cox, of Craig, whose term has expired.

—CLAUDE M. SHOWALTER, a druggist of Winchester, Va., was married recently to Mrs. Bessie B. Sowers at Charlotte, N. C.

DEATHS IN THE DRUG TRADE

CHARLES HOLZHAUER

Charles Holzhauser, president of the American Pharmaceutical Association, and one of the oldest retail druggists of Newark, N. J., died suddenly of apoplexy in that city on Nov. 19. Death was unexpected, and just before the fatal attack he had written a letter to Committee in charge of the testimonial dinner given in honor of Dr. Daniel Mangan and Dr. Henry W. Schimpf, commemorating their twenty-five years as teachers in the Brooklyn College of Pharmacy, expressing his congratulations. He was 70 years of age.

Mr. Holzhauser was a typical example of the successful retail druggist, and was proprietor of the busy pharmacy at 787 Broad street, Newark, where he located many years ago. He started in the drug business as an errand boy, and graduated from the New York College of Pharmacy in 1873, with honors. He immediately became active in organization work, joining the American Pharmaceutical Association and actively participating in all of its deliberations for more than forty years. In 1874 he joined the New Jersey Pharmaceutical Association, serving as its president in 1881. He took an active part in securing pharmacy legislation in his State, and was a man of affairs and influence in his city. He was elected president of the A. Ph. A. at the election of that organization held in 1916, being installed at the recent meeting in Indianapolis. In his speech of acceptance he expressed his appreciation of the honor conferred upon him, and promised to give his best energies toward furthering the interests of the association during his administration. Since 1873 he had attended most of the annual meetings of the association and was one of its best known members.

The funeral services were held at the High street Presbyterian church, Newark, on Nov. 21, various branches of the drug trade being represented by wellknown delegates in attendance, as well as prominent members of the A. Ph. A., The New Jersey Ph. A., and the New York College of Pharmacy. He is survived by his widow, and his son, Charles W. Holzhauser, a wellknown druggist of Newark, and also prominently identified with organization and educational activities in pharmacy.

A. EDWARD HOLDEN

A. Edward Holden, for many years European manager for Fairchild Bros. & Foster, manufacturers of pharmaceutical products, New York, died suddenly of cerebral hemorrhage at Tunbridge Wells, England, on Oct. 20. Mr. Holden was 57 years of age and was born in Canada, gaining his first experience in pharmacy at drug stores in Norwich and Paris, Ontario. He graduated from the Montreal College of Pharmacy in 1884, winning the gold medal of the college. He then became identified with Fairchild Bros. & Foster, representing the firm for more than thirty years, since 1896 and up to the time of his death making his headquarters in London. He had much to do with the plans of the Fairchild Scholarship and prizes provided by Samuel W. Fairchild, filling the post of secretary to the Committee of Trustees of the fund from the beginning. He was widely known in this country and Canada, returning for a visit here almost every year. He was prominent in the Masonic order, and served as master of Columbia Lodge, London, to which belong many members of the craft in Canada and the United States.

GEORGE THOMPSON

George Thompson, vice-president of C. S. Littell & Co., wholesale druggists, 228 Fulton st., New York, died at his home in Brooklyn on Nov. 15 from apoplexy. He was 54 years of age, and was born in New York City. He began his career in the drug business as a youth with R. W. Robinson & Son, with whom he remained until 1906, when he became one of the partners of C. S. Littell & Co. He was active in the work of Plymouth Church

and its men's societies, and was a member of Long Island Council No. 173, R. A. He is survived by a daughter, Mrs. Frederick Harry Kueck.

RECENT DEATHS

—GEORGE W. GRAGG, proprietor of the McFarland drug store, McFarland, Cal., died as a result of a shock on Sept. 24 and was buried at Pasadena. He was a former resident of Maine and prominent in the organization of the Sons of Veterans, having been for a number of years and up to the time of his going to California, a delegate at large from the Maine Sons of Veterans to the national convention of that organization. He was a member of the Universalist denomination.

—MRS. LOUISA S. VAN SCHAACK, widow of the late Peter Van Schaack, founder of the wholesale house of Peter Van Schaack & Sons, Chicago, died at the residence of her son Cornelius P. Van Schaack, Wilmette, Ill., on Oct. 31. She was 82 years of age. Funeral services were held at her son's home, after which the body was sent to Manlius, N. Y., her birthplace, for burial. She is survived by two sons, Cornelius P. and Robert H. Van Schaack.

—EDWARD MEACOM, 77, a wellknown druggist of Peabody, Mass., died at his home in that city on Oct. 31, death resulting from coal gas poisoning which he had suffered about a year ago. He was a veteran of the civil war, having enlisted in 1861 and served until 1863, when he was discharged for disability. He was a member of Peabody Post, G. A. R., and president of the Geo. E. Meacom Drug Co., one of the oldest concerns in Peabody.

—HARRY L. COMSTOCK, for seventeen years proprietor of a drug store at 782 Main st., Springfield, Mass., died at Westfield on Nov. 10. He was 57 years of age. Besides the Springfield store, he was proprietor at different times of stores in New Haven, Conn., and Big Timber, Mont. He was a member of Hampden Lodge, I. O. O. F. He is survived by his mother, 80 years old, with whom he made his home.

—CHARLES ROESCH, who conducted a drug store in Alton, Ill., for many years, was fatally injured as he was attempting to cross the track ahead of an approaching car, dying soon thereafter in the hospital where he had been taken. He was nearly 82 years of age. He was born in Germany, came to America in 1853 and in 1863, enlisted in the Union Army. He was wounded in battle. He is survived by his widow and three daughters.

—JOSEPH T. WATERHOUSE, for 27 years a Newton Highlands, Mass., druggist, died recently, after more than a year's illness. He was born in Whitinsville, Mass., 63 years ago, and for a time was engaged in the drug business in South Boston. He was a Mason and a member of Saint Omar Commandery K. T., of South Boston, and Home Lodge, I. O. O. F. He is survived by his widow and a daughter.

—A. PERLEY FITCH, head of the A. P. Fitch Company, wholesale and retail druggists of Concord, N. H., died in that city on Oct. 24. He was one of the best known business men in New Hampshire and had many financial interests aside from the company of which he was president. He was born in Enfield, N. H., in 1842. His company was a member of the N. W. D. A.

—DR. HENRY NELSON, who had been engaged in the drug business at Rogersville, Tenn., since 1882, and was one of the best known and most influential men in that section of the State, is dead. He was a native of Murfreesboro, Tenn. Surviving him are three children, two sons and a daughter, one of the sons, Henry, conducting a drug store at Rogersville.

—M. J. ERWIN, for many years a wellknown druggist and business man of Harbor Springs, Mich., died recently.

after a lingering illness. He was 64 years of age. He was a member of the Presbyterian church, a Knight Templar and prominent in local affairs as president of the common council and chairman of the board of public works.

—OTTO H. BUCKENDORF, a buyer for the Minneapolis Drug Co., with which he had been connected for 25 years, died recently at the Asbury Hospital, Minneapolis. He was 38 years of age, and a member of the Elks, Royal Arcanum and Red Men fraternities. He is survived by his widow, his mother and a sister and brother.

—JAMES H. CHAMBERS, 81, president of the Dios Chemical Company, manufacturers of medicinal specialties, St. Louis, Mo., died recently from complications due to old age. For some years he had been dividing his time between St. Louis and California. He is survived by his widow and four children.

—EDWARD D. CARTER, proprietor of the Johns Drug Co., Red Key, Ind., recently hanged himself in the doorway of his home at Muncie, after arraying himself in a new black suit and new shoes, as if preparing himself for the grave. He was widely known throughout Indiana and Ohio in drug circles.

—JOHN KILLOUGHY, a druggist at Waterbury, Conn., who went to a private sanitarium at Stoneham, to undergo treatment for a nervous disease, and soon thereafter was reported as missing, was found drowned in a small pond near the latter city on Nov. 6. He was about 50 years of age.

—ARTHUR MORROW FOSTER, 80, who retired a short time ago after spending most of his life in the drug business at Steubenville, O., is dead. He was born at Mansfield, Pa. (now Carnegie), and had resided in Steubenville more than sixty years. He is survived by his widow and one son.

—CARL A. SCHMID, for twenty years a druggist of Minneapolis, Minn., died on Oct. 25. He was born in Peoria, Ill., in 1862, where he resided continuously until his removal to Minneapolis in 1895. He is survived by his widow, three sons, and a brother, E. A. Schmid, a druggist of Peoria.

—ALBERT W. KLOSTERMAN, 29, a druggist of St. Louis, Mo., was drowned recently in White River, near Galena, Mo., where he was on a fishing trip with three companions. He was unmarried, and was associated with his brother in the drug business at 2700 St. Louis ave.

—GEORGE W. DUFFIELD, who represented Burrough Bros. Mfg. Co., manufacturing pharmacists, Baltimore, in Colorado and adjacent territory for some years, and who was well-known through the West by wholesale and retail druggists, died in Denver Nov. 6.

—GUY P. HOWE, the first registered drug clerk to receive a certificate to practice pharmacy in Athol, Mass., and for a number of years proprietor of a drug store in that city, died suddenly on Nov. 1. He was in his 47th year at the time of his death.

—THOMAS C. TREFREY, for eleven years a druggist at Milford, Conn., died on Nov. 4, after a short illness. He was 60 years of age and is survived by his widow and two children. His body was taken to Yarmouth, N. S., his former home, for interment.

—EDWARD THURLIMANN, 55, for many years a prominent druggist of Carroll, Iowa, and otherwise intimately associated with the business interests of that city, died on Nov. 1, following an attack of pneumonia. He is survived by two children.

—JOHN M. SNYDER, the oldest druggist of Somerset, Pa., died recently after a long illness of a complication of diseases. He was born in 1856. His widow and two children survive him.

—EARL McSPADEN, a graduate pharmacist who had been employed for some years in the leading drug stores of Chattanooga, Tenn., died recently in a local sanitarium, after a brief illness.

—E. H. KOZA, druggist of Clarkson, Neb., was instantly killed on Oct. 21, when the car he was driving turned turtle. He was thrown under the machine and his neck was broken.

CLOSE WATCH ON GERMAN PREPARATIONS

German preparations for trade after the war are being scrutinized carefully by experts in the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, and the recent important report on the subject of "German Foreign-Trade Organization" by Chauncey D. Snow, which touched on this point, has been in such great demand as to establish a new sales record for Government trade reports.

Since the war eliminated Germany from world trade, the United States has improved its position in foreign markets in spite of the shipping shortage and other abnormal restrictive factors. Department officials point out that the future prosperity of the country will depend in part on Germany's loss of good-will in practically all foreign markets and in part upon American ability to maintain our new prestige. American business must not make the mistake of seeing only one side of this situation and thus underestimating the German capacity for foreign trade nor the energy, application, and craft with which German business will address itself to the task of regaining favor in markets in which it once prospered.

In order to understand the significance of the information on German trade moves that will from time to time be made public, Secretary Redfield counsels not imitation of, but familiarity with the German theories of foreign trade and the artful and formidable organization that with Government aid at every turn, has been built up in Germany during the last twenty years to dominate the world's markets. It was to meet the demand for such information that the Bureau of Foreign and Domestic Commerce issued the bulletin on "German Foreign Trade Organization." The unprecedented demand for it is taken as an indication that the American manufacturer is making after-war preparations of his own.

The Bureau now plans to get out a supplementary bulletin on German trade and preparation; for the commercial future about the first of the year, and further supplements as rapidly as important additional information is received.

NEW FOUGERA CASE ARGUED

Argument was heard on Nov. 17, by a specially selected court in the U. S. District Court of Appeals on the application of E. Fougera & Co., wholesale druggists, of this city, for an injunction to restrain New York State Attorney General Lewis and District Attorney Swann of New York County from enforcing Chapter 487 of the laws of 1917 of New York State, purporting to prohibit advertisements relating to remedies for venereal diseases.

The complainant declares the statute a violation of the United States Constitutional rights, on which various points are presented in an exhaustive brief; as follows: That it constitutes a burden upon foreign and interstate commerce, in conflict with section 8 of the Constitution, and that it nullifies the Fourteenth Amendment in depriving the complainant of liberty and in the confiscation of property without due process of law.

JENKINS CO. ANNOUNCES DRUG STORE CHAIN

The W. P. Jenkins Drug Company, recently incorporated with a capital stock of \$250,000, has announced that it will operate in Dayton, Ohio, and surrounding cities of the country, a chain of drug stores. W. P. Jenkins, who is chiefly interested in the concern, now personally controls five stores in Dayton, the first one being opened by him in 1892. It is stated that several physicians and capitalists are interested in the new venture, and that the "chain," when completed, will number twelve or fifteen stores.

URUGUAY ANALYZES DRUG IMPORTS

A decree of the Uruguayan Government issued on July 16, 1917, places chemicals and pharmaceutical products temporarily on the list of articles subject to chemical analysis before clearance. Under the terms of this decree 2 pesos (\$2.07) will be charged for the analysis of each product imported, regardless of the quantity, and all products that are found to be below the standards of purity prescribed in the official pharmacopœia (the French Codex) will be rejected and must be re-exported within 30 days.

NON-BEVERAGE SPIRITS RULES REVISED

National Wholesale Druggists' Association, with the Co-Operation of the Proprietary Association and National Association of Retail Druggists, Obtains Certain Concessions.

The National Wholesale Druggists' Association continues its practical service to the trade by issuing another eight-page bulletin giving the revised regulations relative to the sale and use of non-beverage spirits. Secretary F. E. Holliday has been in conference with officials of the Department of Internal Revenue at Washington and has obtained many concessions which he announces as follows:

Important concessions have been secured from the Internal Revenue Bureau in the regulations relative to the sale and use of distilled spirits for other than beverage purposes recently promulgated as Treasury Decision 2559 which was published in our bulletin of November 2, 1917. The original regulations were objectionable to the trade on numerous grounds, but especially because they required all applications for alcohol to be approved by collectors of internal revenue, which, in many districts, would involve many days' delay and much unnecessary correspondence; because the requirement that bonds of surety companies must be given by all persons handling non-beverage alcohol involved an unnecessarily heavy expense, and because of the stipulation that manufacturers of proprietary preparations must submit their formulae to collectors as a basis of permits to use non-beverage spirits. The dissatisfaction of the trade with the original regulations was so general that the matter was taken up with the Internal Revenue Bureau authorities by the Association's Washington representative, Mr. W. L. Crounse, in conjunction with Messrs. H. B. Thompson and F. A. Blair, of the Proprietary Association and E. C. Brokmeyer, representing the National Association of Retail Druggists, and as the result of an extended series of conferences Treasury Decision 2559 has been comprehensively modified and practically all its objectionable features withdrawn.

As revised, the purchase of alcohol can be made without referring applications to local collectors, the new system authorized resembling that in use for the procurement of narcotic drugs under the Harrison Act. Dealers may present the bonds of surety companies, or are permitted to substitute individual sureties, or deposit Liberty Bonds, the Bureau now being authorized to accept any one of the three mentioned. The last named method is likely to appeal to small dealers whose transactions in alcohol are limited to small quantities. Inasmuch as bonding companies in many districts will not write bonds for less than \$1,000 at the rate of 1 per cent. entailing a premium of \$10, it is obvious that a dealer who requires a bond of but \$100 or so will be enabled to make a handsome net saving by depositing the amount in Liberty Bonds.

We are informed that several of the surety companies are now offering bonds at the rate of \$5 per thousand, with a minimum charge of \$5, or at the rate of one-half of one per cent. per thousand, in amounts equal to or exceeding that sum.

The requirement that manufacturers of proprietary preparations shall submit their formulae to collectors of internal revenue in order to secure non-beverage alcohol is withdrawn in view of the very general protest against this provision of the regulations and it is provided that this information need not be disclosed except in the event that the officials have reason to suspect that some particular product is of such a character that its manufacture from non-beverage alcohol should not be permitted. In such an event the producer will be called upon to submit his formula to the Department, but will be permitted to do so in such manner as to prevent its disclosure by careless or unscrupulous subordinate officials.

SALE OF ALCOHOL BY PHARMACISTS

Regulations issued by the Internal Revenue Department recently permit pharmacists to sell small quantities of non-beverage alcohol without a physician's prescription to persons who do not hold a permit. The text follows:

Hereafter, pharmacists who hold permits and have given bond will be permitted to sell non-beverage alcohol with-

out a physician's prescription to persons who do not hold permits and who have not given bonds, in quantities not exceeding one pint, but not in advance of orders, provided they first medicate the same in accordance with any one of the formulae recited below:

1. Carbolic acid 1 part, alcohol 99 parts.
2. Formaldehyde 1 part, alcohol 250 parts.
3. Bichloride of mercury 1 part, alcohol 2,000 parts.
4. Bichloride of mercury 0.8 gram, hydrochloric acid 60 c. c., alcohol 640 s. c. c., water 300 c. c.
5. Bichloride of mercury 1½ grains, hydrochloric acid 2 drams, alcohol 4 ounces.
6. Formaldehyde 2 parts, glycerin 2 parts, alcohol 96 parts.
7. Carbolic acid 1 dram, tannic acid 1 dram, alcohol 1 pint, water 1 pint.
8. Alum ½ ounce, formaldehyde 2 drams, camphor 1 ounce, alcohol and water, each 1 pint.
9. Lysol 1 part, alcohol 99 parts.
10. Liquor cresolis, comp. 10 c. c., alcohol 1,000 c. c.

The container of such alcohol will bear a "poison" label. Any abuse of these privileges will result in recall of the pharmacist's permit and its cancellation.

Permits will not be issued to retail liquor dealers, except pharmacists, and such other retail dealers as do not sell beverage spirits.

It will be understood that a pharmacist is in no sense a denaturer of alcohol, nor are the agents prescribed above regarded as satisfactory for the denaturation of alcohol in bulk quantities. Persons permitted to denature alcohol in bulk quantities are proprietors of distilleries having denatured bonded warehouses on their distillery premises, proprietors of central denaturing bonded warehouses, and proprietors of industrial distilleries. All persons purchasing non-beverage alcohol for use in manufacturing processes must obtain permit.

Alcohol brought to the United States from Porto Rico may be removed free of tax for denaturation. Such alcohol of not less than 180 degrees proof may be transferred to any central denaturing bonded warehouse, free of tax, upon the filing of a bond with the Collector of Internal Revenue of the district in which such warehouse is located.

USE OF ALCOHOL IN FLAVORS

The Commissioner of Internal Revenue has issued the following synopsis of decisions relating to syrups, extracts, alcohol used in manufacturing flavors and beverages sold at fountains:

Soft drinks—(1) Section 313, paragraph (a), does not impose a tax upon syrups or extracts intended for use by the maker for further manufacturing purposes.

(2) Is the use of flavoring extracts containing some alcohol in syrups which are to be used in the manufacture of soda water, etc., prohibited?

There is no provision against using flavoring extracts which contain some alcohol to flavor syrups that are to be used in manufacturing soft drinks.

(3) Are carbonated beverages which are mixed and sold at fountains subject to the tax imposed under subdivision (b), section 313, of the act of October 3, 1917? (a) There is no exemption in favor of products mixed and sold at fountains; (b) the manufacturer of soft drinks who purchases his carbonic-acid gas must pay 5 cents per pound upon the amount of gas he buys (sec. 315); (c) the manufacturer of soft drinks who makes his own gas must pay 1 per cent. per gallon upon all soft drinks sold (sec. 313 (b)); (d) the manufacturer of syrups or extracts must pay from 5 cents to 20 cents per gallon upon all sales of syrups or extracts which are intended for use in the manufacture of soft drinks (sec. 313 (a)).

(4) Carbonic-acid gas used in drawing beer from a container is not taxable under section 315.

(5) Extracts to be used for household purposes are not taxable.

(6) Where concentrates or extracts are sold to be further manufactured into flavoring extracts or syrups, the person completing the manufacture is subject to the tax. Where concentrates or extracts are sold to the bottler or the manufacturer of the soft drinks, the manufacturer of the concentrates or extracts is subject to the tax.

SUMMARY OF THE WAR REVENUE ACT

Dates on Which the Various Taxes Become Effective —Brief Review of the Commodities, Papers and Luxuries on Which Returns Must be Made.

The War Revenue Act has proved too intricate for the average business man to understand clearly. Manufacturers, producers and dealers find so many complications when they attempt to apply the terms of the law to their business that they have been obliged to refer many points to the Commissioner of Internal Revenue at Washington for decision. One large corporation has had three lawyers at work upon the War Excess Profits section for a month. A manufacturer of flavoring extracts has sent a list of questions to the Department covering points in his business which are not apparently included in the Act, yet he cannot make a satisfactory return until these points are answered.

As rulings by the Commissioner must be promulgated to decide the course which is to be followed in many instances, no attempt is here made to interpret the law, but a running summary of the scope of the law is given to assist those who may desire to know the date when the various provisions become effective and what taxes they must pay.

The amount of taxes to be paid must be figured out in each individual case and only the general provisions are here given:

Income Tax

Title I—The War Revenue Act provides first for an Income Tax, which takes effect as of January 1, 1917. The return should be made not later than March 1, 1918, and is due and payable on or before June 15, 1918.

Income Tax—Two per cent. upon incomes of unmarried individuals in excess of \$1,000 and upon incomes of married persons or heads of families in excess of \$2,000, and graduated surtaxes ranging from one per cent. upon taxable incomes in excess of \$5,000 to 50 per cent. upon incomes in excess of \$1,000,000.

War Excess Profits Tax

Title II deals with the War Excess Profits Tax. This covers corporations, partnerships and individual invested capital. It is effective as of Jan. 1, 1917.

Excess Profits Tax—Ranging from 20 per cent. of the net income in excess of the deduction allowed, and not in excess of 15 per cent. of the invested capital, to 60 per cent. of the net income in excess of 33 per cent. of such capital of every corporation, partnership or individual.

War Tax on Beverages

Title III—Distilled spirits, imported perfumes containing distilled spirits, ethyl and denatured alcohol, beer, lager beer, ale and porter, still wines, vermouth and champagne, grape brandy or wine spirits, sweet wine, prepared syrups or extracts, unfermented, soft drinks, mineral table waters, and carbonic acid gas are included under this title and the law was effective as of Oct. 4, 1917.

Tax on Beverages—In addition to the tax now imposed a tax of \$1.10 (or if withdrawn for beverage purposes, or for use in the manufacture or production of any article used or intended for use as a beverage a tax of \$2.10) on each proof gallon, or wine gallon when below proof.

Tax on Cigars and Tobacco

Title IV—Cigars and cigarettes and manufactures of tobacco, snuff, cigarette papers and tubes must pay the tax under sections 400 to 404. The full tax is effective thirty days after the passage of the act, which was Oct. 3, 1917. A floor tax equivalent to one-half of the full tax is due on all cigars, cigarettes and tobacco held for sale on Oct. 4, and upon all removals during said thirty days from factory or custom house.

Tax on Cigars and Tobacco—Ranging from 25 cents per thousand to \$7 per thousand on cigars; 80 cents to \$1.20 per thousand on cigarettes; an additional tax of 5 cents per pound on tobacco and snuff.

Tax on Facilities Furnished by Public Utilities and Insurance

Title V—Sections 500 to 505 cover express, freight, pas-

senger transportation, seats, berths, mileage, oil pipe lines, telegraph, telephone and radio messages, life insurance, marine and fire insurance, and casualty insurance. The tax is effective as of Nov. 1, 1917.

Tax on Utilities—One cent on express packages for each 20 cents paid; eight per cent. on passenger transportation; ten per cent. for seats, berths and staterooms in parlor cars; five per cent. on amount paid for transportation of oil by pipe lines; five cents on telegraph, telephone or radio despatches; eight cents on each \$100 for which any life is insured; one cent on each dollar of premium paid on policies of insurance against peril by sea or fire.

Excise Taxes

Title VI—Automobiles, motor cycles, musical instruments, moving picture films, jewelry, sporting goods, perfumes, cosmetics, etc., for toilet purposes, proprietary medicines, chewing gum, cameras, yachts, pleasure, power and motor boats are included under sections 600 to 603. These taxes are effective as of Oct. 4, and must be paid by the manufacturer, producer or importer.

Excise Taxes—Three per cent. of the price paid for automobiles, musical instruments; one-fourth of one cent per linear foot on moving-picture films to one-half of one cent; three per cent. on jewelry; three per cent. on sporting goods; two per cent. on perfumes and toilet articles; two per cent. on proprietary medicines; two per cent. on chewing gum; a floor tax (covering stock on hand Oct. 4) equivalent to one-half the tax imposed on above articles must be paid by the person, corporation, partnership or association so holding such articles.

War Tax on Admissions and Dues

Title VII—Admissions to any place are taxed under sections 700 to 702. The sections also cover cabarets, and club and association dues where such dues or fees are in excess of \$12 a year. These taxes are effective Nov. 1, 1917.

Tax on Admissions and Dues—One cent for each 10 cents paid for admission; a tax of ten per cent. of amount paid for dues or fees in excess of \$12 per year.

War Stamp Taxes

Title VIII—Stamp taxes apply to bonds of indebtedness, indemnity and surety bonds, drafts or checks not payable on demand, capital stock issues, capital stock sales or transfers, sales of produce on exchange, promissory notes, transfer of contracts, conveyance, custom house entries and withdrawals, foreign passage tickets, playing cards, proxies and powers of attorney.

The tax on parcel post packages comes under this heading and is one cent on every parcel on which the postage amounts to 25 cents or more and for each fractional part thereof over 25 cents. The tax is effective Dec. 1, 1917.

War Stamp Taxes—Ranging from 5 cents on each \$100 of face value represented by bonds of indebtedness, capital stock, etc., to 50 cents on conveyances; from 25 cents to \$1 on custom house withdrawals and entries; two cents on \$100 of face value of stock transferred, or fraction thereof; two cents on \$100 of value of sales of produce on exchange; one dollar to five dollars on foreign passage tickets; ten cents on proxies; 25 cents on powers of attorney; 5 cents a pack on playing cards; one cent for each 25 cents paid on a parcel sent by parcel post.

War Estate Tax

Title IX—Additional taxes are imposed upon the transfer of each net estate of every decedent dying on and after October 4, 1917. This tax is effective December 1, 1917.

Estate Tax—Ranging from one-half of one per cent. of the net estate not in excess of \$50,000, to ten per cent. of the amount exceeding \$10,000,000.

Title X deals with the administrative provisions of the Act, the collection, penalties, enforcement.

Title XI covers the new postal rates on letters, second-class mail matter and other details of interest to officials who have charge of the enforcement of the law.

Title XII gives the income tax amendments, the exemptions, deductions, returns by guardians, partnerships, and instructions regarding the withholding of the tax at the source of income of non-resident aliens.

Title XIII gives effect to the Act.

TAX ON PROPRIETARIES NOT PUT UP BY FIRM WHOSE LABEL THEY BEAR

Owner of the Formula Declared to be the Manufacturer—Real Maker Not Taxed—Right to Deduct Freight Charges and Discounts.

Rulings by the Internal Revenue Department relating to articles which are bought in bulk and prepared for distribution by manufacturers for firms who place their own names on the containers and supervise the sales, are given in a bulletin issued by the National Wholesale Druggists' Association. A ruling which permits manufacturers of proprietary articles to deduct freight charges as well as discounts is also given. Secretary F. E. Holliday quotes from a letter received from W. L. Crouse, Washington representative of the N. W. D. A. as follows:

"Owing to conflicting rulings on the part of local collectors misunderstandings prevail in certain districts with regard to the tax liability of firms and individuals selling goods under their own labels, brands and trade-marks which are made for them by other manufacturers. I have therefore secured from the Bureau a ruling covering this question in detail and indicating the course to be pursued where erroneous action has already been taken, a number of such cases having been reported.

"After full consideration, the Bureau holds that firms or individuals owning a formula, brand, trade-mark or label under which they are offering their goods to the public are the manufacturers within the intent of the War Revenue Act, notwithstanding the fact that their goods are actually made for them by other parties. The Bureau also holds that such other parties incur no tax liability inasmuch as the law does not contemplate double taxation. This ruling is in accordance with the spirit of the so-called Bulk Package Decision, issued by the Bureau under the Act of 1914, which permitted manufacturers without payment of tax, to produce and ship goods in bulk to parties who subsequently put them up in form for retail sale. A consideration which doubtless has had some weight with the authorities in reaching this decision is the assumption that the price charged the trade by firms and individuals, who have their goods made for them, is higher than that which the actual manufacturers charge for their production. As the tax paid to the Government depends upon the 'manufacturer's price,' a larger sum will be collected under the Bureau's ruling than would be obtained if the tax were levied on the price obtained by the parties who actually make the goods.

"In view of the fact that in certain cases reported to the Bureau the actual manufacturers of goods sold under the labels, brands, etc., of other parties have assumed the 2 per cent. tax and added it to bills for goods shipped, the Bureau suggests that in all such cases prompt notice of this ruling be given by the owners of the labels, brands, etc., to the actual manufacturers. Where the actual manufacturers have prepared returns covering this tax they should correct them accordingly and if in any case tax has actually been paid a claim for abatement of the amount erroneously included should be made to the local collector.

"I have presented to the Internal Revenue Bureau the question as to whether freight paid by a manufacturer on goods shipped by him to a jobber or retailer in accordance with a previous understanding may be deducted in order to arrive at the price actually received by the manufacturer for the goods. The Bureau holds that freight paid under such conditions is a deductible item and is in the same category with discounts from list prices, etc. The intent of the law is to assess the tax upon the net price received by the manufacturer, which, of course, does not include either discounts or freights paid by him."

Secretary Holliday continues:

The taking of inventories for floor taxes, as per information given in our bulletin of October 15th, is well underway and almost completed, but some delay and confusion have been caused because a few collectors of Internal Revenue in scattered portions of the United States have insisted that wholesale druggists must make complete inventories in duplicate, retaining one copy and filing the other with the collector.

This condition was brought to the attention of the officials of the Bureau of Internal Revenue, who, after giving the matter full consideration, finally decided that if each dealer will prepare a detailed inventory and hold same subject to inspection, retaining it in his possession for two years, the Bureau will be satisfied to have the footings only transmitted to local collectors.

We are further authorized to inform the trade, in case any collector refuses to accept inventory footings in lieu of detailed inventories, provided that such inventories are held by the dealer subject to examination, wholesale dealers should immediately notify by telegraph the Commissioner of Internal Revenue, Washington, D. C., who will at once wire instructions to the collector in accordance with the above. The recommendations made regarding the taking of inventories in our bulletin of October 15th, should be carefully followed in all cases.

DRUGGISTS' SIDE LINES SUBJECT TO TAX

Among the articles classified as jewelry by the Commissioner of Internal Revenue for purposes of taxation under the War Revenue Act are the following when made of precious or imitation metals and to be carried on the person:

Dorean (powder) boxes; vanity boxes; stamp boxes; match boxes; cigarette cases; cigar cases; eyeglass cases; eyeglass chains; eyeglass holders; lorgnettes; lorgnons; card cases; vinaigrettes; handkerchief holders; garters; suspenders; emblem charms; emblem pins; emblem buttons; mesh bags; memorandum books; lip salve cases; eyebrow pencils; cigar cutters; compasses; key chains; key rings and like articles.

REVENUE RULINGS ON PERFUMES

A summary of decisions by the Department of Internal Revenue affecting perfumeries and the materials used in their manufacture has been issued by Walter Mueller, secretary of the Manufacturing Perfumers' Association. It covers alcohol, toilet waters, goods for export, "name" preparations not put up by the owner of the formula, discounts, freight charges and returned goods.

EXTENDING TIME OF TAX PAYMENTS

By giving a bond with sureties approved by the Commissioner of Internal Revenue and the Secretary of the Treasury, payment of additional taxes imposed by the new War Revenue Act upon articles or commodities, upon which the tax imposed by existing law has been paid, may be extended to a date not exceeding seven months from the passage of the act.

LIGGETT CO. ANNOUNCES NEW POLICY

The Louis K. Liggett Co. announced a new specialization policy at a banquet to officials and many employes, Nov. 1, at the Copley-Plaza, Boston. These changes were announced: Jerome A. Crane, former manager for New England, director of employment for all New England stores and those in New York outside of New York City; H. W. Weed, territory manager, director of employment for New York City stores; E. E. Burlingame, named director of sales; C. A. Masterson, fancy goods director; E. L. Meserve, specialist on opening new stores; L. A. Luther, sales specialist in rubber and hospital goods; Warren G. Sweet, assistant director of employment in New England; George W. Platt, assistant director of employment in New York. At the head table at the banquet were President Liggett of the United Drug Co., General Manager J. N. Staples and Sales Manager H. L. Simpson.

SCHOOLS AND COLLEGES

BUFFALO

Dean Willis G. Gregory reports that the thirty-second annual course of instruction of the Buffalo College of Pharmacy opened in October with a record attendance of 196 students, 126 of whom are taking the two-year pharmacy course, and 70 are studying in the three-year analytical chemistry course.

The senior students and faculty gave the freshmen class a reception on the evening of Oct. 26, in Townsend Hall. About 150 were in attendance, the program consisting of vocal and instrumental music and recitations furnished by the students. Refreshments were served, a feature of the entertainment being the chorus singing, including America and the Alma Mater song.

John T. Stoddart has joined the faculty this year, becoming an instructor in pharmaceutical Latin.

MASSACHUSETTS

Scholarships for the session of 1917-1918, at the Massachusetts College of Pharmacy, have been awarded as follows: The Massachusetts State Pharmaceutical Association scholarship to Argiris G. Sampanias of Boston; the Eastern Drug Company scholarship to R. Tracy Burrows of Noank, Conn.; the Brewer & Co. scholarship to Francis J. Connors of Westerly, R. I.; the Baird Memorial scholarship to Leo D. Steinberg of Boston; the Greenleaf Memorial scholarship to George C. Schicks, Jr., of Lowell.

The students have subscribed to a fund for the purchase of a service flag to be displayed by the college.

QUEEN CITY COLLEGE OF PHARMACY

Dr. Frank B. Cain, dean of the Queen City College of Pharmacy, Cincinnati, recently announced that arrangements were being made for the erection of a new building to house the college in that city. Heretofore the college was under the control of Lebanon University, which recently merged with Wilmington College, owing to financial difficulties, all departments being placed under the control of the last-named institution. Since the merger, plans are being considered by President J. E. Jay of Wilmington College for the establishment of a co-operative course in pharmacy between the Queen City College of Pharmacy and the druggists of Cincinnati, Dr. Frank B. Cain being elected a member of the Wilmington faculty and dean of the merged school, and who, with Prof. Edward A. Ohm of the faculty of Wilmington College are to have charge of the Queen City College of Pharmacy. Selection of other Cincinnati men to co-operate with Dr. Cain and Prof. Ohm on the pharmacy faculty will be made by President Jay.

UNIVERSITY OF MICHIGAN

The pharmaceutical world is well informed as to the activities of Professor Henry Kraemer, and will doubtless be interested to know that in his new position at Michigan, he is progressing with his wonted enthusiasm. Dr. Kraemer recently gave an illustrated lecture before the Detroit Branch of the A. Ph. A. on "Phases of Pharmacy," which was so much enjoyed that he has been asked to address them again later in the year.

Never before in the history of pharmacy has there been so great a demand for trained pharmacists as at present. Students who are in doubt as to what business or profession to choose for a life work would do well to investigate the opportunities offered in pharmacy. Girls, too, find this work to their liking, as is evinced by the nine who are now enrolled here.

The present enrollment of this College shows only 70 per cent. of that of last year, and includes nearly the same number of freshmen. The light attendance is due to the number of upper-classmen now in military service. We hope soon to publish a list of our students now serving their country.

M. A. Jones, one of Michigan's drug inspectors, lately visited the pharmacy class and gave the students some valuable points concerning his work.

PURDUE UNIVERSITY

The following graduates and students of Purdue School of Pharmacy have entered the service of the country: Lieut. J. B. Burt, '18, Camp Taylor; Lieut. A. W. Hellenberg, '18, Camp Green, Charlotte, N. C.; Sgt. Glenwood Borders, '17, Ft. Riley, Kansas; E. F. Crabb, '16, Ft. Riley, Kansas; M. C. McCallum and T. A. Bramble, '17, Great Lakes Training Station; W. L. Thoms, '16, Camp Taylor; Sgt. E. R. McCoy, '18, Ft. Benjamin Harrison; W. C. Royce, '16, Ft. Benjamin Harrison; Merle Fairman, '12, Camp Taylor; E. N. Harper, '18, Camp Upton, Long Island; P. L. Wyand, '18, Paris Island, S. C.; W. M. Parrish, '18, Camp Taylor; L. R. Hess, '17 and W. K. Wendt, '17, Officers Training at Ft. Benjamin Harrison; D. J. Kay, '16, J. H. Heward, '17, R. B. Bixler, '17, Lawrence Atkinson, '15, and R. M. Dwyer, '17, are waiting the call to colors, E. W. Hanley, '17, Camp Shelby, Hattiesburg, Miss. At this time it is impossible to secure a complete list of our alumni who have entered the service. We earnestly request anyone who may hear of alumni who have entered the service to notify us at once.

The Purdue Pharmaceutical Society held the first meeting of the year on Oct. 31. The retiring president, H. H. Hedgecock, and Professor Jordan both spoke of the work of the Society for the coming year. Election of officers was held with the following results: President, J. R. Phillips; Secretary and Treasurer, Miss Ramoth Huff; executive committee, Miss Juanita Follet, J. R. Miller and J. W. Wood. Plans were completed for a successful year.

The following alumni returned for the Purdue homecoming and to witness the game between Northwestern and Purdue: J. S. McMahan, '07, with Devoe & Reynolds Co., Chicago, Ill.; E. H. Westlund, '15, Eli Lilly & Co., Indianapolis, Ind., and R. M. Dwyer, '17, of Foller, Ind.

The following alumni have recently accepted positions as follows: P. L. Burrin, '17, Eli Lilly & Co., Indianapolis, Ind.; D. U. Williams, '16, Wm. Warner & Co., St. Louis, Mo.; Beatrice Fansler, '17, pharmacist, State Soldier, Home, Ind.; L. O. Hill, '16, Kolynos Co., Hartford, Conn.; W. R. Shugers, '16, Parke, Davis & Co., Detroit, Mich.; R. B. Wilkins, '16, Goodyear Tire Co., Akron, O.

Professor G. N. Hoffer, professor of botany of Purdue University, has resigned his position to take up the "Investigation of Corn Diseases" for the United States Government. Professor Toole, of the University of Kansas, has taken over his work at Purdue.

UNIVERSITY OF IOWA

Students of the College of Pharmacy recently elected the following officers; Senior Class-President, H. T. Gillespie, Algona; vice-president, W. S. Heping, Colo.; secretary-treasurer, Josephine Weiss, Iowa City; athletic and class representative, U. P. Sweeney, Waukon. Junior class: President, B. C. Rogers, Clinton; vice-president, L. W. March, Hot Springs, S. Dak.; secretary-treasurer, P. A. Dahlen, Rock Island, Ill.; class representative, C. W. Wilsey, Keokuk; athletic representative, L. V. Carter, Montezuma.

The Phi Delta Chi fraternity held its founder's day banquet at the Chapter House, November 1. Dr. C. S. Chase acted as toast master. Prof. R. A. Kuever spoke on "Added Responsibility;" Dr. W. J. Karslake on "Cheer Up;" Dean W. J. Teeters on "The Purity Rubric;" L. A. Meierkord, '18, on "The Indefinite Future," and P. A. Dahlen, '19, on "Riding the Goat." At the dance given by the fraternity at the Chapter House on the evening of Oct. 19, Dean and Mrs. Teeters chaperoned.

John Byers, '17, and Bernice Lumsden were married Oct. 24 at St. Patrick's parsonage at Iowa City. After a trip east they will be at home at Estherville, Iowa, where Mr. Byers has been employed since his graduation.

J. L. Kubichek, '12, who for several years has been at

Winnemucca, Nevada, is now in training at American Lake, Wash., as a member of the California Masonic ambulance corps.

Senator J. M. Lindly, '89, of Winfield, Iowa, has just published a pamphlet "Every Day a Patriotic Day," intended for use in the public schools. It is a compilation of facts of historic interest occurring in the United States and in Iowa, one or more for each day and arranged chronologically.

W. R. Bryant, '13, who has been in the employ of the Harmer Drug Co. at Tempe, Ariz., writes from Camp Funston, Kansas, where he is in training in the Hospital Corps.

UNIVERSITY OF UTAH

The School of Pharmacy of the University of Utah organized in the present year, opened its doors for the first time on Sept. 17, under the direction of Dean Perry G. Snow of the School of Medicine, as the two schools will be run in connection with each other. Three groups of courses are offered in the new school, one of two years leading to the degrees of graduate in pharmacy, one of three years leading to the degree of pharmaceutical chemist, and one of four years leading to the degree of bachelor of science in pharmacy, the last named course being on a parity with other courses in the university offering bachelor degrees. The new school has the indorsement of the pharmacists of the State and is backed by the State pharmaceutical association.

UNIVERSITY OF OKLAHOMA

War has left a large percent of students in the school of pharmacy, the enrollment being proportionately higher than in some of the larger schools. Dr. Henry Kraemer, of the University of Michigan, has written Dean H. S. Browne that the total enrollment of that school has dropped considerably this year, while the school of pharmacy of Purdue University has only 30 per cent. of the enrollment last year. The enrollment at the school of pharmacy in the University of Oklahoma is now 65 per cent. of that of last year, and allowing for the usual increase, it is expected that the number will be somewhat larger at the beginning of the next semester. The freshman class is larger than that of last year, but the number of juniors and seniors has decreased because so many have enlisted in the army.

The following students from the school of pharmacy are now in training camps: Frederick A. Jackson, Ph. G. '17, U. S. N. Hospital, Great Lakes, Ill.; Harlin J. Fuller, Ph. G. '17, 4th Inf., 164 Depot Brigade, Med. Dept., Camp Funston, Kans.; Elmer L. Ray, Ph. G. '18, Ambulance Co. No. 28, Ft. Clark, Tex.; Alex F. Buckley, Ph. G. '17, Co. I, 358th Inf., Camp Travis, Tex.; C. B. Bonham, Ph. G. '18, U. S. N. Hospital, Portsmouth, New Hampshire; Wm. E. Moore, Ph. G. '18, U. S. N. Hospital, Great Lakes, Ill.; Edgar Risley, Ph. G. '18, U. S. N. Hospital Corps, Co. E, Great Lakes, Illinois.

Lieut. Claude E. Aikman, B. S. '17, who enlisted in the officers' reserve corps last spring, is now located at Camp Pike.

Lieut. W. Ross Gahring, Ph. G. '17, of the infantry section, unattached, American Expeditionary Forces, recently arrived somewhere in France.

J. H. McCartney, Ph. G. '01, of Minco, has been commissioned as a captain in the United States Army.

Akard Hatcher, who withdrew from the University last spring and enlisted in the army, is now stationed at Camp Bowie, Field Hospital Corps, No. 144, Fort Worth, Texas. George L. Risen, Ph. G. '12, is also stationed at Camp Bowie, Field Hospital Corps, No. 143.

Marvin G. Humphreys, Ph. G. '12, who has been practicing pharmacy with the Douglas Drug Company, Douglas, Ariz., is now a pharmacist in the United States Camp Hospital, Douglas, Ariz.

K. B. Jennings, Ph. G. '18, who withdrew from the university last spring to offer his services to Uncle Sam, is now located at the United States Training Station, Hospital School, Company No. 28, at Goat Island, San Francisco, Cal.

At a meeting of the seniors in the school of pharmacy a few days ago, Norwood Hall was elected president,

Oscar Hrabe, vice-president and Miss Reola Mansfield, secretary-treasurer.

Dean H. S. Browne of the School of Pharmacy has enlisted the co-operation of J. H. Craven, landscape gardener, in starting a medicinal garden so that plants may be available for students of pharmacy in connection with their work. Among the schools of pharmacy which have already established drug gardens are the Universities of Michigan, Minnesota, Wisconsin, Nebraska, Kansas and Purdue.

Dean H. S. Browne has been appointed by Dr. Henry Kraemer, of the University of Michigan, a member of the committee of the American Conference of Pharmaceutical Faculties, which has for its purpose, the standardizing of examination questions in the schools of pharmacy in the United States.

SOUTHERN COLLEGE OF PHARMACY

Among the 1917 graduates of the Southern College of Pharmacy, Atlanta, Ga., who have just received their diplomas, is John A. Lazardes, formerly of Cairo, Egypt, now in New York, who has been called to the service under the selective service law. He is said to have a brother and father fighting for the sultan. Carl B. Anderson, H. L. Candler and Eugene Ellison, all of Georgia, have also been called from the 1917 class under the selective draft law. The other members of the graduating class follow: B. Cruz, Florida; P. H. Duning, Mississippi; L. L. Henry, Georgia; A. G. Howard, Alabama; Burress Johnson, Mississippi; W. C. Lawrence, Kentucky; C. M. M. Mayhall, Alabama; B. M. Miller, Alabama; R. L. Nichols, Georgia; G. A. Stegar, Kentucky; J. C. Yearwood, Jr., Tennessee; M. Van Zandt, Mississippi; James D. Zemp, South Carolina.

UNIVERSITY OF CALIFORNIA

At the annual meeting of the stockholders of the California College of Pharmacy of the University of California held recently, the following officers were elected:

Directors, G. E. Bacon, president; R. E. White, treasurer; Valentine Schmidt, K. B. Bowerman, I. Tebriner, Charles J. Abraham, H. B. Philip and Dr. Haydn M. Simmons, secretary.

Dean Frank T. Green announced that forty-one students and graduates were serving in the medical department of the military service. The regular session of the college opened September 1, 1917.

UNIVERSITY OF MONTANA

A newspaper despatch from Missoula, Mont., states it has been announced by Dean C. E. F. Mollett that members of the United States army hospital corps, stationed at Fort Missoula will be admitted to courses in the school of pharmacy of that institution without the payment of fees. About ten members of the corps have signified their intention of availing themselves of the privilege.

TEXAS UNIVERSITY

The senior class of the School of Pharmacy, Texas University, Galveston, recently elected the following officers: President, C. B. Allisen, Farmersville; vice-president, W. M. Rogers, Munday; secretary, Miss Villa C. Saunders, Blanco; reporter, S. M. Levy-on, Boerne.

ASSIGN CHEMISTS TO SPECIAL WORK

A recent despatch from Washington states that several hundred chemists who were drafted into the national army have been assigned to special work under government departments and that others are being withdrawn from cantonments daily. Army authorities were able to pick out these men from a census of all chemists within the draft age limits, arranged by the bureau of mines. A similar census has been made of mining engineers.

Drug clerks of New Haven, Conn., recently formed an organization under the direction of R. K. Marshall of Bridgeport, representing the International Clerks' Association. The organization has applied to the American Federation of Labor for a charter. At the organization meeting 35 clerks applied for membership.

Boards

CALIFORNIA

The California Board of Pharmacy announces that its next meeting will be held in Los Angeles at the Fraternal Brotherhood Hall on Monday, Jan. 14, 1918, the examination beginning on Wednesday, Jan. 16, and a meeting will be held in San Francisco at the office of the board on Jan. 21, the examination beginning on Wednesday, January 23, at the German House, same city. At the last meeting of the board, registration was granted to 39 applicants who were awarded licentiate certificates on examination, and to 11 applicants who were registered on credentials and twenty years' experience. Forty-two applicants were registered as assistant pharmacists.

GEORGIA

Forty-eight applicants were examined by the Georgia Board of Pharmacy at the State Capitol, Atlanta, recently. Of those who successfully passed the examination, twenty-one received druggists' licenses and eleven apothecaries' licenses.

ILLINOIS

Boards to exercise examining functions under the administrative code, formerly performed by Illinois State boards, were named recently by Francis W. Shepardson, director of the new department of registration and education. The members of the examining board for pharmacists are H. C. Christensen, Chicago; Thomas B. Gregg, Harrisburg; F. W. Metzger, Springfield; Carl Lutz, Ottawa; and W. S. Denton, Beardstown.

KENTUCKY

At the meeting of the Kentucky Board of Pharmacy, held in Louisville, Oct. 9 and 10, certificates of registration were granted to five applicants who successfully passed the examination for registered pharmacists. One applicant was registered as an assistant pharmacist. At the annual meeting of the board which was held at the same time, William Votteler, recently appointed by the Governor to succeed the late Prof. C. Lewis Diehl, qualified as a member of the board, while G. Orville Patterson, Hawesville, was appointed to succeed J. C. Gilbert, whose term had expired. The following officers were elected: President, W. E. Danhauer, Owensboro; secretary, J. W. Gayle, Frankfort; treasurer, Addison Dimmitt, Louisville; chairman of the executive committee, William Votteler, Louisville. The next regular meeting of the board will be held on January 8 and 9, 1918.

MARYLAND

The Maryland Board of Pharmacy announces that ten names were added to the list of registered pharmacists in that State as a result of the examination held during the early part of October. Of these, eight were given certificates as pharmacists, and two certificates as assistant pharmacists.

MINNESOTA

The Minnesota Board of Pharmacy has granted registration as pharmacists to fifteen applicants who successfully passed the recent examination. Ten applicants were also granted registration as assistant pharmacists. H. W. Rietzke, secretary, also announced that the board had purchased \$1,000 worth of Liberty bonds.

NEW JERSEY

At a meeting of the New Jersey Board of Pharmacy, held at Trenton on Oct. 8, the following resolution was unanimously adopted:

Resolved, that the rule regarding the pre-requisite requirements be suspended in the case of those who are eligible to examinations previous to the date on which said rule becomes effective, but are prevented from taking

the examination by virtue of the fact that they are in the service of the Government, in the Army or Navy, and that such persons shall be granted the right of examination, under the same conditions existing at the time of their entrance into said service, after expiration of such service.

NORTH CAROLINA

At a meeting of the North Carolina Board of Pharmacy held at Raleigh, on Nov. 9, 37 applicants (34 whites and 3 colored) to practice pharmacy were examined, 24 of whom were successful. H. C. Christensen, of Chicago, secretary of the National Association of Boards of Pharmacy, was present, and after a conference with him, the board unanimously agreed to become a member of the national organization after January 1, 1918, at which time the new North Carolina pharmacy law goes into effect. This action enables the North Carolina Board of Pharmacy to reciprocate certificates of registration with those states whose boards are members of the national association. The next meeting of the board will be held at Raleigh in June, the exact date to be fixed later on.

OHIO

The Ohio Board of Pharmacy conducted examinations for registration of applicants to practice pharmacy at Columbus, on Oct. 9 and 10. Of the 94 who took the examination for pharmacist certificates, 50 were successful for first papers, and four obtained grades high enough to entitle them to assistant certificates. Of the 17 who took the assistant examination, 8 were successful. The highest grade obtained in the pharmacist examination was 93.8 per cent. by John F. Winkler, of Apple Creek, Ohio. The highest grade in the assistant examination was 85.3, obtained by Clark R. Ward, Lancaster, Ohio. The next examination will be held in Columbus beginning Tuesday, January 15, 1918.

TENNESSEE

The Tennessee Board of Pharmacy at a three days' session held on Oct. 16-18, in Chattanooga, decided that all Tennessee pharmacists called to the colors will remain in good standing without the payment of a State license tax during their term of service. About 200 pharmacists of the State have already entered military service. Fifteen applicants took the examination, four of whom passed the tests. The officers of the board are: President, O. J. Nante, Jackson; vice-president, Harry Whitehouse, Johnson City; secretary, Ira B. Clark, Nashville. Other members of the board are W. G. Coulter, Clarksville, M. E. Hutton, Nashville, and Edward V. Sheely, Memphis.

WESTERN DRUG OFFICIALS ORGANIZE

The Association of Western States Dairy, Food and Drug Officials was recently organized at Salt Lake City, Utah, the following officers being elected: President, Sanford C. Dinsmore, state commissioner of food and drugs of Nevada; vice-president, Walter M. Boyden, food and dairy commissioner of Utah; secretary, Erwin J. Lea, director of the state bureau of food and drugs of California. The organization meeting was opened by Gov. Simon Bamberger with an address of welcome, the state officials present being called to order by Dr. J. S. Abbott of Washington, D. C., Walter M. Boyden, food and dairy commissioner of Utah, being made temporary chairman. Officials representing most of the Western states were in attendance. San Francisco was selected as the convention city for 1918.

HARTFORD R. D. A.'s ANNUAL BANQUET

The Hartford Retail Druggists Association held its annual banquet at Bond's restaurant, Hartford, Conn., H. F. Roby, president of the association acting as toastmaster. Among the speakers present were James F. Finneran of Boston, chairman of the executive committee of the N. A. R. D., and M. P. Gould, president of the M. P. Gould Co., of New York. The association has in its membership 72 of the 76 druggists of the city, who are all very much alive to current business problems.

Credit and Commercial Decisions

By GEORGE H. MURDOCH, Newark, N. J.

Delivery of Goods—Place—Ordinarily, one cannot sue for failure to accept goods under contract when he has not delivered them at the place agreed upon.—195 S. W. (Mo.) 576.

Requisites of Usury—To constitute usury, the borrower must enter into an obligation the effect of which is to bind him to pay more than legal interest.—75 So. (Ala.) 577.

Special Deposits—If a bank receives a deposit for an express purpose, but uses it for a different purpose, it is liable to the depositor therefor.—163 N. W. (Wis.) 184.

Payment of Debt Owned Jointly—A debtor may efficiently pay and discharge, in whole or in part, his debt by payment to one of two or more joint owners thereof.—75 So. (Ala.) 580.

Checks as Payment—In the absence of a contract to the contrary, the giving of a check is not payment, and no title passes unless the check is paid when presented.—195 S. W. (Mo.) 562.

Duty of Trustee in Bankruptcy—The trustee takes the title of the bankrupt by operation of law, and it is his duty to reduce all of bankrupt's property to possession.—165 P. (Wash.) 392.

Purchase by Corporation of Its Own Stock—In the absence of a statute prohibiting it, a corporation when acting in good faith by the authority of its directors may purchase its own stock.—195 S. W. (Ark.) 381.

Relations of Attorney to Client—It is a familiar rule of law that an attorney is required to exercise the utmost good faith in all of his relations and dealings with his client.—163 N. W. (Nebr.) 153.

Failure by Carrier to Deliver Goods—Where a common carrier is unable to deliver the goods shipped to the consignee, it is its duty to exercise due diligence to notify the consignor within a reasonable time.—165 P. (Ore.) 363.

Loan Made to Pay Usurious Debt—A loan made in good faith and at a legal rate of interest to enable the borrower to pay a debt owed to a third person is not affected by usury inhering in the original debt.—75 So. (Ala.) 577.

Interstate Commerce—"Interstate Commerce," in a legal sense, embraces not only the transportation of freight from one state to another, but every link in that transportation, whether or not some of the links are entirely within one state.—116 N. E. (Mass.) 499.

Lawful Competition—A desire or motive which intends no harm or injury to a business competitor other than that of denying him an advantage in competition, which may result from the manner of conducting one's own business, is neither illegal or unlawful.—116 N. E. (Ind.) 425.

Dishonored Check—Effect—Where a sale is made for cash on delivery and buyer gives seller a check which is dishonored, when presented in a reasonable time, title does not pass, and the seller is entitled to recover the property from any one not a bona fide purchaser.—75 So. (Ala.) 570.

Acts of Agent Induced by Emergency—A servant, acting in an emergency in the absence of his principal, and apparently for the protection of the interests of the principal, may frequently do things which transcend his usual authority, and they will be deemed to be authorized.—165 P. (Okla.) 408.

Stipulation in Bill of Lading—A stipulation in the bill of lading, requiring claim for loss to be made in writing to the carrier within four months after delivery, or after a reasonable time for delivery has elapsed, is valid and binding on the parties under the Interstate Commerce Act, Feb. 4, 1887, c. 104, 24 Stat. 379.—116 N. E. (Mass.) 474.

False Pretenses—Elements of Offense—The constituents of the statutory offense of obtaining money, property, or credit by check or draft, which is not paid, are: (1) Issuing check with fraudulent intent; (2) obtaining money

or credit thereon; (3) failure of drawee to pay check after demand; and (4) subsequent failure of drawer to pay after seven days' written notice.—195 S. W. (Tenn.) 584.

Trade Secrets—Defendant in a suit to prevent the use or disclosure of secret trade processes, the knowledge of which was acquired by him while in the plaintiff's employ, may be enjoined from disclosing any of such alleged processes to experts or witnesses produced during the taking of proofs,—excepting defendant's counsel,—with leave to move to dissolve the injunction if occasion to consult experts arises.—37 Sup. Ct. (U. S.) 575.

Destination Determines Character of Shipment—Goods actually destined for points beyond the state of origin are necessarily in interstate commerce when they are delivered to the carrier and start in the course of transportation to another state, whether shipped on through bills of lading, or on initial bills to a terminal within the state, where they are transhipped on new bills of lading to a point beyond the state.—241 F. (U. S.) 562.

Patent and Latent Ambiguities—A patent ambiguity is one apparent on the face of the instrument, and which remains uncertain after all the evidence of surrounding circumstances and collateral facts admissible under the proper rules of evidence is exhausted. A latent ambiguity is one where the writing appears on the face of it certain and free from ambiguity, but the ambiguity is introduced by evidence of something extrinsic or by some collateral matter out of the instrument.—195 S. W. (Texas) 627.

Presentation of Demand Note—A "reasonable time" within which a demand note must be presented in order to charge indorser as required by Rev. Laws, c. 73, § 88, is sixty days, in absence of contrary trade usage or peculiar facts to bring it within section 209, providing that in determining what is a reasonable time the nature of the instrument, usage of trade and facts of the particular case must be regarded, such time being the period allowed prior to enactment of the Negotiable Instrument Laws.—116 N. E. (Mass.) 468.

Health of Insured When Policy is Delivered—Where an application for insurance provided that the insurance should not take effect unless the policy was delivered to and accepted by the applicant during his lifetime and in good health, a mailing of the policy by the insurer to its local agent, with instructions not to deliver it unless the applicant was in good health, was not a delivery of the policy; and, where the applicant died while the policy was still in the hands of the local agent, the insurer was not liable.—195 S. W. (Ark.) 371.

Liability of Retiring Partner—The dissolution of a co-partnership by the retirement of a member thereof does not ipso facto discharge him from liability for the pre-existing debts of the firm. The mere assumption of the indebtedness by the partner continuing the business of the concern after the dissolution, and the creditor's assent thereto, without an express or implied agreement by him to rely exclusively upon the credit of such partner, do not work a discharge of the retiring partner from the joint obligation. To exonerate a retiring partner from a firm debt contracted before the dissolution, the facts and circumstances out of which arises an implied release or discharge must be established by clear and convincing proof, certainly where the creditor theretofore expressly refused to agree to such exoneration.—92 S. E. (W. Va.) 792.

EIMER & AMEND BUY NEWARK FACTORY

Eimer & Amend, manufacturers of drugs and chemicals, New York City, have recently purchased the factory and land at 13-17 Margaretta st., Newark, N. J., which, after extensive alterations and improvements have been made, will be used for manufacturing purposes. They are also erecting a building costing \$150,000 at Third avenue, Eighteenth and Nineteenth streets, New York City.

PATENTS & TRADEMARKS

PATENTS

Granted Sept. 18, 1917

- 1,240,321—Joseph C. Dickinson, Cottondale, Ala., assignor of one-half to J. D. Wright, Toomsba, Miss. Bottle-vending machine.
 1,240,383—Henry F. Stock and Joseph Nader, Waukesha, Wis., Bottle-stopper.
 1,240,511—Charles F. Thatcher, Providence, R. I. Fastener for bottle stoppers.
 1,240,610—John Sheridan, San Francisco, Cal. Cork puller.
 1,240,657—Lester W. Bolick, Newton, N. C. Bottle-opener.
 1,240,766—Edgar T. Olson, assignor to the Detroit Organic Chemical Co., Detroit, Mich. Process for the production of lactic acid.
 1,240,767—Charles E. O'Malley, Mansfield, Mass. Bottle-cap.

Granted Sept. 25, 1917

- 1,241,017—Ferdinando Quartieri, Milan, Italy. Process for the manufacture of trinitrotoluene.
 1,241,141—Thomas O'Brien, New York, N. Y. Bottle capping machine.
 1,241,354—Robert Donald, Highgate Road, London, England. Method of storing microscope-slides.

Re-issue

- 14,364—Lee E. H. Cone, assignor to the Dow Chemical Company, Midland, Mich. Method of making indoxyl and derivatives.

Granted Oct. 2, 1917

- 1,241,508—Charles Hamann, Brooklyn, N. Y. Bottle washer.
 1,241,509—Charles Hammer, assignor, by direct and mesne assignments, to American Metal Cap Company, Brooklyn, N. Y. Formation of bottle caps.
 1,241,536—Irving W. Mason, Aberdeen, Wash. Poison indicator.
 1,241,640—Isabella McIntyre, Bryn Mawr, Pa. Casing for bottles.
 1,241,791—Wm. H. Waggaman, Harry Bryan, and Cary H. Wagner, Washington, D. C. Apparatus for the manufacture of phosphoric acid and compounds of the same.
 1,241,810 and 1,241,811—William Jakob Beisel, Brooklyn, N. Y. Non-refillable bottle.
 1,241,919 and 1,241,920—John E. Bucher, assignor to the Nitrogen Products Co., Providence, R. I. Process of producing urea.

Granted Oct. 9, 1917

- 1,242,138—May L. Burke, New London, Conn. Non-refillable bottle.
 1,242,208—Burrill S. Lacy, assignor to the Roessler & Hasslacher Chemical Co., New York, N. Y. Process of manufacturing ethyl chloride.
 1,242,264—Leland L. Summers, Chicago, Ill. Process for forming nitrogen compounds.
 1,242,313—William J. Beals, Beloit, Wis. Bottle filling machine.
 1,242,453—Charles Lester, Ambridge, Pa., assignor of one-fourth to Frank L. McCready, Sewickley, Pa., and one-fourth to Philip L. Sohn and one-fourth to Irvin Sohn, Ambridge, Pa. Collapsible funnel.
 1,242,510—Frederick E. Anderson, Red Wing, Minn. Sealing-cap for bottles.
 1,242,592—Lawrence V. Redman, Archie J. Weith, and Frank P. Brock, assignors to Redmanol Chemical Products Company, Chicago, Ill. Process of producing phenolic condensation compounds.
 1,242,654—Frank F. B. Chapman, Winchester, Mass. Collapsible tube.
 1,242,817—John T. Lally, Wilmington, Del., assignor by direct and mesne assignments to National Bottle Washing Machine Company. Bottle-washing machine.

Granted Oct. 16, 1917

- 1,243,349—Arthur E. Smith, Chicago, Ill. Anesthetic nerve-blocking tablet.
 1,243,382—Carl Bosch, Ludwigshafen-on-the-Rhine, Germany. Folding bucket.
 1,243,406—Louis A. Hawthorne, Newark, N. J., assignor to Steel Utilities, Inc., a Corporation of New York. Crating apparatus for bottles and the like.
 1,243,579—Burpee O. Bates, assignor of two-thirds to William P. Gray, Campbellton, New Brunswick, Canada. Tooth-brush.

TRADE-MARKS

Published Sept. 18, 1917

- 94,826—H. K. Mulford Co., Philadelphia, Pa. Fluid extracts, extracts, tablets, biological products, etc.
 99,495—Waldes & Co., Prague-Wrschowitz, Austria Hungary, assignor, by mesne assignments, to Waldes Co., of New Jersey. Powder paper.
 101,514—Benjamin F. Swindell, Baltimore, Md. Preparation for the treatment of cancers.
 103,698—Rose L. Kingstone, New York, N. Y. Composition of matter for removing superfluous hair.
 103,771—Boris Fonstein, Chicago, Ill. Liver tablets, corn plasters, etc.
 103,966—New World Ginseng Co., New York, N. Y. Ginseng used by Chinese people in the preparation of a tonic.
 103,969—William M. Paulson, Mawer, Saskatchewan, Canada. An ointment for piles.
 104,118—Leon Gawurin, New York, N. Y. Face powder, toilet powder, etc.

- 104,120—Henry E. Kendall, Shelby, N. C. Preparation for the treatment of rheumatism.
 104,132—Arthur J. Cole, Omaha, Nebr. Antiseptic cream for burns.
 104,269—Schering & Glatz, Inc., New York, N. Y. Ointment for burns.
 104,286—Matthew T. Moorehead, West Lafayette, Ohio. Ointment for ulcers, sores.
 104,288—Puritan Pharmaceutical Co., St. Louis, Mo. Hair tonic, skin cream, etc.
 104,623—Dewitt C. Ruscoe, Stamford, Conn. Preparation for the relief of malaria.
 104,934—International Pharmaceutical Co., Chicago, Ill. Stomach tablets.
 104,966—The Remiller Co., New York, N. Y. Creme (greaseless), hair tonic, nail polish, etc.

Published Sept. 25, 1917

- 103,916, 103,920 and 103,922—A. Bourjois & Co., Inc., New York, N. Y. Face powder and rouge.
 104,191—Innis, Speiden & Co., Inc., New York, N. Y. Phosphoric paste and phosphates.
 104,355—The Arlington Chemical Co., Yonkers, N. Y. Medicinal preparations on the order of the Bulgarian bacillus.
 104,363—Carrie N. Reider, Cincinnati, Ohio. Hair tonics.
 104,904—Bruno Kornau, New York, N. Y. Salve for boils, carbuncles, etc.
 105,323—The Roessler & Hasslacher Chemical Co., New York, N. Y. Materials carrying oxygen in available form for the generation of oxygen and peroxid of hydrogen.
 105,426—B. Heller & Company, Chicago, Ill. Dyspepsia tablets and laxative tablets.
 105,522—W. B. McVicker Company, New York, N. Y. Cleansing disinfectant and germicide.

Published Oct. 2, 1917

- 99,990—Henry Newton, Waterville, Wash. Ointment for cuts, sores, etc.
 103,457 and 103,458—Commonwealth Chemical Corporation, Hoboken, N. J. An inorganic acid salt used to take the place of tartaric acid and cream of tartar.
 103,682—Aubry Sisters, Inc., New York, N. Y. Extract perfumes.
 103,903—Chas. H. L. Orton, Pittsburg, Pa. Cough drops
 104,143—Giovannia Pizzo, Philadelphia, Pa. Medicinal compounds for malaria fever, asthma, etc.
 104,292—William W. Alexander, Manchester, Ohio. Preparation for sick headache.
 104,417—Sesame Pharmaceutical Corporation, Enid, Okla. Preparation for the sexual organs.
 104,640½—George Borgfeldt, & Co., New York, N. Y. Toilet powder.
 104,815—A. R. Pruett, Millen, Ga. Preparation for the kidneys and blood, and a pepsin compound.

INDIVIDUALITY IN WINDOW DISPLAYS

Few people who have had an opportunity to scrutinize the recent Nujol cut-outs in druggists' windows will fail to remember them. They possess artistic charm and commonsense advertising value to an exceptional degree. The coloring of the mother's gown in one of the most recent examples, and the smooth, cool tints of the background with its delightful still-life detail are unique among commercial cut-outs. It is safe to say that these latest Nujol displays give an individuality and strong attention compelling value to any druggist's window in which they are shown. They will certainly be seen as centerpieces in many Christmas windows.

ATOPHAN MADE IN U. S. A. NOW AVAILABLE

Following the announcement of Schering & Glatz, Inc., that they are now manufacturing and distributing exclusively genuine Anusol Suppositories and Problin Pills, manufactured in the United States, is the announcement that Atophan is now also available, being manufactured in this country on a sufficiently large scale to meet the entire demand. The re-appearance of this specialty on the market is being widely advertised to physicians, and in case druggists are unable to obtain Atophan promptly from their wholesalers, they can obtain it direct from Schering & Glatz, 150 Maiden Lane, New York.

PFAUDLER CO. ESTABLISH NEW BRANCH

The Pfaudler Co., manufacturers of glass enameled steel products, Rochester, N. Y., announce that they have recently established a branch sales office at 440 Pierce Bldg., St. Louis, Mo., in charge of George E. Gray, who has for some time been connected with their Chicago office. They also state that the agency for their products has been granted to C. M. Jackson & Co., 512 Gould Building, Atlanta, Ga.

RUBBER SUNDRIES FOR REXALL DRUGGISTS

The Seamless Rubber Co., New Haven, Conn., has made arrangements with the United Drug Co. of Boston, to manufacture rubber sundries for Rexall dealers exclusively.

THE DRUG MARKETS

IODINE AND IODIDES ADVANCED

Government's Need Influences Higher Prices on Chloroform—Mineral Acids in Strong Demand to Meet War's Requirements—Essential Oils Tending Upward.

NEW YORK, Nov. 23—The tone of the drug market has been firm throughout the month, the prices for many chemicals showing an upward trend, manufacturers advancing their quotations on a number of the wellknown staples. A feature of the market has been the sudden jump in the price of iodine, the announcement made by the London syndicate forcing American manufacturers to raise their prices about 25 per cent. The reason for the advance is not fully understood, but the result is seen when one looks at the quotations on all of the iodine preparations, particularly the iodides. Other important advances are noted for benzoic acid from toluol, the mineral acids generally, benzaldehyde, buchu leaves, caffeine, camphor, chamomile flowers, chloroform, codeine and its salts, diacetylmorphine, gentian, hexamethylenamine, Iceland moss, jalap root, metallic magnesium in ribbons, morphine and its salts, various essential and fatty oils, orris root, caustic potash in sticks, rosemary flowers, American saffron, bromides, roll sulphur, turmeric, vanillin and zinc chloride and oxide.

A downward tendency in prices is noted for acetylsalicylic acid, ammonia water of different strengths, benzonaphthol, powdered calamus root, bleached cardamom seed, cream of tartar, English digitalis leaves, elaterium, foenugreek seed, jaborandi leaves, lycopodium; naphthalene, flake or balls; spearmint oil, synthetic wintergreen, phenolphthalein, potassium bichromate, red potassium prussiate, resorcin, pale rose leaves, Tinnevely senna, sodium cacodylate, violet flowers and Levant wormseed.

OPIMUM—Quotations on usual druggist's quantities are unchanged, the demand being largely of a routine character. Jobbers quote \$30@32 for natural, \$32@35 for granulated and \$32@35 for U. S. P. powdered. Opium in warehouse Oct 1, amounted to 23,016 pounds, valued at \$417.82.

MORPHINE—A steady demand is reported and stocks are diminishing, prices having been advanced accordingly. All salts have been marked up as follows: Alkaloid, $\frac{1}{8}$ oz. vials, per ounce, \$20.50@21.55; acetate, $\frac{1}{8}$ oz. vials, per ounce, \$16.50@17.15; hydrobromide, $\frac{1}{8}$ oz. vials, per ounce, \$16.85@17.15; hydrochloride, $\frac{1}{8}$ oz. vials, per ounce, \$16.85@17.15; meconate, per ounce, \$18.20; sulphate, $\frac{1}{8}$ oz. vials, per ounce, \$16.55@17.15; in 1 oz. vials, \$16.50@17.05.

CODEINE—High prices of opium continue to effect the upward trend of this alkaloid, which jobbers now hold at \$14.55@15.80 per ounce. Salts of codeine are also higher, revised schedules for hydrochloride being \$13.15@14.45 per ounce, nitrate \$13.15@14.45, salicylate \$10.25@10.50, phosphate \$11@12.35 and sulphate \$11.70@13.05.

QUININE—Offerings are said to be light on account of scanty stocks. sulphate in 100-ounce tins being held at 83@85c per ounce, 5-ounce cans at 85@88c, and 1-ounce cans, 90@95c. Unless some new factor develops it is believed that the present prices will continue for some time.

GLYCERIN—Scarcity of stocks of both crude and refined, backed by an active demand, has continued to keep the market firm. C. P. bulk in drums or barrels is held at 72@73c; in cans, 74@75c, and less at 80@83c. It is stated that the uncertainty with regard to raw materials and the possible attitude the Federal Government may take toward this commodity in the future has caused buyers and sellers to hold aloof from speculative effort.

ALCOHOL—Market conditions have become steadier, and prices are notably lower than those of last month. Cologne spirit, 95%, U. S. P., being held at \$5.35@5.40 per gallon

by the barrel, and \$5.60@6.10 for less. Commercial, 95%, U. S. P., by the barrel, \$5.30@5.35 per gallon, and \$5.55@6 per gallon for less; denatured in barrels, 93c@1.15 per gallon. Wood alcohol is higher at \$1.45@1.55 per gallon in barrels.

CAMPHOR—All grades have been advanced, notwithstanding reports from Japan that the crop outlook is favorable. Refined is held at 79@87c per pound in bulk, and 79 $\frac{1}{2}$ @85c in $\frac{1}{4}$ -lb. squares; powdered, 88@93c, and Japanese, 78@85c, an advance of 2c per pound.

CHLOROFORM—Has been steadily advancing in price for some months, a government inquiry for 300,000 pounds further accentuating the situation. The demand is likely to continue and quotations are tending upward, with jobbers quoting 80c@1 per pound.

IODINE AND IODIDES—The jump in prices of iodine has been one of the features of the market during the past week, resublimed having been advanced to \$4.35@4.85 per pound. The exact reason for the advance is attributed to various causes, as lack of transportation facilities from the source of supply to the market, labor difficulties, rapidly increasing demand for war purposes in face of a possible shortage, small spot stocks in London, etc., the syndicate there having recently advanced prices. It is known also that the United States Government has been in the market for large quantities for use in the army hospitals, and this demand, in addition to an increased call for it in Europe has stiffened the market considerably. Following the advance in price of iodine, quotations have been moved upward for all iodine preparations, iodoform being held at \$5.10@5.65 for both crystal and powdered. Prices for the various iodides are quoted as follows: Ammonium, \$4.50@4.75; calcium, \$4.10@4.60; iron, 35@40c (per ounce); potassium, \$3.90@4.05; sodium, \$4.75@5; thymol, \$17.60@18.50 per pound, respectively.

BROMIDES—A revision of quotations on bromides shows an upward trend, jobbers asking 95c@1 for ammonium, \$1.20@1.30 for calcium; \$3.20 for lithium, \$1.55@1.75 for potassium, 60c@65c for sodium, and 90c@1 for strontium.

MINERAL ACIDS—All acids of this character are in a strong position, with supplies insufficient to meet the consuming demand, and prices are advancing. A strong market prevails with regard to sulphuric acid, manufacturers, it is understood, being far behind in their orders, since the Government is constantly absorbing the bulk of the production for war requirements. Commercial sulphuric acid, 60 degrees, in 160-lb. carboys has been marked up to 6 $\frac{1}{2}$ c per pound, while for less quantity 11@13c per pound is asked; C. P. is held at 15@17c. Commercial muriatic, 20 degrees, in 120-lb. carboys, is 5 $\frac{1}{2}$ c per pound, and C. P. hydrochloric, 16@18c. Nitric, 38 degrees, in carboys, is quoted at 12@13c per pound.

AMMONIA WATER—Shows downward fluctuations, and jobbing prices have declined to 9@10c per pound for 18 deg., 11@12c for 20 deg., and 12@17c for 26 deg. concentrated.

BENZALDEHYDE—This synthetic flavoring has been advanced to \$6@6.25 per pound; per ounce, 50@60c.

CAFFEINE—Scarcity of raw material and a strong demand continues for this basic substance, which has been recently advanced by jobbers to \$15.65 per pound; citrated, \$8.75@9.

BUCHU LEAVES—The long variety has been marked up to \$1.65@1.75 for whole, and \$1.80@1.90 for powdered. Short leaves continue at \$1.60@1.70 for whole, and \$1.70@1.80 for powdered, a steady but quiet demand being reported.

CHAMOMILE FLOWERS—All varieties are higher, Spanish having been recently advanced to 72@75c, and Roman or Belgian at \$1.65@1.75 per pound respectively.

COLCHICUM SEED—Has again been marked up, jobbers quoting \$4.30@4.40 per pound for whole, and \$4.40@4.50 for powdered.

CREAM TARTAR—A heavy demand is reported, with inside prices advanced to 4c for powdered, the range being 4c higher.

DIACETYLMORPHINE—Continues to advance, with jobbers quoting \$23.60@23.85 per ounce in 1/8-oz. vials for alkaloid, and \$21.45@21.70 per ounce for hydrochloride in 1/8-oz. vials.

ELATERIUM—Is lower at \$1.35@1.55 per ounce.

FENNEL SEED—All varieties are in scanty supply, war conditions in producing countries and difficulties in making shipments being largely responsible for the situation. The common variety is held at 80@85c, Saxon at 82@85c, and French at 25@30c.

FOENUGREEK SEED—Is in more plentiful supply, jobbing quotations showing a decline to 14@16c for whole, and 18@20c for powdered.

GENTIAN ROOT—Scarcity of available supplies has created a firmer market and prices have been advanced to 25@30c per pound for whole, and 30@35c for powdered.

HEXAMETHYLENAMINE—Increased demand and higher manufacturing prices have caused jobbers to mark up prices to \$1.15@1.25 per pound.

PHENOLPHTHALEIN—Increased production by domestic manufacturers has given an easier trend to the market, and prices have been reduced to 70@75c per ounce.

ESSENTIAL OILS—Difficulty in transportation and shipping, as well as a strong demand for various products in this category, have caused many quotations to advance, the more important changes being as follows: Caraway, \$10.50@11 per pound; cedar leaves, \$1.30@1.40 per pound; erigeron, \$2@2.25 per pound; peppermint, New York, \$3.85@4.40, Western, \$3.85@4.40; pine needle, \$5@7 per pound; rosemary, Trieste, 90c@1; sandalwood, East India, \$14@14.75; West Indian (Amyris balsam), \$11@11.60; sassafras, \$1.40@1.55; tansy, \$3.75@4. A decline in prices is noted for oil of spearmint, \$4@4.35 per pound being asked. Synthetic oil of wintergreen is also lower at \$1.10@1.15 per pound. Oil of ylang ylang has been advanced to \$1.50@1.75 per ounce.

VEGETABLE OILS—The demand for lubricating oils and fats for the various industries speeded up on account of the war has created a firm market for all commodities of this character, castor oil having been advanced to 32@38c per pound. Linseed oil, boiled, is quoted at \$1.81@2 per gallon, and raw at \$1.80@2. Whale oil is held at \$1.20@1.40 per gallon, and cottonseed at \$1.60@1.65.

POTASSIUM COMPOUNDS—The market is strong, commercial caustic being held at \$1@1.15 per pound, and white sticks at \$2.60@3. Bichromate is a little easier at 60@65c per pound, while fluoride has been advanced to \$3.90@4.05 per pound. Prussiate, red, is lower at \$3.60@3.85, while an advance is noted for prussiate, yellow, \$1.75@1.85 being asked.

RESORCIN—Pure white is in better supply, and prices are lower at 90@95c per ounce.

SILVER NITRATE—Notwithstanding the strong demand for bullion, the nitrate is in better supply, a revision of prices showing a decline, 70@72c per ounce for crystal now being asked; fused is also lower at 80@86c per ounce.

LYCOPodium—Is in more plentiful supply and the demand has fallen off, jobbers lowering their prices to \$2@2.25 per pound.

ANALGESIC BALM NON-GREASY

The Norwich Pharmacal Company, Norwich, N. Y., call attention to a comparatively new product they manufacture called Analgesic Balm Non-Greasy, which is put up in collapsible tubes, attractively cartoned, and is claimed to be a pain reliever of real merit. It is water-soluble and does not stain the clothing, possessing all the desirable characteristics of the greasy anodynes, without any of their disadvantages. In addition to these features, it shows a tidy margin of profit and is a repeater.

SERUM TREATMENT OF PNEUMONIA

Antipneumococcic Serum will be largely used during the coming winter. Pharmacists should therefore know the facts concerning Antipneumococcic Serum Polyvalent and Antipneumococcic Serum Type I.

The treatment of pneumonia with Antipneumococcic Serum is not new. The serum was first produced by the H. K. Mulford Company nearly twenty years ago and this serum was the first to be offered to the medical profession in this country.

Recent researches have shown that there are three different fixed types and a fourth group of miscellaneous pneumococci, all of which may cause pneumonia, with a varying mortality percentage. It has been shown that serum produced by injecting horses with any one of the three fixed types of pneumococci is not potent against pneumonia caused by the other types. Clinical reports show that pneumonia caused by Type I is most amenable to serum treatment while pneumonia caused by Types II and III does not respond to the same extent. In pneumonia caused by type I the mortality has been reduced about 75 per cent. by the use of serum.

It is impossible for a physician to know which type of pneumococcus is causing pneumonia unless he makes a laboratory diagnosis. This cannot always be done quickly. It follows therefore that a polyvalent serum, prepared by injecting horses with the three types of pneumococci simultaneously, and therefore, containing antibodies against these three types is the most useful in the emergency serum treatment of lobar pneumonia. This serum is standardized against Type I Pneumococcus by animal protection tests. One c. c. must protect against 500,000 fatal doses of Type I Cultures.

The H. K. Mulford Company has had on the market for some time such a polyvalent antipneumococcic serum which contains antibodies against Types I, II and III and is just as potent in its protective power against pneumonia caused by Type I as is the Type I serum which contains only antibodies against Type I. The administration of Mulford Polyvalent Antipneumococcic Serum should be commenced immediately upon diagnosis, for the patient is thus at once supplied with antibodies against three types. If laboratory diagnosis later shows the pneumonia to be due to Type I, it would still be of advantage to continue the polyvalent serum because it affords all the curative value possessed by the Type I serum, and in addition may guard against possible infections by Type II and III pneumococci. The H. K. Mulford Company furnishes both Polyvalent and Type I Antipneumococcic Serum, but it is clearly to the advantage of the patient as well as the physician to use the polyvalent serum. Information as to how the Mulford Serums are furnished both for curative and diagnostic purposes is found in the advertisement of this firm on another page.

NEW PRICES ON CALCIDIN FOR COLDS

A new Calcidin preparation recently put upon the market by the Abbott Laboratories, Chicago, is the Calcidin Troche, a large, deliciously flavored lozenge, to be dissolved in the mouth. Calcidin has been found efficacious in practically all acute diseases of the upper respiratory tract, and in the troche form it is particularly recommended as a medicament for children of all ages as well as seniors. New prices now effective are as follows: 1/2 grain tablets—100, 29c; 500, 78c; 1,000, \$1.35; 1 grain tablets—100, 40c; 500, \$1.33; 1,000, \$2.45. 2 1/2 grain tablets—100, 59c; 500, \$2.28; 1,000, \$4.25; 5 grain tablets—100, 83c; 500, \$3.28; 1,000, \$6.25. Pure powder, in 1-ounce packages, per package, 60c. Calcidin troches, 100, 57c; 500, \$2; 1,000, \$3.70. In Canada, customs' tariff must be added to prices quoted.

NO ADVANCE IN PRICE OF SANATOGEN

The Bauer Chemical Company, Inc., of 30 Irving Place, New York, successors to A. Wulffing & Company, wish to announce to the trade that there has been no advance in the prices of Sanatogen, the three sizes still being quoted at \$9, \$17.25 and \$33 per dozen. It has become necessary, however, for them to change the price of Formamint to \$4.50 per dozen bottles, with the usual trade discounts allowed.

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