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Vol. 23.	JANU	ARY 1916.		No. 1.
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	C.U.C.P. ALL		RNAL -	

Che new York College of Pharmacy

Columbia University

The S7th Annual Term of Instruction of this College, Open to Men and Momen, will begin on Monday, September 20, 1915.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

To graduates of this and other courses properly qualifying for advanced work, a Graduate Course of one year in the microscopical and chemical analysis of foods and drugs is open.

As a department of Columbia University, the College offers courses of three, four and six years, of three and a half days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board.

The Isaac Plaut Fellowship provides five hundred dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

With the session of 1915-1916, evening courses in Pharmacy, Chemistry and Microscopic and Pharmacognosy will be inaugurated in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN. Secretary, 115-119 West 68th St., New York City.

C. U. P. Alumni Iournal

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JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY

G. C. DIEKMAN

H. V. ARNY

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AN ANNOUNCEMENT.

With this issue the JOURNAL goes forth to meet its readers and friends under a new name and in a new dress.

While considering the change we were mainly influenced by the thought, that, the JOURNAL being the official publication of the Alumni Association should bear a name distinctive thereof.

The alumni of our college as well as its many friends are scattered throughout the country from Maine to California and it is our ardent hope and desire that the C. U. C. P. ALUMNI JOURNAL may become a potent factor in keeping all, wherever they may be, in touch with the College and its Alumni Association and their respective activities.

We ask our readers to note the several new features appearing in the current issue and promise that others are to follow.

Members of the College, graduates and undergraduates are requested to consider the JOURNAL as *their* publication and we hope that they will employ its columns at any and all times when they wish to discuss anything pertinent to the welfare of our College and the profession which it continually strives to place upon a higher and better plane.

A WORD ABOUT THE A. PH. A.

The remark that the American Pharnucceutical Association does not appeal to the overage retail pharmacist is heard much to often not to be taken suriously. One of the several reasons a lowneed is that "it is composed too largely of thigh brows " college professors, etc."

Only recently we heard a member make this selfsame statement. The speaker was one who had only a short time since retired from the presidency of a state pharmaceutical association upon the completion of an exceptionally successful administrative year. The association had hit, as many thought and said, a slump, the finances were in poor condition and interest walagging.

Quite a few of the speaker's friends criticized the organization, not at random and iconoclastically, but usually constructively, and, when the gentleman was chosen president, flocked to his support and assisted him in performing wonders in infusing new life and interest into the association.

No doubt there are others, realworkers not shirkers, active in divers pharmaceutical bodies, who hold similar views of the American Pharmateutical Association. If this be true it bodes the American Pharmaceutical Association no good and something should be done to disillusion the doubters and to induce them to become active workers in the ranks of the pioneer pharmaceutical association of our country.

OUR INFORMATION BUREAU.

The attention of our readers is called to the pages of the JOURNAL devoted to the COLLEGE INFORMA-TION BUREAU. From now on, this will become a regular feature, one that ought to prove of great value and interest to all pharmacists.

Through the liberality of the Trustees of the College the BUREAU was inaugurated last July. Much work and time has been spent on the preliminaries needed to prepare for efficient service.

Inquiries have been received continuously and have been answered usually with dispatch. We hope that our readers will remember that the BUREAU places at their service at very short notice the information to be gained in our comprehensive and well selected Library and hope that they will consult it regularly as often as needed.

NEXT MEETING

OF THE

ALUMNI ASSOCIATION

WILL BE HELD

Wednesday Evening February Ninth 1916.

BE A COG === MESH IN

A Plea for a Federation of Pharmaceutical Organizations By F. J. WULLING.

N. Y. C. P. '87.

It is with extreme pleasure that we publish this article by Dean Wulling of the University of Minnesota, a most distinguished alumnus of the College. Dean Wulling is president elect of the American Pharmaceutical Association and past president of the American Conference of Pharmaceutical Faculties

In his presidential address to the Conference at San Francisco, the writer treated exhaustively the direct and collateral needs of pharmaceutical education. As a means of unifying and strengthening all the varied and related pharmaceutical interests with a view to creating better things for each, he strongly advocated a union or federation of all existing pharmaceutical organizations. The following, an abstract of the address relating to the federation idea should be read by every pharmacist working for higher pharmacy.

Pharmaceutical organizations have greatly grown in number; all are doing more or less valuable work in their own particular sphere or locality, but until they all are linked and linked in some substantial and responsible way, the entire interests of pharmacy at large cannot be efficiently safeguarded and supported. Out of the present organizational heterogeneity must come some homogeneity so far as pharmaceutical purposes and so far as objects and means of achievement are concerned. This should seem reasonable and logical to any who give the matter thought, for all pharmacentical organizations have a community of genesis in their underlying practically identical purposes, be-

cause all were created out of the conmon desire to protect and increase the interests of pharmacy, from its local and simple to its national and complex aspects. Onr national development has reached a point where i-olation and independence may still be possible, but where they are unprofitable and foolish. Interdependence is a great privilege and advantage of which we of this higher civilization may be the beneficiary if we Interdependence brings so choose. strength, safety and comfort, and pharmacy is the rightful inheritor of these, but it must claim them and must fit itself to enjoy them. No organization can accomplish singly all that it should and therefore the sum total of the result of the work of all the separate or un-united organizations can never equal a hundred per centum. By their very nature all pharmaceutical organizations are related. If they would unite into a strong federation, each preserving its identity for its own local or particular purposes, but merging with each other heartily and unselfishly in some wise and consistent manner in all matters of comin n or national interest, all problems could be solved much more easily, quickly, efficiently and wisely. Our local, state and national government might

might serve as a pattern. City and county organizations and the state boards could become divisions of their respective state associations and these of the A. Ph. A. as the large central national body. Other national bodies such as the Committee of Revision, the National Association of Retail Druggists, the National Association of Boards of Pharmacy, the American Conference of Pharmaceutical Faculties, the National Wholesale Druggists Association, etc., could become departments of the A. Ph. A. corresponding to the various departments of our national government. This I have often advocated. It would require some determination, work and expense to bring about such a federation. but it surely would be worth while and would be the best investment pharmacy could make. Under a sufficient constitution based upon proper professional and ethical principles such a federation could accomplish things for pharmacy that are now simply impossible. While some may be skeptical about the practicability of the proposed federation, the fact is that it is already in the process of crystallization. For some years now the A. Ph. A., the A. C. P. F. and the N. A. B. P. have affiliated very closely and have held their meetings concurrently and at the same places and often have held joint meetings and frequently state associations have met with them. In quite a number of states the several county organizations are either intimately affiliated with the state associations or are divisions of them. So a fairly

large number of pharmaceutical traveling men's organizations are auxiliary to or closely connected with state associations, and the several state associations are already, though as yet only feebly, linked to the A. Ph. A. through the House of Delegates. Many state associations work with the N. A. R. D., either through membership or annual money contributions. Lately a congress of all national pharmaceutical bodies was suggested and committees are now in existence to report upon the advisability of such a congress. These are all indications that point to the consummation of a federation in the not remote future. A pharmaceutical organization is not a complete thing in itself; it needs every other related organization to complete itself as a division of the body pharmaceutic, a division best fitted to carry out specific purposes of the body of which it is a part.

A

DETECTION OF STRYCHNINE.

For this purpose, G. Guérin employs manganese carbonate, and claims that this reagent is more sensitive than the bichromate-sulphuric acid reaction, or the ammonium vanadate-sulphuric acid reaction of Mandelin and Wenzell, or the cerium oxide-sulphuric acid reaction of Sonnenchein. According to Guérin the suspected substance is treated with 2 to 3 drops of sulphuric acid, and from 2 to 3 milligrammes of manganese carbonate added. With strychnine a blue color, changing to violet and finally red is obtained.

SULPHIDES IN LIME WATER.

Jeannot Hostmann. N. Y. C. P. '96.

"Why does lime water when mixed with aspirin give off hydrogen sulphide?" This query came to the "Information Bureau" and for the time seemed to be a real "nut" to crack. Investigation brought forth the following:

A prescription calling for aspirin, enquinine, mucilage of acacia and water was presented to the pharmacist. In dispensing same, not having any mucilage of acacia on hand, he used powdered acacia and after triturating the dry drugs added the required amount of lime water. While triturating he noticed an odor suggestive of hydrogen sulphide.

Quite puzzled he proceeded to mix the ingredients separately, and by elimination traced the trouble to the mixture of the aspirin with the lime water.

When consulted I asked for samples of the two ingredients used and found the facts to be as above stated. Chemical examination of the aspirin proved it to be a good sample and when mixed with line water taken from the laboratory shelf no odor of hydrogen sulphide was noticeable.

Examination of the dispenser's lime water disclosed a rather peculiar impurity. Upon acidifying with hydrochloric acid hydrogen sulphide was immediately liberated.

When the querist was informed of my results he was both surprised and indignant as he had prepared his lime water according to official directions from a standard lime. Having satisfied himself that my diagnosis was the correct one and I having pleaded ignorance as to the possible cause, he sought for the latter and found it to be rather an unusual one.

Like many other pharmacists he made use of a two-bottle system for making and storing his lime water, using rubber tubing for syphoning. The particular kind of tubing, of the red variety, proved to be the crux of the situation. Examination showed that some lime water, having been retained in the tubing, appeared to be slightly discolored. and when some of the tubing was placed in lime water for a period of twentyfour hours, not only did the latter become contaminated with sulphide, but the tubing lost its beautiful red tint due to the fact that all of the antimony sulphide, with which it had been colored. was found on the bottom of the beaker.

I do not know whether all red rubber tubing would act in similar manner, but would suggest to pharmacists that when using rubber tubing in connection with their line water containers they first satisfy themselves that the former will not be attacked by the latter.

A

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address II, C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, III.







At the College meeting, held January 18, Professor Homer S. Pace spoke on "Business Training for Pharmacy Students," outlining a complete course of instruction in pharmaceutical accounting, salesmanship, etc., adaptable for Colleges of Pharmacy.

An outline of the work accomplished so far this year in this course as given at the New York College of Pharmacy as well as that to be given later, is given in the following tabulated form.

The following subjects are prescribed, among others, by the State Board of Examiners in Commercial Pharmacy for the State of New York (pages 152 to 155, Pharmaceutical Syllabus). The Syllabus states : "Thus, when this period (July 31, 1916), is reached, the graduates of the schools shall have been prepared in the subject matter upon which the boards are expected to examine them." Of these, the following have been given :

BOOKKEEPING. Necessity of proper books of account; theory of bookkeeping, single and double entry; practical bookkeeping, ledger, cash book, journal, supplementary books; balance sheet, profit and loss statement, statement of cash receipts and payments, statement of income and expenditure, statement of cash reconciliation.

STOCK. Purchase; ordering; value of discounting bills; inventory; pricing of goods. BANKING. Commercial banks; deposits; withdrawals; loans.

CHECKS. Deposits; returned checks; necessary reconciliations (as used in connection with Cash Book).

BUSINESS ORGANIZATION. Three basic forms—sole proprietorship, partnership, corporation, generally. These forms to be considered more fully later.

The following subjects prescribed by the Board constitute the work for 1916:

Week of Jan. 4:

CHECKS. Economic nature; legal phases; certification; endorsement; forgery; raising; restrictive obligations of bank and of depositor.

Weeks of Jan. 11, Jan. 18, Jan. 25:

CONTRACTS. Definitions: nature and requisites of contracts in general; essentials of contract; parties; offer and acceptance; consideration; legal subject matter; time; interpretation of contracts; discharge of contracts.

BILLS AND NOTES. Distinction between assignment and negotiation; essentials of negotiable instrument; definition of a holder in due course; liability of endorsers; protest; advantage over open account.

Week of Feb. 8:

AGENCY. Principal and agent; form of authority; ratification; rights and lia-

bilities of principal and agent; rights and liabilities as to third persons.

Week of Feb. 15:

PARTNERSHIP. Common law partnership; formation of partnership; rights and liabilities of partners; dissolution of partnership; limited partnership.

Weeks of Feb. 24 and 29:

CORPORATIONS. Formation; capital stock; rights and obligations of stockholders; comparison of partnership and corporations.

Week of Mar. 7:

REAL PROPERTY. Methods of acquisition; deeds; wills; dower; curtesy.

Week of Mar. 14:

PERSONAL PROPERTY. Tangible and intangible; good-will; patents; trade marks.

Week of Mar. 21:

SPECIAL CONTRACTS RELAT-ING TO PROPERTY. Bailments; common_carriers; sales.

Week of Mar. 28:

INSURANCE. Nature of the contract of insurance; insurable interest; premium; subrogation; kinds of insurance.

Weeks of Apr. 4 and 11:

BANKRUPTCY.

Weck of Apr. 18:

BUSINESS PRACTICE. Location of the store; new stand or established business; necessary capital; form of capital; amount of capital.

UI IDFR SPADUATE

1917.

The very spirited election of class officers recently held resulted as follows:

President—D. Schneiderman. Vice-President—J. 11. Wildman, Secretary—Miss A. Adams. Treasurer—H. N. Cool. Historian—R. Montani Reporter—M. D. Miller.

New Club Formed.—One of the outgrowths of the get-together spirit of the class was the formation of the Columbia R Club. Dr. L. N. Brown has been elected faculty advisor. The membership is limited to forty.

Class Dance.—President Schneiderman has appointed a committee to arrange for the Class Dance to be held during the third or fourth week of February.

Pharmaceutical Accounting.- Ours is the first class receiving this very valuable instruction and according to the expressed views of the instructors the majority of the members are taking hold of the subject with the proper spirit. When the subject of contracts was being studied the instructor in charge voiced his surprise and gratification over the very thorough description of the legal phase thereof handed in by one of the students. Investigation brought to light that the young gentleman had spent an entire evening at the Public Library This is getting the necessary data. simply one of the many instances that go to prove that the students realize the importance of the subject

M. D. MILLER.

THE COLLEGE LIBRARY AND ITS ACTIVITIES.

By Adelaide Rudolph, Assistant Librarian.

With an increase in the staff, and someone in attendance throughout the day, the Library assumes, this year, an appreciable book and reading-room air. While it is not, for obvious reasons, thought advisable to subject copies of the pharmaceutical journals, which are to be bound, to the wear and tear of constant handling, yet there are enough duplicates contributed by generous editors and College of Pharmacy professors to make a good showing on the library tables and to encourage the journal-reading habit. This new order of things seems to be duly appreciated by the students.

Speaking of pharmaceutical journals brings to mind the importance to any library, which is used by those engaged in research work of a scientific or technical character, of complete sets of periodical literature in the technical subjects involved. In this respect the College of Pharmacy has a goodly heritage, handed on by such beneficent and discriminating founders and promoters as Dr. Charles Rice and Dr. Virgil Coblentz.

Some one was reparking not long ago, how well and to what a high standard the necessarily small collection of chemical books and periodicals had been kept up under Dr. Coblentz's administration. This was brought out by comparison, during a visit to one of the most important and well-stocked technical libraries of the city, when the writer was working with Dr. H. V. Arny on the chapter-end bibliographics for his forthcoming revised edition of the "Principles of Pharmacy" (which, by the way, ought to be a real boon to those who know by experience the irksomeness, because of the lack of general indexes, of finding material on a given subject in the pharmaceutical journals). When it became apparent that the aforesaid technical library was afflicted also with broken sets of periodicals, and that the volumes that had been missing from the C. of P. library were not to be found here, there was a simultaneous expression of restored confidence in and respect for our Pharmacy College library.

As a matter of fact, this library is considered, as it ought to be, the final and exclusive court of appeal in New York City for research questions of a pharmaceutical character. In no other library, open to the public, is to be found a complete set of the American Journal of Pharmacy, dating from 1825, or of the Pharmaceutical Journal, from 1841. Also, the Journal de pharmacie et de chimie is complete, together with its predecessors, the Bulletin de pharmacie and the Journal de pharmacie et des sciences accessoires, from 1809 to date, except for the incomplete volume for the latter half of 1801, and a gap between the years 1893 and 1906, which is often embarrassing to our own research work. if not to the reputation of the Library outside.

We might note for our own satisfaction, though not as an exclusive possession, a complete set (1859 to date) of bound volumes of The Chemist and Druggist, and of The Chemical News covering the same period of time. The

use of the latter is considerably hampered, however, by the exasperating lack of the fifty-year index, which somebody one day, "unbeknown" to the authorities, took home with him and never brought back.

The set of invaluable . Innalen der Chemie und Pharmacie has been made complete from volume 79, 1851, to date, by one of the unassuming gifts for which Mr. Ernest Stauffen is noted among the College of Pharmacy trustees and friends generally. He supplied last year the twenty-eight double volumes missing between 1850 and 1873. that is, vols. 100-164. Of course, for the Library to own the first seventyeight volumes, which Baron Justus von Liebig began publishing in 1832 under the title, "Annalen der Pharmazie," is the great desideratum of our research workers along chemical and pharmaceu-But—for that—we tical lines. shall have to wait until after the War!

A considerably longer list might be given, and possibly will be given later. of periodical literature more or less complete, possessed by the Library, which may well be regarded with pride by the Alumni, and possibly also will be suggestive of what might be, from old students or other well-wishers so inclined, a graceful and well appreciated souvenir of remembrance of the "good old days," and an energizing reminder that the new days need a better equipment of books, as well as other apparatus, if pharmaceutical scholarship keep pace and rank with other scientific professions. Anyway, a list of such wants will gladly be supplied from the Library upon individual application.

Speaking of *pride*—lest all the alumni may not have seen a news item in the

Practical Druggist for October, 1015, it is printed below:

"The library opens this year with an exhibition of pharmacopoeias- the United States Pharmacopocia of 1820 with its eight later editions and the ninth decennial revision in advance sheets, together with its forerunners, Dr. Brown's Repertory and the Pharmacopoeias of Massachusetts Medical Society the (1808) and of the New York Hospital (1816); also a copy of the American Homoeopathic Pharmacopoeia, and the pharmacopoeias of seventeen foreign countries in their respective languages. Among the latter one notes with satisfaction the pharmacopoeias of Greece. Russia and Japan in their native dress."

With such an illustration at hand, Dr. H. M. Whelpley's article in the December number of Meyer Brothers' Druggist on the United States Pharmacopoeia becomes doubly interesting. He says, that there are "twenty-three such authorities of national character now in use."

If all of these do not appear in the show-case, which displays the exhibit, students will find more on the shelves. If not, that omission may stimulate inquiry which will lead to further reading on the subject.

As a matter of fact we do possess the pharmacopoeias in various editions of twenty-six different countries, not all official at present, however; and—well that reminds us that we must put down immediately on our "want list" the Rumanian and the two South American pharmacopoeias which we lack, so that no alumnus of the College of Pharmacy shall suffer in his pride because the pharmacopoeial collection is not as good as any other in the land.

HERMANN HAGER'S CENTENARY.*

By Otto Raubenheimer.

N. Y. C. P. '88.

llistory of pharmacy is one of the sadly neglected subjects in our present pharmaceutical education. The sooner the apprentice and student becomes acquainted with pharmaceutical history, more love for professional pharmacy will be acquired, and with more enthusiasm will be carry on his daily work. As professor of history of pharmacy in one of our colleges, the writer had occasion to collect many data, to chronicle many events, and to compile many biographies of men who have greatly helped in the evolution of pharmacy, men to whom pharmacists should forever be thankful. January 3d, 1916, marks the centenary of the birth of one of these men, who in my mind occupies the highest rank among the "masters of pharmaey." Dr. Hans Hermann Julius Hager, or as he is generally and simply called. Hermann Hager, was born in Berlin on January 3d, 1816, the son of an army physician and surgeon. Dr. Johann Heinrich Hager. He passed his maturity examination at the high school in Brandenburg on the Hayel, where his father was stationed as physician to a regiment. On April 1st, 1832, young Hager entered the profession of pharmacy in the Loewen-Apotheke (Lion Pharmacy) at Salzwedel. Even as apprentice he showed his literary ability by writing several poems and a treatise *Druggists Circular.

on "Stoichiometry." Without going to the university, Hager passed his board examination in Berlin in 1841, with the mark "very good."

In 1843 he bought the Stadtapotheke in Fraustadt, where he devoted seventeen of the best years of his life to professional and literary pharmacy. Poor and unknown, like Karl Wilhelm Scheele, and assisted only by an apprentice. Hager labored long and lovingly in the service of pharmacy and became one of its "masters," if not the "master." He sold his pharmacy in 1860 and moved to Berlin, the center of German sciences, even at that time, so as to devote himself to his literary work. as the opportunities for original research and writing were much better in the capital of Prussia than in the country village.

On July 1st, 1859, Hager founded and during twenty years edited the *Pharmaceutische Centralhalle*, a weekly journal devoted to the scientific and commercial interests of pharmacy, which is still one of the leading pharmaceutical journels in the world. In 1860 he established the Pharmaceutische Kalender, which he published annually during nineteen editions. This calendar and note-book is still extensively used by German pharmacists.

From 1871 to 1881 Hager lived in his country home, "Pulvermuehle" (Powder

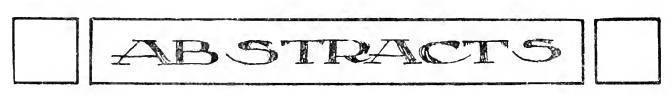
Mill), situated (or, better, isolated) in the pine woods near Fuerstenberg on the Oder, devoting himself to chemical and pharmaceutical studies and to literary work. He then moved to Frankfurt on the Oder, and in 1806 to Neu-Ruppin, where he died on January 24th, 1807, at the ripe age of eighty-one years. Small was the number which attended his funeral, unpretentious is the stone on his grave, but high and everlasting is the monument which Hager has erected for himself in his literary works and his many books on pharmacy.

Among the numerous books from the brain and pen of Hager, I call especial attention to his masterwork, the "Handbuch der Pharmazeutischen Praxis." Since its first edition in 1880, this work, which now comprises three stately volumes, has had a larger circulation, perhaps, than any similar pharmaceutical book. It has also been translated into Russian, and the German edition may be found in professional pharmacies throughout the world. This classic work is not only a universal pharmacopoeia, but also a ne plus ultra reference work in all branches of pharmacy.

Numerous honors have been bestowed upon Hager. The philosophical faculty of the University of Jena conferred upon him the degree of Ph. D., and the medical faculty of the same university granted him the honorary degree of M. D. He was elected an honorary member of many pharmaceutical societies and colleges, including the following in the United States: The American Pharmaceutical Association, the New Yorker Deutscher Apotheker Verein, the Philadelphia College of Pharmacy, the Chicago College of Pharmacy, and the Massachusetts College of Pharmacy.

CHOLEVAL.

Choleval is a colloidal silver preparation in which the sodium salt of the bilary acids is employed as the protective colloidal agent. It is said to be the most stable of all colloidal silver preparations. It is marketed in the form of histrous, dark-brown, almost black, and odorless lamellae or plates. It is very soluble in water, the solution possessing a faintly alkaline reaction. It contains 10% of silver. It is practically insoluble in alcohol. Identity reactions: If 0.1 gm. of choleval is dissolved in 5 cc. of water, and if to 2 cc. of this solution, 10 cc. of concentrated sulphuric acid are added, a reddish-brown solution results, which shows a green fluore-cence in reflected light. The addition of a few drops of cane-sugar solution, changes the color to deep-red. The addition of hydrochloric acid to a solution of choleval results in the formation of a brown precipitate. Choleval, heated in a testtube, emits an odor resembling that of burning hair. Choleval is said to be a very valuable agent in the treatment of acute, subacute and chronic gonorrhoea. The presence of bile acid salts is said to enhance its value in this disease to a great extent. Comparative bacteriological experiments have shown that choleval completely sterilized gonorrhoeal pus in the period of 10 minutes, while silver albumose required 60 minutes to accomplish the same result. Both preparations were used in 1:100 solution.



Conducted by Prof. George C. Diekman.

The Detection of Kapok Oil (Kapokoel).

This has lately become an important article of commerce, and is said to possess food value. The resorcinbenzol reaction of Beltier shows negative results. The Halphen reaction is positive, as in cotton-seed oil, even more intensified, as small amounts as 0.50% can be detected with ease and certainty.

A. Besson (*Chem. Ztg.*, 39-1915-982) reports on a method for the differentiation between cotton-seed and kapok oils by means of the Millian method, as follows:

A chloroformic solution of the oil is treated with a 2 per cent. solution of silver nitrate in absolute alcohol. Kapok oil at once assumes a deep coffee-brown color, while cotton-seed oil assumes a much lighter brown color, and this only after a lapse of time. The quantity of oil employed and the quantity of the alcohol solution of silver nitrate added must be carefully controlled.

The same test applied to the fatty acids obtained from cotton-seed and kapok oils respectively respond to this even more readily than do the oils, 0.10% of kapok oil being detected with certainty.

Aqua Chloroformi Mentholata.

 The menthol is dissolved in as much chloroform as is required to make 50 gm. of chloroform water. The distilled water and peppermint water are then added, in portions, with vigorous shaking.

Valuation of Rhubarb.

A. Tschirch and M. Ruzzkowski, report upon the value of samples of rhubarb obtained from the Altai mountains. They succeeded in isolating the following named bodies: (1) The glucoside rhaponticin, which upon hydrolysis splits into d-glucose and rhapontigenin. (2) Methoxy chrysophanic acid, melting point, 175°. This acid was decomposed into chrysophanic acid and emodin monomethyl ether. (3) Emodin, possessing a melting point of 250°. (4) Two glucoside groups, (a) Tanno-glucoside and (b) Anthraglucoside. Oxidation of these resulted in the production of rheum-red and rheonigrin. (5) dglucose. Valuation of these samples of rhubarb by the Tschirch method showed the presence of 3.20% of oxy-methyl anthrachinon, and they therefore meet all requirements.

Volatile Oil in Cacao Beans.

S. If. Davis and J. S. Bainbridge made investigations concerning the volatile-oil content of cacao beans. From 2 kilos of the beans, by steam distillation, they succeeded in obtaining 24 cc. of volatile

oil. This, upon examination was found to consist chiefly of d-linalool. The presence of a fatty acid and a very small amount of a nitrogenous body was also ascertained.

The Detection of Very Small Amounts of Nitrites in Potable Waters.

For this purpose L. Rosenthaler and V. Jahn recommend the indol reaction of Dane.

The reagent employed consists of a solution of 0.02 grammes of synthetic indol in 150 cc. of 95% alcohol; from 3 to 5 cc. of this reagent, together with 1 cc. of 50% sulphuric acid, are added to 100 cc. of the suspected water. In the presence of nitrites, a blue-red color appears after the lapse of one minute. In presence of minute traces of nitrites the color change will be pale violet, and its appearance will be delayed. Experiments have shown that the presence of ammonium salts. iron, manganese or nitrates do not interfere with the reaction. In total absence of nitrites the reaction is negative, even in presence of the substances named. The reagent is fairly stable. After a lapse of four months the reagent was still found to be reactive.

≁ NEW REMEDIES.

Chinocol. Under this name tablets are marketed, each of which contains 0.15 gm. of quinine sulphoguaiacolate and 0.15 gm. of fluidextract of piscidia erythrina. These tablets are claimed to of value in the treatment of tuberculosis.

Eudulsan is the name given to tablets claimed to be of value in the treatment

of the various forms of diabetis. C. Mannich has endeavored to ascertain the composition of these tablets, but has not been able to isolate any constituent which might be said to possess properties able to combat the disease for which the tablets are recommended. Mannich finds plant extracts to which about 30% of inorganic material, consisting mainly of magnesium silicate, has been added Lecithin was also found to be present.

Glanduitrin-Tonogen contains in each cc. 0.2 gm. extract of pituitory gland, and 0.0005 gm. of adrenalin. The preparation is claimed to be useful in the treatment of asthma.

Atoxikokain according to Dr. Hans Brun is to be considered as the following: p-amino-benzoyl-di-ethyl-aminoethanol-chloral-hydrate. It therefore is practically identical with novocaine.

Sapoten. This name is given to solution of tar-oil in resin soap, which when mixed with water turns milky. It is claimed to be a non-poisonous, nonirritating disinfectant. In 3 to 5% solutions, it is said to possess the properties of a deodorizer and disinfectant. It may be described as a clear-dark-brown liquid, possessing a tarry odor. Its specific gravity is 1.030 to 1.050. Saporen mixes readily with equal parts of ether or petroleum benzin. and is miscible with alcohol in any proportion, forming practically clear solutions. 5 parts of saporen mixed with 05 parts of water produces a milky solution. possessing a mildly alkaline reaction. It contains about 20' of coal tar constituents.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a self-addressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Introduction.—In inaugurating the queries department of the JOURNAL which will be conducted each month under the heading given above, it is only necessary to state that on the pages devoted to the department the answers to the more important questions submitted to the Information Bureau will be given. Because of the large number of queries coming in, at the present stage of the JOURNAL, space cannot be given all of the answers and a selected list is therefor found below.

Spiritus Balsamicus.—R. K., New York.—This is a synonym for "baume de Fioraventi," the recipe for which is as follows:

Balsam of Peru Oil of turpentine Oil of cloves Oil of juniper Oil of mace Oil of thyme of each 15 minims. Alcohol I pint

Halphen's Reagent.—B. O. C., New York. This reagent used in the sensitive and reliable test for the presence of cottonseed oil in olive oil devised by Halphen (*J. Soc. Ch. Ind.*, 16-1897-1045) is prepared by mixing equal volumes of anyl alcohol and carbon disulphide and dissolving in the mixture I per cent. of sulphur. When this reagent is mixed with an equal volume of the oil in question and the fluid is heated in a boiling brine-bath for from ten to fifteen min-

utes a red color is produced when cottonseed oil is present.

Mistura Ferri Aperiens.—R. J. F., New York.—The following recipe for the above named preparation is in the "Pharmacopoeia of the Philadelphia Hospital" (*Proc. A. Ph. A.*, 40-1001-581).

Ferrous sulphate 0.65 gramme Magnesium sulphate 4.00 " Diluted sulphuric acid 0.5 cc. (mil) Syrup of ginger 4.0 " Infusion of quassia

enough to make 15 cc. (mils) Dose.—One tablespoonful.

Rhubarb and Soda Mixture without Glycerin.—T. J. B., New York had a German prescription calling for "Mixtura rhei et sodae sine glycerin" and turns to us for help. We suspect that the doctor desired the unofficial infusion of rhubarb employed in Germany which has the following recipe:

Infusion of rhubarb (8:175)

175 grammesSodium bicarbonate10Oil of peppermint3 dropsSyrup enough to make 200 grammes

The Composition of Proprietary Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association. "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Lotio Alba. S. R. M., New York, A recipe by Otto Raubenheimer for this preparation appearing in the *Journal of* the *American Pharmaceutical Associa*tion for 1914, p. 662, is as follows:

Zine sulphate 5 grammes Sulphuretted potassa 5 " Rose water

enough to make 125 cc. (mils) Dissolve each chemical in 60 cc. (mils) of the rose water, pour the filtered potassa solution into the filtered zinc sulphate solution and then add the rest of the rose water.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted.

Liquor Carbonis Detergens.--O. B., New York.-In the Real Encyklopaedie der Gesammten Pharmazie, there is a recipe for this preparation directing that it be made by mixing one part of purified coal-tar with two parts of tincture of soap bark. In the forthcoming edition of the National Formulary there will be a recipe for a similar preparation under the name liquor picis carbonis.

Names of Manufactures. We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Haine's Solution.—R. B., New York. —This modification of the copper solutions used in testing urine for glucose is prepared according to Cohn's "Tests and Reagent's" as follows:

Copper sulphate	2	grammes
Glycerin	20	
Potassium hydroxide	0	* *
Water	175	* *

Cathartic Acid Assay.-E. M. S., Ohio.--.According to Aweng the assay of cathartic acid in senna can be performed as follows: Upon 50 grammes of cut senna leaves 50 cc. (mils) of boiling water are poured and the mixture is heated on a water-bath for one-half hour. The infusion is then strained, and is mixed with an equal volume of 96% alcohol and is then filtered from the precipitated mucilage. The filtrate is evaporated to about 50 cc. (mils) on a water-bath at 80° and is mixed with 200 cc. (mils) of absolute alcohol. The fluid is filtered from the copious inert precipitate and evaporated to dryness at 105°. Aweng states that this product contains two anthraquinone glucosides.

Tschirch recommends that the assay of senna as well as other anthraquinone drugs be performed by use of his colorimetric method in which the color of the purified infusion of the drug treated with diluted alkali be matched against a standard alkaline solution containing one part of emodin to one million. For details of the assays we refer our querist to the Aweng paper (.4p. Zt. 16-1901-829) and to the article by Tschirch and Hape (Arch. d. Phar. 238-1900-429) both of which are in the College library and will be translated, if desired, by the library staff at rates which will be furnished on application.

Tincture of Green Soap.—R. H., New York, desired the recipe for tincture of green soap of the German Pharmacopoeia. This recipe follows:

Potassa soap

Alcohol equal parts

The potassa soap of the present German Pharmacopoeia is a linseed oil soap of about the same composition as the soft soap of the United States Pharmacopoeia. Hebra's original tincture of green soap was prepared from a rape seed oil soap and the recipe, according to Hager's "Handbuch der pharmaceutischen Praxis," was as follows:

Green soap Alcohol Spirit of lavender

of each 35 grammes

Toxicity of Carbon Tetrachloride.— J. E., New York,—In an old reference to carbon tetrachloride (*Proc. A. Ph. A.* 16-1868-207) it is stated that the chemical is more toxic than chloroform.

Fothergill's Tonic Mixture.—R. H., New York.—According to *Pharmacentical Formulas*, Fothergill's Tonic Mixture has the following recipe:

0	
Quinine sulphate	16 grains
Diluted hydrochloric acid	enough
Solution of strychnine (B.P.) 2 drams
Potassium citrate	J 1/2 **
Tincture of ferric chloride	5 ``
Syrup	I ounce
Water enough to make	4 ounces
Dissolve the animine subth	ate in one

Dissolve the quinine sulphate in one ounce of water with the aid of diluted hydrochloric acid; then add the other ingredients in the order named.

Solution of strychnine B. P. contains I per cent. of strychnine alkaloid dissolved by the aid of hydrochloric acid.



ALUMNI NEWS

THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1915-1916

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Registrar CURT P. WIMMER 115 West 68th Street, New York City						
Executive Board						
Term expires 1916						
Term expires 1917						
Term expires 1918						
* Deceased						

Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

MINUTES OF ALUMNI MEETING HELD WEDNESDAY EVE-NING, NOV. 10th, 1915.

President Hostmann in the chair.

Present: E. H. Hecker, '08; E. J. Kodet, '14; F. A. Leslie, '04; B. Maslon, '13; V. Orefice, '15; H. H. Schaefer, '12; B. H. Schubert, '06; J. A. Steffens, '08; E. C. Steinach, '00; A. Vorisek, '98, W. Taylor, '13; L. Roon, '10.

The minutes of the previous meeting were adopted as read.

Treasurer's Report: The October report was re-read, and upon a motion made, seconded and carried, it was received with thanks and ordered spread upon the minutes.

Entertainment Committee reported progress.

Registrar's Report : Registrar absent.

Under new business, considerable discussion took place concerning the present condition of the New York Journal of Pharmacy, and ways and means for its improvement.

This discussion resulted in the suggestion that a special meeting of the Executive Board be called on the evening of November 24th, 1915, for the purpose of taking up in detail the Journal matter.

Election of new members: Applications of the following were received, duly considered and the applicants elected to membership: Miss Frances P. Godduhn, '12; J. P. Kaufman, '15; S. Levin, '15.

The following bills were presented and ordered paid:

Schwebke and Knerr, for notices..\$7.50 C. G. Braxmar Co., for medal..... 5.50 Treasurer's account..... 2.50

Motion was made, seconded and carried that an informal smoker be held in connection with the December meeting, expenses not to exceed \$15.

Motion was made, seconded and carried to adjourn.

Leo Roon, Secretary.

MINUTES OF THE EXECUTIVE BOARD MEETING.

Held in the Alumni Room on Wednesday evening, November 24th, 1915.

President Hostmann in the chair.

Present: E. H. Hecker, '08; E. C. Steinach, '00; H. H. Schaefer, '12; J. A. Steffens, '08; M. H. Weil, '10; J. Weinstein, '06; C. P. Wimmer, '02; L. Roon, '10.

Meeting was called to order at 8.45 P. M.

Before taking up the matter of the New York Journal of Pharmacy, Dr. Wimmer was asked by President Hostmann to inform the Executive Board as to his plans for the publication of the Journal for the coming year. Dr. Wimmer related his experiences with the Journal during the two-year period of his editorship, and then told of his plans for increasing the circulation and scope of the Journal, provided he could obtain the services of Mr. Ridal as associate.

Vice-President Steffens was called to the chair by the President; President Hostmann on the floor.

Discussion: Dr. Hecker asks Dr. Wimmer if the Journal, under those conditions, would continue to exist as the official organ of the Alumni Association.

Mr. Hostmann offers to take over the editorship of the Journal, and to make it the official organ of the Association.

Dr. Weinstein suggests that, since there are two applicants for the editorship, the position be awarded to the candidate that will offer the best service to the Association and to the Journal.

Dr. Weil states that after hard work he got four subscriptions to the Journal. This, indicating that there is no demand for it, he suggests that the publication of the Journal be discontinued.

Motion was made, seconded and carried that the publication of the Journal be continued; Dr. Weil voting negatively.

Motion was made, seconded and carried that the awarding of the editorship be voted on by secret ballot.

Both Dr. Wimmer and Mr. Hostmann signified their satisfaction and willing-

ness to edit the Journal for a period of one year, gain or loss in the transaction being theirs; and also, to sign an agreement mutually satisfactory to the Association and the editor-elect.

The nomination of Dr. Wimmer as editor of the Journal was made and seconded.

The nomination of Mr. Hostmann as editor of the Journal was made and seconded.

Election by secret ballot proceeded. The secretary, acting as teller, reported the following result:

Present—10 members.

Ballots for Mr. Hostmann	5
Ballots for Dr. Wimmer	2
Not voting	3

Motion was made, seconded and carried that Dr. Wimmer be accorded a vote of appreciation and thanks for his services as editor of the New York Journal of Pharmacy.

Vice-President Steffens appointed Drs. Leslie and Weil a committee for the drawing up of the agreement between the Association and the editorelect.

Motion was made, seconded and carried to adjourn.

> Leo Roon, Secretary.

MINUTES OF THE ALUMNI MEETING HELD WEDNES-DAY EVENING, DEC. 8th, 1915.

President Hostmann in the chair. Present: S. Feigin, '15; L. W. Geisler, Jr., '94; J. H. Hecker, '08; H. A. Herold, '94; S. Levine, '15; B. Maslon, '13; J. W. McKeown, '11; V. Orefice, ^{'15}; H. H. Schaefer, ^{'12}; B. H. Schubert, ^{'06}; N. A. Smedira, ^{'15}; J. A. Steffens, ^{'09}; A. J. Taddonio, ^{'15}; W. Taylor, ^{'13}; Watters, ^{'13}; J. Weinstein, ^{'06}; E. Windt, ^{'13}; A. Ziperowitz, ^{'14}; L. Roon, ^{'10}.

There being no objection, the reading of the minutes of the previous meeting was dispensed with.

The minutes of the last meeting of the Executive Board were read in order to acquaint the members present of the business which transpired at that session of the Board, especially that portion dealing with the new disposition of the Journal contract for the coming year. According to the constitution, ratification by the Association of the action of the Executive Board is not necessary.

Treasurer's Report: Treasurer absent.

Registrar's Report: Registrar absent. In the absence of the Registrar, the President reported the death of Dr. Anton Vorisek, Professor of Analytical Chemistry at the College and member of this Association since 1898. The President gave a brief sketch of Dr. Vorisek's life and of his services to the College and the Alumni Association.

Motion was made, seconded and carried that a committee be appointed to forward a letter of condolence to the family of the deceased, and to draw up a suitable set of resolutions. This was amended to the effect that, in addition to the above, a page be set aside in the minutes to the memory of Dr. Vorisek.

There being no further business, the meeting turned over to the Entertainment Committee, which had arranged for a short, informal smoker.

> LEO ROON, Secretary.

The first informal smoker of the season held on December 8th, 1915, immediately after the business meeting was well attended. The smokes and jokes were plentiful. Messrs. Brennan, Johnson, Larson and Genung of the College Orchestra entertained with numerous selections.

Chairman Roon called upon several of the older members who responded with interesting reminiscences and suggestions for the future. The members were honored by the presence of three former presidents, viz.: Herold, Geisler and Weinstein.

The committee asks that members show their ALUMNI SPIRIT by attending the meetings and socials arranged for them.

BE A COG-MESH IN

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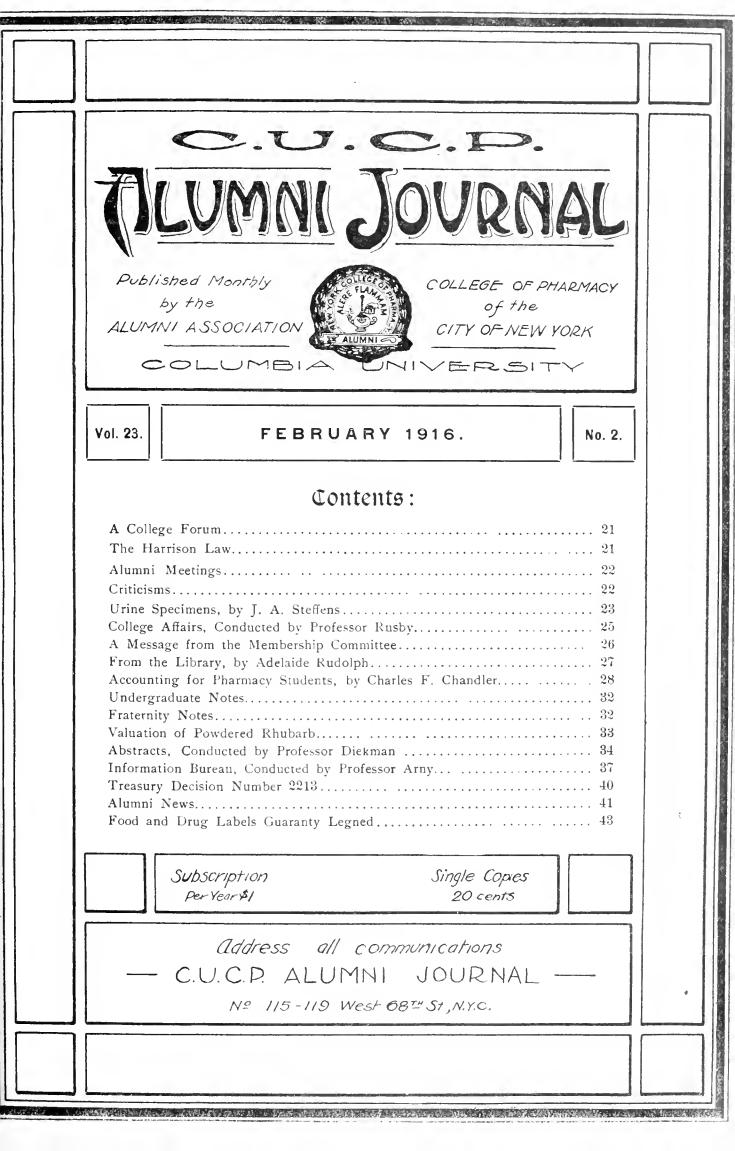
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PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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A COLLEGE FORUM.

Oftimes when visited by some of our graduates we hear suggestions about changes that they think would be advantageous to the College. We hope that these friends will write us their ideas and thoughts so that they may receive the proper publicity. It will ever be the policy of the JOURNAL to be the medium for exchange of any ideas that our readers believe might prove of value to the College. Make the JOURNAL a real forum. Send us your ideas. Let us print them. Give others a chance to consider and discuss them. I. H.

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THE HARRISON LAW.

The "Information Bureau" has been kept busy answering queries as to the real meaning of T. D. 2213. In answering these we always call attention to the fact that we are simply giving the opinion of a layman and usually we refer our querist to any authority cited. Professor J: H. Beal in his "Brief Respecting T. D. 2213 and the Interpretation of Section 6 of the Harrison Antinarcotic Law" on behalf of the National Drug Trade Conference (N. A. R. D. Journal, 21-161, p. 748) discusses the question in great detail and concludes with an eloquent and very logical appeal to the department for a revision of T. D. 2213.

At the present time, judging by our queries, much doubt seems to exist among pharmacists as to just how they are to proceed so as to comply with the law.

T. D. 2213 as we understand it, was issued supplementary to T. D. 2172 which refers to Section 6 of the law. A subtle distinction is made between "preparations," "remedies," and "prescriptions," which is the cause of the present unhappy muddle. On account of the widespread uncertainty, we present the decision in toto on page 40.

The interpretation given means that if a physician writes a prescription for four ounces of paregoric, a narcotic prescription is not necessary. If, however, he writes for two ounces of paregoric and two ounces of simple syrup, the prescription is not exempt, even though the quantity of "narcotic" present is less than in the first prescription. A prescription calling for two ounces of elixir terpin hydrate and codeine N.F. and two ounces of syrup of wild cherry is considered as "narcotic," although the quantity is well within the exempt limit. If the mixture was separated and called for two ounces of elixir terpin hydrate with codeine in one bottle, and two ounces of syrup of wild cherry in another, the pharmacist could renew without restriction.

We agree that this is rather a peculiar ruling and do not wonder at the chaotic state in which the trade finds itself. Let us hope that the plea of the National Drug Trade Conference will not have been in vain and that we will shortly have a more usual and common-sense interpretation placed upon the terms "preparation," "remedy" and "prescription."

J. H.

ALUMNI MEETING NOTICES.

. . .

The attention of members of the Alumni Association is called to the discontinuance of sending postcard notices of the stated meetings. As every endeavor is being made to regularly send the JOURNAL to each member of the Association entitled thereto, it was decided at the February meeting that a mail notice was unnecessary. Read your JOURNAL and attend the meetings.

J. H.

CRITICISMS.

The expected has happened. A new hand being at the helm of the old ship, critics, friends and foes, have boarded her, and have assailed her, front, aft and amidships. Come ahead, you hearties; we welcome vou. The more we are criticized the better we will like it. We want to make the JOURNAL of interest to all our friends, and want to make it so good, that those not counting themselves as such, will have to admit its worth and value. The editor is only one and has only one mind, therefore he not only welcomes but asks for criticism. "Mush" we do not care about, but the help that can be and already has been derived from criticisms we need and want. Write or telephone us, or come and see us. The latchstring is ever on the outside for our critics We consider them our best friends.

J. H.

NEXT MEETING

OF THE

ALUMNI ASSOCIATION

WILL BE HELD

Wednesday Evening March Eighth 1916.

BE A COG === MESH IN

Urine Specimens

By JOHN A. STEFFENS

N. Y. C. P. '09.

Honor student of his class, Doctor Steffens immediately upon completion of his post graduate studies became connected with a busy clinical laboratory. His description of some of his experiences are interesting and some rather startling.

What is a sample? How should a specimen be taken? These are questions rarely asked, and when asked as rarely answered.

Sampling of urine depends upon the object to be achieved, namely, the insight into general bodily conditions, the functioning of the kidney, the condition of the urinal tract and its bacterial flora. The physician often desires only a report on the bacteria present or absent, but most often combines the first three and neglects the latter.

However, it is best not to isolate objects when a sample is being examined, for a searching examination will often reveal more serious conditions than suspected. In one instance a sample sent in for examination for gonococcus showed in addition over four per centum of sugar. In another case a sample marked "cystitis" showed Nieser's cocci in the bladder, which had not been suspected.

Thus, in general, a sample of urine should be the secretion and detritus of the urinary tract from kindey to the mouth of the urethra, unmodified in any way, taken under known conditions of diet, medication, bodily exercise and nervous condition. Since diet, medication, bodily exercise and nervous conditions may not be known and as all samples contain more or less foreign matter. allowances should be made in the interpretation of analyses. Some physicians make too many allowances, others take every result as absolutely representative. In all cases judgment should be exercised.

Some rather rigidly moral males and females receive a shock when ordered to prepare a sample of urine and following the nervous shock, the kidney behaves abnormally, either secreting more copiously or causing a retention of urine. Others try to make conditions as favorable as possible for a clean bill of health by sudden regulation of habits, purging and copious drinking of water. Some people, too, seem to require "spirituous" consolation. Thus, the nervous state of the patient and resultant acts may completely change the nature of the urinary indications.

Bodily exercise and excessive sweating, especially when the patient is not used to that state, may create a temporary state of urinary excretion which is abnormal. Diet similarly may falsify a result as in case of a girl who had only recently been hired in a candy shop and showed a few per cent. of sugar due to over indulgence in the sweets.

Many persons have formed habits of regularly taking certain favorite pills which have usually been recommended to them by a friend, and discovery of this fact often aids the physician materially. A case of salivation and acne was cured when it was discovered that the urine was full of iodides—a plain case of iodism.

Foreign matter in the form of accidental additions may vary from pieces of shirt to caterpillars. An annoying and common form of foreign matter in the urine of women is vaginal detritus which should be removed by douching before the sample is taken. Foreign matter often vitiates the microscopical examination.

Containers for urine need some consideration. They should be washed and a minimum of water left in them. The kinds of containers that are chosen are various. Women usually have an empty perfume bottle; men frequently find the whisky flask convenient. It is against the law to use milk bottles, but necessity knows no law. Old medicine bottles, the pint can, thermos bottles, gallon eider jugs, preserve jars, and in instances, holy-water bottles have been pressed into service. Of course, the form of container has no effect upon results, but previous contents may. A maple syrup botthe once caused a careless patient to do some worrying over his supposed diabetes.

Cases of falsification of samples vary from the unconscious to the criminal. An instance occurred in which cane sugar was put into a husband's urine under the mistaken idea that it was the same as dextrose. It is alleged that the wife desired a trip to Europe in order to take her husband to Karlsbad. This was before the war, of course. A sample should be fresh in order to avoid changes in the detritus due to the osmotic action. If fresh samples cannot be obtained, they must be preserved as decomposition occurs so readily and is so destructive. For general use, the preservative likely to give most satisfactory results is thymol, but this like all other preservatives, has its objections. Cold storage is not always advisable, particularly with concentrated urines that precipitate sodium urate granules.

Having thus made some destructive observations, it is but right that some constructive ones should follow in the form of recommendations as to the method of sampling.

For general results, a sample before retiring and one on rising give a simple method for obtaining a fair index of the patient's condition. Separate analyses are advisable, but analysis of a mixture of the two is good. This has the advantage of indicating the condition after a day's work and after complete rest. The time of sampling is most convenient and the psychological effect is at a minimum.

For specific results, more accurate methods may be used but need not be discussed in this article because of lack of space.

The importance of correct sampling and the avoidance of errors due to changes, whether natural or artificial, cannot be over estimated. Judgment and simple observation, coupled with frank and tactful statements may save years of valuable life.

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Conducted by Prof. H. H. Rusby.

DISCONTINUANCE OF FOOD AND DRUG COURSE.

With the close of the session of 1015-16 the Food and Drug Course of the College will be discontinued. At the time of the establishment of a graduate course, based upon high school graduation, there were many graduates from the ordinary pharmacy course who desired to pursue graduate studies but who were unable to present the necessary credentials for admission to the regular graduate course. For such students, the Food and Drug Course was established. and it has proved of great service to them. At the present time, with a threevear course leading to the degree of Ph. Ch., and one of four years leading to that of B. S. in Phar., with still further opportunity for work leading to the degree of Phar. D. and with ample provisions for summer school work and evening classes, it seems neither desirable nor expedient to maintain another course of study, for still those who have not made proper preparation, now that an abundance of time has been allowed for so doing. The steady trend of American pharmacy schools in the direction of increased entrance requirements militates strongly against providing advanced work and degrees for those who have not completed their secondary school work.

Suitable certificates will be awarded to all students who successfully complete any of the evening courses. Full announcements regarding the evening and summer courses will be printed in the next number of the JOURNAL.

Beginning with the session of 1910-17, the tuition fees of the first and second year students will be increased from S120 to S125 per term, and no extra charge will be made to the students for the supplies used in the pharmaceutical accounting course.

Member- of the Alumni Association who take an interest in College affairs should become members of the College organization. The initiation fee has been abolished, the annual contribution requested being Five Dollars per year. A certificate of membership will be issued to any member without charge, upon request.

The Trustees are hopeful that all those who received their pharmaceutical education at the New York College of Pharmacy will become members as soon as they are in a position to do so. Applications for membership should be sent to the Chairman of the Membership Committee, Mr. Frederick K. James. 247 West 46th Street, New York. About fifty new members have been elected during the present year, and it is the ambition of those in charge of the matter to double this number before the end of the present session.

A MESSAGE FROM THE MEMBER-SHIP COMMITTEE.

TO THE ALUMNI:

The history of the steady growth of the College of Pharmacy of the City of New York from a course of a few evening lectures given in one room to a handful of ambitious young men, to the present complete, all-inclusive and complex course of lecture and laboratory instruction given through two full years of study to classes totaling five hundred men and women, is well known to all pharmacists in the country.

This institution, educationally and financially successful to a degree far beyond the fondest hopes of its founders, now feels the need of the co-operation of the retail pharmacist, especially those who have their places of business within the limits of the greater City.

The Board of Trustees feels that with this co-operation, the power of advancement for good in education, legislation and in ethics will be increased manyfold.

What is asked of you is that you sign an application for membership. This will be submitted to the Membership Committee of the Board of Trustees and if you are found to be of good standing in the profession, you will be elected to membership. There is no initiation fee; an annual contribution of \$5.00 is requested. Upon the payment of \$100 you will be entitled to life membership. A certificate of such membership in the College will be issued to those desiring it.

As the source from which you must draw your registered clerks, your interest in this College becomes to you a business proposition. Your duty to take your share in its management becomes clear. Founded by retail pharmacists, it must be continued by retail pharmacists in order that the best results may be accomplished.

Whether you find it possible to join this organization or not, it is our pleasure to offer to you every facility at our hands; our faculty, our library and our laboratories, to use as you may at any time require them.

With high hope for the future of our profession, we remain,

The Membership Committee,

F. K. JAMES, Chairman, 247 West 46th Street.

At the annual meeting of the College, to be held on Tuesday evening, March 21, officers and trustees will be elected to succeed those whose terms expire on July 1. At this time Professor Henry P. Hynson will make an address on a commercial topic of interest to every pharmacist. All members of the Alumni Association are invited to attend this meeting.

It has been decided to install 500 steel lockers for the use of the students next year, each student to be assigned an individual locker. This will do away with the present checking system, which has proven unsatisfactory in many ways.

It is also planned to re-flecorate the store room in the basement which will be used by Professor Diekman as a laboratory and exhibition room. Such laboratory work as requires steam or electricity will be carried on there, and there will be a permanent exhibit of pharmaceuticals and galenicals.

FROM THE LIBRARY.

Though great honors give human life its distinction, the little kindnesses and courtesies of daily living contribute most to its comfort and happiness. So, while an unendowed college library cannot do without great and important gifts of money and treasure to give it a reputation and make it useful to a large and ever increasing body of students and research workers, it must rely largely upon the little gifts, which are bestowed with quick responsiveness to its daily demands, if it is to maintain a successful and honored career.

Fortunately, the C, of P, library is not unblessed by friends who can, and will. bestow the large gifts upon occasion: and it is also happy to a degree in the possession of those who play admirably the role of "good genii" in the furtherance of our daily plans. So it becomes a matter of not much concern, whether we wish a few duplicate numbers of the pharmaceutical journals to garnish the reading-room tables, or whether we plan some day to so stock the library with the current periodical literature from all over the world, that no one shall come in and ask in vain for a pharmaceutical journal printed in any language; for we feel sure that there will be plenty to meet us half way with the requisite means, if we but go half way ourselves with the effort.

And so, for this issue of the Journal, I believe the alumni and the students will be interested in getting the following note from the library as to how the "wheels go round" in its daily life:

If there is any gap that needs to be filled in the botanical files, we naturally turn to Dean Rusby, who has a wonderful faculty for keeping a missing number in mind through all the hurry of his multifold engagements. By Professor G. C. Diekman the library is supplied with the Zeitschrift für angewandte Chemie, the Columbia Alumni News, and a duplicate copy of the Journal of the Society of Chemical Industry for the reading-room tables, to which he is the largest contributor. Professor H. V. Arny furnishes the American Journal of Pharmacy. The Journal of the Society of Chemical Industry is the gift or Dr. A. H. Elliott.

The three publications of the American Chemical Society are contributed by Mr. Milton Falk. Mr. C. A. Mayo sees that the Bulletins of the Health Department are sent to the library regularly.

In this connection we are reminded of the packages of duplicates sent in by Dr. H. H. Schäfer, when, recently, we were getting the books off for the bindery, because these supplied in the very nick of time the two numbers which we lacked to make our sets complete. That, certainly, presented some resemblances to the "fairy god-mother" or "good genius" act.

For our reading-table duplicates we are indebted to the kindness and courtesv of Dean Rusby, Professors Arny, Diekman, Mansfield and Wimmer, and also of the editors of the Bulletin of Pharmacy, the National Druggist, the Practical Druggist and the Southern Pharmaceutical Journal, who have been or are sending us an extra copy every month.

> AdelAIDE RUDOLPH, Ass't Librarian.

ACCOUNTING FOR PHARMACY STUDENTS.

By CHARLES F. CHANDLER,

Professor Emeritus of Organic Chemistry.

The following is a stenographic report of a talk given to the accounting class by "our" beloved Doctor Chandler. Testimony as to the need of instruction in accounting for pharmacy students, given by one possessing such an enviable professional reputation, is convincing proof of the value of the course.

l think it was in 1866 when Dr. Bedford, Professor of Pharmacy in this College, came to me—I was quite a young man in 1866—and said "I want you to come down to the College of Pharmacy and help us."

I said "what have you got?"

"Well, we have a little school for educating apothecaries."

That seemed to me a worthy undertaking; our lives are in their hands, and I thought it very important that they should understand the business in which they are engaged.

Professor Bedford explained to me that he wanted me to take the chair of chemistry.

"How many students have you?"

"Thirty-three."

"What quarters have you?"

"We hire one room in the University Building."

"What do you want of me?"

"Three evenings a week for five months during the winter."

"Have you got any money?"

"No. We could allow you \$400 a year, but you will have to hire your own assistant, and buy whatever apparatus and chemicals are needed, out of that \$400."

I thought it over, and felt there was no other work I could undertake that was more important than building up this College of Pharmacy: It was a labor of love, and one along with others who were all working with the same object. And you know what the College of Pharmacy is now. It all grew out of that little school of thirty-three in one hired room of the University Building. It is the only institution that I know of in the United States that has grown without having outside help. The City has never appropriated anything; the State has never given a cent; no millionaire has ever endowed it; it has received its support from the students and from the pharmaceutical profession in New York City.

You can imagine what a pleasure it is for me to come down here again to this lecture room; I lectured to the students of this College until about five years ago. Speaking of pleasure, you can imagine what a pleasure it was when President Butler wrote me if I thought the Trustees would be willing to join Columbia University. I told him they would be delighted to belong to the greatest University in America; to have the degrees conferred Columbia University degrees. Why, do you know, when that was published in the news-

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papers, every pharmacist in town looked three inches taller than he did before. It made a University man out of him.

What brings me here tonight, is something that happened at a Trustees' meeting a little while ago. I understood that the junior students had petitioned to be relieved from the exercises in accounting. I said "They do not know what they are doing, because they are young and inexperienced. They are like young bears; their troubles are still to come. Why, a knowledge of bookkeeping has been a trump card with me all my life."

When I began life, after studying a short time at Harvard University, in 1853, there was not much doing in teaching chemistry at that time, so I made diligent inquiries as to how I could advance myself. A man who had spent four years studying in Germany came into the laboratory one day and I asked him questions, and finally induced my father and mother to let me go to Germany to study chemistry. When I returned, Professor Joy, who had steered me to Germany, offered me \$400 a year to become his assistant in chemistry at Union College. There was nothing else in sight, so I took it. I might say two or three words here, about taking a position. You know when the students at the School of Mines graduate, they have an idea that they ought to get \$2,500 a year to begin with. The greatest mistake in the world to make is to say "What is there in it for me?" The first thing to consider is whether the place is going to be valuable; whether it will lead to something better. You will get what you are worth, and the proper way to do is to get your toes in

somewhere, and show what you are worth. I took this place at \$400 a year and when I got to Union College, I found that this amount had been appropriated for janitor's services. There was, consequently, no janitor, and it was the coldest winter the oldest inhabitant had ever known. I had to make six anthracite fires every morning, sweet the laboratory, the lecture room and two smaller rooms, wash the bottles, and get the laboratory ready for the students. Of course I had not been there very long before I made the acquaintance of some of the other professors. They laughed at me, and said "Why do you do all this?" Well, you see, Professor Joy had steered me to Germany, had given me my first chance and I was only too glad to help him.

I had only been at Union College three months when Professor Joy was called to Columbia. As the salary he would receive at Columbia was greatly in excess of what he was getting at Union College, he promptly accepted, and left Union College without a professor of chemistry. The president sent for me. "Well," he said, "Professor Joy's gone, and he has recommended Professor Mallett of the University of Alabama, who is a distinguished chemist and teacher, for the place. But there is a young man who has been here three months, and we like the way he takes hold and does anything to make himself useful. I mean you! If you think you can lecture to the senior class, you can have the position, and we will call you Professor when you are old enough." I was twenty years old then. There were one hundred and fifty students in the senior class, and when I went into the lecture room, I felt very small. I said,

"Professor Joy has gone to New York. There is no one here to give you the lectures in chemistry unless you take them from me, and I think I can do it." I think this is rather a good lesson for young men about getting a position. My last year's expenses in Germany were \$1,100. I did not wait for a \$2,000 job to come along. I took the first thing. I knew Professor Joy was a good man; I knew that Union College was a good college and I did not think it mattered how much I got at first.

When I was put in charge of the chemistry department, I had to buy the apparatus and chemicals, and I had to take the deposits from the students, and so I immediately opened a bank account. Half the men who come to grief in their financial affairs, do so because they mix their own money with other people's money. This is one of the fundamental principles of my life; never to put anybody's money into my own bank account. and so in this instance I opened an account. The Treasurer of Union College was a very austere man, but he liked my way of doing things, and for the eight years I remained in Union College, there was never a mistake in my accounts and the Treasurer was my warmest supporter. When I asked to be appointed adjunct professor, the treasurer was back of me; when I wanted the "adjunct" removed, he backed me again. He had never found a mistake in my accounts, and it was the greatest satisfaction to him to know that the financial affairs of the chemical department were properly managed. If I had had no lessons in bookkeeping, I could not have done that.

When I was eight years at Union College, Professor Eggleston, who had just returned from Germany, where he had been studying at a school of mines, conceived the idea of having a school of mines in America. We did not have any such school in America, and so we wrote a little pamphlet telling how it could be done. Eggleston finally got connected with the Trustees of Columbia University. Columbia was very poor at that time, so they said to Eggleston: "You can start the school of mines, provided you do not ask for any money. If you can get two or three men to join you on the same terms, go ahead." My friend Professor Joy did not take much stock in this college, and so Eggleston came to me. I had a salary of \$1,750 at Union College and a house; and I had a wife and a baby a year old. To give that all up and come to New York and take a position not paying any salary, and with no money except \$1,000 which was given to my wife on her marriage, seemed a risky thing to do. My wife said she had the greatest faith in my decision, an l so we came to New York. Everybody said we were crazy. They said: "You may not have a single student at the School of Mines." We opened on the 15th of October, 1864, and we had twenty-four students, each paying \$160. That did not seem a bad beginning to us professors without salaries. The students kept coming in until we had forty-seven. Eggleston had fitted up a laboratory for twelve students, and so we called in the carpenters, the gas fitters and the plumbers until we ran up a bill of \$6,000. Then the trustees came around and they said: "We have had a baby born here," and two or three days after we opened, four of the professors offered their serv-

ices gratuitously! Then Professor Joy came and said: "Why, I can't afford to be out of this." I told him he could have whatever part of the chemical instruction he wanted, and so I took the analytical and industrial chemistry. So you see it all depends upon getting your toes into a good piece of ground.

Just as I had been head of the chemical department at Union College, so for thirty-three years I was really at the head of the School of Mines. I kept all the accounts, took the deposits from the students, made the purchases, etc., and the consequence was that the treasurer was delighted. I took all the troubles of the finances of the School of Mines off his shoulders, so I had \$4,000 or \$5,000 to keep track of, and when it was gone I would take all the bills and my records down to the treasurer and he would give me a check for the amount that I had spent. So you see that bookkeeping was a trump card with me. Really, I think it had quite as much, if not more, to do with the success of my undertakings than my knowledge of my profession. So when I heard that you young men doubted the importance of learning about accounts, I thought it would not hurt you to hear my experience. It does not take a great deal of time to study bookkeeping, and you will be thankful all your lives.

When my wife's mother died, she left three children, and under her will. I was made executor. I had to keep all the accounts of the estate, and so I immediately opened a separate account, and every six months I made out a statement of what had been spent, and what had come in, and sent a copy to those concerned. By and by my wife's father died, and the same thing happened again. Think of all the trouble 1 have saved by having a knowledge of bookkeeping!

It seems that a professor of chemistry in the University of Michigan had a quarrel with the assistant professor and the assistant accused him of mismanaging the accounts, and the matter ended in a lawsuit, simply because the professor did not know enough about bookkeeping to keep the accounts of the laboratory straight.

In closing, I can only tell you what a pleasure it is for me to come back to this lecture hall to see the eager faces of young people who have the world before them, all of whom can make a success if they will keep the right ideas in their heads. Learn to do the things that are worth doing and to pass by the things that are not worth doing.

On Tuesday, February 9th, Professor William Mansfield entertained the Torrey Botanical Club at its meeting held in the American Museum of Natural History with a lecture entitled "Poisonous Plants of the Eastern United States."

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RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

UNDERSPADUATE — NØTES —

1918.

It is not often that First Year University men organize quickly. The Class of '18 is one of those few, however, which was ready for business early in the term; in fact, it was on the second Tuesday that the officers were elected. Those chosen were Mr. Triner, President; Mr. Buttenbaum, Vice-President: Miss Kish, Secretary; Miss Argueso, Treasurer; Mr. Wilson, Reporter; Mr. Anopol, Historian, and Mr. Holtzman, Sergeant at Arms. Professor Mansfield was chosen Faculty Adviser.

Four men have left the class so far. Three dropped out for various reasons. One, the fourth, Mr. Fasolino, after an attendance for more than a month, was taken ill with pleurisy. An operation was performed saving his life but weakening him so that he was advised not to return to his studies for the year at least. Mr. Fasolino was a good student and was liked very much by his classmates.

There has been no special function for January. At the meeting the annual banquet was discussed, and voted to be a formal affair. The date was not set, however. The organization of a new Biological Society was also considered and the business is now in the hands of a committee which is to act with that of the Second Year Class. Mr. Buttenbaum, Mr. Anopol and Mr. Holtzman are on the committee of the '18 Class.

FRATERNITIES



OFFICERS FOR 1916.

RegentR. N. Lehman
Vice-RegentH. E. Miller
TreasurerG. H. Dowsev
SecretaryK. A. Bartlett
ChaplainW. O. Bacon
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The new year has started very successfully for Gamma. Our nucleus of thirteen members has been increased by eleven initiates and several more men are pledged.

Our new members are: H. C. Johnston, '17; L. H. Buccanning, '16; R. B. Genung, '17; G. Bruns Jr., '17; C. M. Russell, '17, C. G. McCloskey, '17; J. Triner, '18; W. P. Whalen, '17; V. K. Commons, '17; H. McAdams, '18, and F. N. Lehman, '17.

"Stop, Look, and Listen" was the play chosen for the theatre party held on February 25th. A goodly crowd was present and "Gaby" and her company kept everybody in good humor. After the show a real old "Dutch" party rounded out the evening's pleasure.

Although no date has been set for the banquet it has been decided to hold it earlier than formerly. Probably the second or third week in March will be chosen.

K. A. BARTLETT.

G. ANAPOL.



At our annual election of officers held February 7, 1916, the following men were elected and installed:

Raymond F. Clemens, President; John Semon, Vice-President; J. P. Cloherty, Secretary; Harold N. Cool, Treasurer; F. G. Spottke, Master at Arms; Albert E. Baker, Chaplain; D. R. C. Vogel, Editor.

Alfred Young, Barney O'Malley, William Neergard, George N. Graves, Duncan Rose and Joseph Cairoli were among the many to visit Mr. Hamilton at Grand Central Palace on January 26 and 27.

Our new headquarters are at 122 West 64th Street, where we are more comfortably located than ever before.

Truman Linck, Harold N. Cool and Barney O'Malley were sent to Epsilon Chapter at Philadelphia as delegates to their annual banquet held in the Club Room at the Rittenhouse, Friday, February 11, 1916.

D. R. C. VOGEL.



Alpha Chapter, 'Lau Epsilon Phi has inaugurated the new session by initiating the following: Schaeffer; Gerson and Markowitz of the Senior Class and Medoff, Schneiderman, Franklin, Miller, B. Markowitz and Jacobius of the Junior Class. Knowing the calibre of these men the Chapter is extremely hopeful for the future. Up to the present the Annual Ball stands out as a landmark in social activities, owing to its huge success.

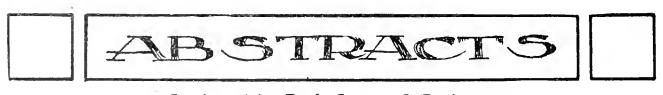
B. MASLON.

VALUATION OF POWDERED

RHUBARB.

Tschirch recommends that 0.50 grammes of finely powdered rhubard are extracted with 50 cc. of 5% sulphuric acid in a Soxhlet apparatus for 14 hour. After cooling, and without first filtering, the liquid is shaken with 50 cc. of ether, and the ether layer separated. The extraction with ether, in 50 cc. portions, is continued until the ether remains colorless, and does not become colored red by addition of diluted solution of potassium hydroxide. The aqueous liquid is now gently heated in order to remove any traces of ether, and is again extracted in a Landsiedl apparatus for 15 minutes. The further extraction with portions of ether 50 cc. each is continued, and the ether extracts are finally united.

The combined ether extracts are now skaken out with 200 cc of 5% solution of potassium hydroxide, until the aqueous extractions cease to show color. The combined alkaline extracts are then diluted with water to 500 cc. and 100 cc. of this solution is further diluted to I liter with distilled water. Of the latter solution 350 cc. are further diluted to I liter with distilled water. This solution when examined against a white back-ground should still possess a decided cherry-red color. This color should be comparable with one obtained by dissolving emodin 1:1,000,000 in distilled water and making alkaline. In this manner samples of rhubarb containing from 2.80 to $4^{c_{\ell}}$ of Oxy-methyl anthrachinon may be recognized.



Conducted by Prof. George C. Diekman.

An Impurity Found in Potassium Carbonate.

Dr. W. Kohen found that a number of samples of commercial potassium carbonate which gave nearly negative results when tested for chlorides in the usual manner, gave evidence of abundant presence of chlorides after ignition. Investigation showed that the samples contained potassium chlorate as an impurity, which upon ignition was decomposed with formation of potassium chloride.

Zinc in Glass.

Javillier, M., states that he succeeded in extracting 0.0025 gm. of zinc, with acidulated water, from an Erlenmever flask having a capacity of 500 mils, and made of Jena glass. A flask of Bohemian glass vielded negative results. The author tried to establish the influence which the presence of zinc might possess in the case of micro-organisms. He conducted the investigations with the Aspergillus niger, which is particularly reactive to zinc. The development of this micro-organism in the Jena flask was quite abnormal, while in Bohemian or quartz flasks its development made only the usual progress. The author calls attention to the fact that the presence of such small quantities of zinc under ordinary circumstances can be ignored. Conditions might, however, arise in which it would have to be taken into account.

Natural and Artificial Oil of Wintergreen.

The following is taken from the report of Schimmel & Co., October, 1915. Methods for the differentiation of artificial oil of wintergreen from the natural oil: 5 drops of the oil under observation are mixed with an equal volume of a 5 : 100 solution of vanillin, the whole shaken well and 1 mil of alcohol added. After thorough admixture add 2 mils of sulphuric acid and again shake, when if the oil is the natural kind, a red color will develop. The artificial oil under the same circumstances will show at most a yellow color.

G. N. Watson and L. E. Sayre are credited with the following in the same report: If the oil under observation be treated with pure sulphuric acid in excess, the natural oil turns deep red, oil of birch turn yellow, or at most light red, while methyl salicylate shows negative results.

Arsalyt.

Hahn, in "Der Jahresbericht von E. Merck, 1915," reports on the value of Arsalyt Bis-methyl-amino-tetraminoarseno-benzol), in the treatment of syphilitic affection, claiming for this preparation an equal rank, at least, with salvarsan. Hahn states that its side and after effects are less than those often observed after the administration of salvarsan.

Antiseptic Property of Hydriodic Acid.

According to R. Lettieri hydriodic acid is a most excellent disinfectant for wounds. He claims that the presence of this acid in an old sample of tincture of iodine, is responsible to a great extent for the superiority of its action when compared with that of a freshly prepared sample. He calls especial attention to the anti-putrefactive properties of this acid. He employs the acid in the form of a 2 per cent. wash, and in the form of a 0.50 per cent. gauze.

Cantharidin in Galenicals.

W. Hinz has conducted a series of investigations in order to determine whether cantharidin could be properly employed as a substitute for the various cantharidal preparations. As a result of his experiments he has arrived at the conclusion that pure cantharidin can be used advantageously in place of the corresponding amount of cantharidal collodion or cantharidal cerate. He suggests that the pure cantharidin be mixed with various ointment vehicles, so that the resulting ointment will contain from 0.01 gm. to 0.02 gm. in each 100 gm.

Plaster Paris Bandages.

A. Astrus and A. Juillet have published some observations relative to the use of plaster of paris in bandaging. The authors claim that usually an excessive quantity of water is employed, and that in many instances the plaster had not been sufficiently dehydrated to obtain the best results.

They suggest that 60 grammes of water, added to 100 grammes of plaster of good quality, are ample to obtain best results. They claim that the presence of althaea, acacia, tragacanth, salep or linseed will retard the hardening process. The presence of alum or sodium chloride will hasten the hardening process. The rise in temperature observed during the process of hardening is in direct proportion to the purity and dehydration of the plaster of paris. The presence of powdered althaea not only lessens the intensity of the reaction, but also retards it, while on the other hand the presence of powdered alum or sodium chloride acts in the opposite direction. The authors claim to have noted instances where the rise in temperature was sufficiently great to produce discomfort to the patient.

Bolus Alba.

Bolus alba sterilisata, is recommended as a cheap substitute for the various antiphlogistins For veterinary practice Kranch recommends the following: 4 parts of bolus alba and 5 parts of glycerin are thoroughly mixed and then heated at a temperature sufficiently high to destroy micro-organisms. After cooling to about 50° C., the paste is at once applied, and covered with a layer of cotton and bandage. It is claimed that if properly applied and protected the paste will hold its warmth for a considerable period.

Acetylcholin.

H. H. Dale and A. J. Ewins claim to have found still another constituent of ergot, which they name Acetylcholin. It is said that this substance has the property of dilating the smaller blood vessels, but does not affect the uterus.

NEW REMEDIES.

Brassicamin contains extracts of thymé, encalyptus and brassica. It is said to be efficacious in asthmatic conditions, pertussis and inflammatory conditions of the lungs.

Glycopon is the name given to a preparation containing all of the opium alkaloids in the form of glycero-phosphates. It is marketed and used in the same manner as is pantopon.

Trisalvan. This is a disinfectant and is said to contain a mixture of resins, together with mercuric chloride, phenol, camphor and odorous substances.

Venarsen. Under this title a preparation is marketed in ampules, which are said to contain an organic arsenic compound, mercury and sodium iodide. It is reported that upon examination the ampules were found to contain sodium cacodylate in amount of 0.1384% calculated as arsenic.

Aphloin is fluid extract of aphloia toeformis, a plant resembling the tea-plant. The preparation is said to be of value in the treatment of affections of the gallbladder. It is given in doses of 10 minims three times a day, increased to 15 minims four times a day. In severe cases doses of 20 minims each may be administered. In appropriate dosage it may also be used as a prophylactic.

Dysentin is marketed in the form of tablets, each containing 0.40 gm. of, aluminum acetylotanuate, and 0.20 gm. of bismuth salicylate. The tablets are employed as intestinal astringents.

Sulfotin is the name given to a syrup containing potassium sulpho guaiacolate.

Enterosan. This is a name given to calcium tannate, containing approximately 15 per cent. of calcium and 85 per cent. of tannic acid. The compound is resistant toward diluted acids, and is employed in inflammatory conditions of the intestinal tract. It is marketed in the form of powder, or in the form of tablets, each of which contains 0.50 gm. of the compound.

Veranacetin. This name is now used to designate what was formerly known as veronacetin. It is marketed in the form of tablets and powder which contains sodium di-ethyl-barbiturate, phenacetin and codeine.

Zinemattan. This preparation has been erroneously called zinc methane. Its composition is as follows: Zinc oxide, 10 gm.; bismuth chloride, 10 gm.; linseed oil, 10 gm.; solution of calcium hydroxide. 10 gm., and mattan 20 gm.

Cenolin. This is a mixture consisting of cetyl alcohol 3 to 5 gm., a mixture of 5 parts of liquid and 1 part of solid paraffin, 90 gm. and wool-fat 10 gm. Hydrous cenolin is obtained by mixing equal parts of cenolin and distilled water.

Natalit. This is a mixture of inflammable liquids, the principal constitutent of which is an alcohol obtained by fermenting the refuse material found in the sugar refineries of Natal. Its specific gravity is 0.800, and its freezing point lies below that of benzol or petroleum benzin. When burning, its flame can be readily extinguished with water. It is used as a substitute for benzin in motor vehicles. When used in this manner it is necessary, however, to add a small amount of an alkali to neutralize its acidity.

I



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in Euglish or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Balsamo Católico. – L. A. C., New York. – This is a preparation resembling our Friars' balsam. The recipe given in the Mexican Pharmacopceia of 1874 follows:

Angelica root 10 grammes
Hypericum flowers 20 "
Alcohol $(80\%) \dots 720$ "
Macerate eight days, then express and
dissolve in the expressed liquid:
Myrrh 10 grammes
Olibanum 10 "
Again macerate for eight days with
frequent agitation, then add:
Balcam of tolu 60 grammes

Balsam of tolu	-00	grammes
Benzoin	60	<i>6</i> 6
Cape aloes	10	

Macerate for eight days and finally filter.

Removing Camphorated Oil from Cerium Oxalate.-R H. Flatbush, is in trouble. The boy spilled camphorated oil upon almost a pound of cerium oxalate and R. H. wishes to recover the salt, even at the expense of the camphorated oil. We suggest that he wash the oxalate several times with petroleum ether or ether in a closed bottle, adding each time enough of the solvent to cover the salt. He could be more economical with the solvent by placing the salt in a small percolator plugged with a pledget of cotton and then pouring on the solvent. In either case, he should look out for the inflammability of the solvent.

Thompson's Emulsion of Linseed
OilM. P., New YorkThe "Stand-
ard Formulary" gives the following rec-
ipe for the preparation named above:
Linseed oil 4 ounces
Oil of wintergreen $\frac{1}{2}$ dram
Oil of cinnamon $\frac{1}{2}$ "
Powdered acacia 2 ounces
Water
Syrup 3 "
Glycerin \dots $I^{1/2}$ "
Diluted hydrocyanic acid45 minims

Triturate the mixed oils with the acacia, add three ounces of water and triturate until emulsified. Then add the syrup, the glycerin and the hydrocyanic acid, and lastly the balance of the water.

Iodoformized Ether.—L. C., New York.—We suspect that what is desired is *pigmentum iodoformi*. This, according to Squires "Companion to the British Pharmacopœia" is prepared by dissolving one part of iodoform in eight parts of ether.

The Composition of Proprietary Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackerv" as well as to the Bulletins of the iood and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Sodium Hydroxide Solution.—S. M. P., New York, has a recipe calling for "solution of sodium hydroxide 27° " and wishes to know what the NaOH strength of such a solution would be. Using the well known factor of conversion of Baume degrees into specific gravity: – 145 \div (145 – °B), we find that 27° B. means that the specific gravity is 1.23 and turning to Gerlach's table for solution of soda found in the United States Pharmacopœia for 1890 (page 547), we find that specific gravity 1.23 means a 20 to 21% solution of soda.

Analgesino.—L. A. C., New York.— This is the Spanish name for antipyrine.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Viscum Album.—E. J. W., New York.—According to the Real Encyklopaedie der Gesamten Pharmazie, Viscum album. is the botanical name of the mistletoe, the fruit of which contains an exceedingly sticky material, *viscin*, used to some extent for catching small birds. The leaves and twigs are supposed to be of service as a nervine.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers. since in serious legal matters a lawyer should be consulted. Alkaline Mixture of Rhubarb.—S. K., New York, had a prescription calling for alkaline mixture of rhubarb and soda of the German Pharmacopoeia. Concerning this we have no information, except that a preparation of this character is not to be found in the German authority cited. Possibly the alkaline infusion of rhubarb, for which a recipe was given on page 15 of the JOURNAL for January, was intended by the physician.

Antidote for Formaldehyde.--J. M., New York .--- There seems to be a dearth of information as to antidotes for formaldehyde solutions. Most of the books on therapeutics are silent on the subject. Tanner's "Memoranda on Poisons" cites a poisoning case in 1905, and suggests the use of raw eggs. André (A. J. P., 72-1900-493) recommends the administration of three times as much solution of ammonium acetate as the volume of formaldehyde solution ((37%) swallowed; to be followed by alkaline mineral water. At present, intravenous injections of aromatic spirits of ammonia are also employed.

Proof Gallons.—R. F., New York, asks us to explain how to calculate the number of "proof gallons" in five gallons of alcohol "188 proof." In internal revenue matters all alcoholic liquids are compared to the standard "proof gallon," which means a gallon of "proof spirit." This according to Walden and Mowry's "Revenue Law Informer," is one containing 50% by volume of absolute alcohol. By this method, five gallons of absolute alcohol ("200 proof") would be called ten "proof gallons" since it would furnish ten gallons of "proof spirit." Likewise five gallons of alcohol "proof 188" would be considered as 5 x 1.88 or 9.40 "proof gallons."

"Bismuth Natrium Bromatum."-K. P., New York has received a prescription for the above named ingredient and asks what it is. Diligent search in pricelists failed to find any mention of such a salt, which we assume means a double bromide of bismuth and sodium, since the German Pharmacopoeia designates as natrium bromatum, sodium bromide, not sodium bromate. We find in an article by Nickles (Jl. de Ph. et Ch. 3-39-1861-118) a lengthy account of a double bromide of ammonium and bismuth, BiBr₃2NH₄ Br.5 H₆O, prepared by treating bismuth with bromine in the presence of ammonium bromide. This salt occurs in rhombic acicular crystals and Nickles states concerning its manufacture "potassium bromide acts the same way." All of this would suggest that a double bromide of sodium and bismuth could be prepared in like manner, but after all we wonder, if the compound the prescriber had in mind was a proprietary article?

Raw Alcohol.—P. D. C., New York .- This represents the crude alcohol as it comes from the rectifying column. According to Sadtler's "Industrial Organic Chemistry," raw spirit, notably that from grain and potatoes, contains, even when rectified to 95 to 96%, appreciable quantities of fusel oil and of acetaldehyde. This is purified, usually by diluting to 50%, filtering through wood charcoal and then redistilling. It is important to note in this connection that commercial alcohol even "188 proof" is not official alcohol and that a druggist selling same as "alcohol" without adding the word "technical" on the label, makes himself liable to prosecution under the national Food and Drugs law.

TREASURY DEPARTMENT, Office of the Commissioner of Internal Revenue. Washington, D. C., June 7, 1915.

(T. D. 2213)

NARCOTIC LAW.

Prescriptions for narcotic drugs in any quantity not exempt from the provisions of the act of Congress approved December 17, 1914, unless for "preparations" or "remedics" exempted under Section 6.

Attention is directed to paragraph 4 of T. D. 2172 relating to the exemption of certain "preparations" and "remedies" from the provisions of this law. The question arises whether or not "prescriptions" come within the definition of "preparations" or "remedies," as given in the act. The word "preparations," as generally used and understood, means ready-made or prepared medicines, and the word "remedies" means that which cures or is efficacious in a specific disease or diseases under all conditions, while the term "prescription" is the written directions or recipe of a physician for the compounding or preparing of a medicine and directions for its use to meet the existing conditions in the case of a particular patient.

It is therefor apparent that the exemptions in Section 6 of the act as interpreted in T. D. 2172, relating to "preparations and remedies" containing more than the specified quantities of the drugs enumerated, do not apply to "prescriptions" written by registered physicians calling for any quantity of the narcotic drug, unless such "prescription" is written for a "preparation or remedy" prepared in accordance with the United States Pharmacopoeia, National Formulary, or other formula, or for a "remedy or preparation" prepared under private or proprietary formula, carried in stock by a dealer, which may be dispensed without a "prescription."

Every "prescription," therefor, containing a narcotic drug in any quantity, with the exemptions noted, must have indicated thereon the name and address of the patient, the date, the name and address of the physician, and his registry number. Such "prescriptions" cannot be refilled and must be filed for a period of two years.

W. H. Osborn,

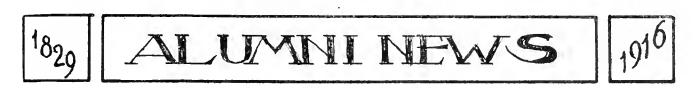
Commissioner of Internal Revenue. Approved:

W. G. McAboo,

Secretary of the Treasury.

Dr. Victor Robinson took part in a symposium on "Alcohol and Drug Habits" held under the auspices of the People's Institute in the Great Hall of Cooper's Institute on the evening of February oth.

George Hohmann, who joined the ranks of the benedicts in December, has resigned as intern at the Knickerbocker Hospital and has been appointed pathologist at Fordham Hospital.



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1915-1916

	President
JEANNOT HOSTMANN, 115	West 68th Street, New York City "
	orary President OMAS F. MAIN
John A. Steffens	ce-Presidents Ernest Windt
Lec Roon	Secretary - 115 West 68th Street, New York City
	Treasurer - 115 West 68th Street, New York City
	Registrar - 115 West 68th Street, New York City
Exc	ecutive Board
Term expires 1916	
Term expires 1917	(JOHN H. HECKER
Term expires 1918	JOSEPH WEINSTEIN Monroe H. Weil George C. Diekman
* Deceased	

Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING, JAN. 12th, 1916.

President Hostmann called the meeting to order at 8.45 P. M. and in the absence of the Secretary appointed William Taylor, Acting Secretary.

Present: Saul Taub, '15; B. H. Berkowitz, '15; M. Bedrick, '15; A. J. Rosenfield, '14; Wm. Taylor, '13; E. Windt, '13; J. F. Ringler, '08; J. A Steffens, '09; J. Hostmann, '96.

There being no quorum present the President declared the meeting adjourned.

WILLIAM TAYLOR, Acting Secretary.

MINUTES OF THE ALUMNI MEETING HELD WEDNESDAY EVENING, FEBRUARY 9th, 1916.

Meeting called to order at 8.45 P. M. President Hostmann in the chair.

Present: J. E. Ettinger, '13; F. A. Leslie, '04; V. M. Orefice, '15; H. H. Schaefer, '12; A. C. Searles, '86; N. A. Smedira, '15; J. A. Steffens, '09; M. H. Weil, '10; L. Roon, '10.

There being no objection the minutes of the December meeting were accepted as printed in the JOURNAL.

The minutes of the January meeting were adopted as read.

Treasurer's Report: The report indicated a balance in the Reserve Fund of \$1,055.13, and in the General Fund \$24.45. There being no objection the report was accepted as submitted.

Registrar's Report: Registrar absent.

The committee appointed by Vice-President Steffens to draw up an agreement between the editor of the ALUMNI JOURNAL and the Association reported progress.

Election of New Members: Applications of the following graduates were received, duly considered and the applicants elected to membership: L. H. Richless, '10; S. Siegel, '14; C. J. Watters, '13.

Motion was made and seconded that life members of the Association be taxed \$1.00 per year for the ALUMNI JOURNAL.

Motion was made, seconded and carried that the previous motion be tabled for future consideration.

Considerable discussion took place when the President announced that over

700 members, whose arrears in dues ranged from \$12 to \$22, were still retained on the active membership list, and received regular communications. He suggested that a committee be appointed to look over the membership list; to make an attractive proposition to delinquents whereby with the payment of a nominal sum these members be reinstated, and to so act as to ultimately get into shape a correct, reliable, active membership list.

Motion was made, seconded and carried that a committee be appointed for the purpose of revising the membership list.

The President appointed Messrs. Ettinger, Steffens and Weil as members of that committee with the treasurer and secretary as ex-officio members.

No post card notices of the meeting were sent out to the members this month, the notice being published in the ALUMNI JOURNAL. This procedure worked quite well, since it drew a fairsized meeting and did away with the considerable expense entailed in the mailing of the postals. For these reasons, it was suggested that this procedure be tried again.

The President is selecting the Nominating Committee.

The following bill was presented and ordered paid:

J. & J. W. Williams.....\$10.92

Motion was made, seconded and carried to adjourn.

LEO ROON, Secretary.

OFFICE OF INFORMATION

U. S. Department of Agrículture

Public Hearing Relating to Guaranty Legend on Labels of Foods and Drugs, Called for March 10

WASHINGTON, D. C.

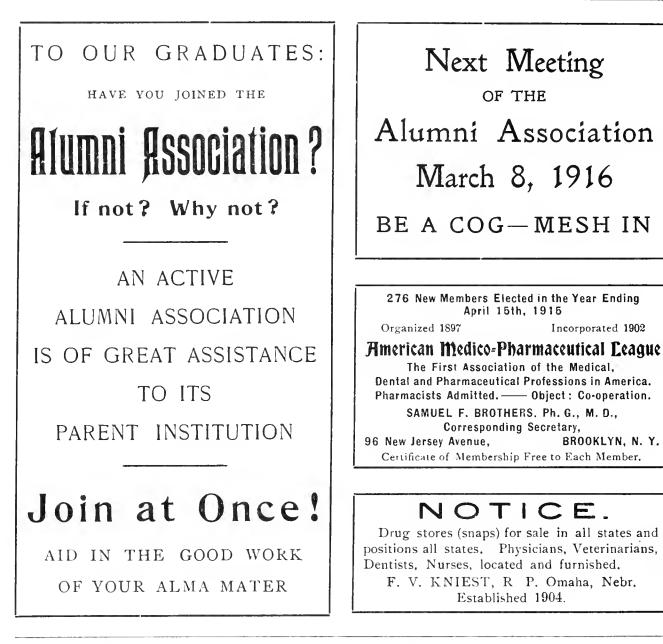
A hearing on the question of postponement of the effective date of Food Inspection Decision 153, which in substance forbids the use of guaranty legends and serial numbers on labels of foods and drugs in interstate commerce, will be held in the Bureau of Chemistry, 216 13th Street, S. W., Washington, D. C., at 2 o'clock p. m., March 10, 1916.

This decision, issued May 5, 1914, as originally promulgated, was to take effect May 1, 1915. Later, the date on which it was to take effect was postponed until May 1, 1916, with the proviso as to products packed and labeled prior to May 1, 1916, in accordance with law and with the regulations in effect prior to May 5, 1914, that the effective date was postponed until November 1, 1916.

Numerous requests recently have been made to the Department for a further postponement. Those requesting this action represent that manufacturers and dealers still have on hand large quantities of labels printed prior to May 5, 1914, and bearing the guaranty legend and serial number. It is represented that this supply of labels in the aggregate cost many thousands of dollars, and that unless they can be used their owners will sustain a severe loss.

On the other hand, many manufacturers, in expectation of the new regulation's going into operation next May, have already eliminated the guaranty legend and serial number from their labels.

All parties interested in the question, whether in favor of the extension or opposed to it, are invited to attend the hearing and present such facts as may be material. Those unable to attend in person may submit their views in writing. Communications should be addressed to the Chief of the Bureau of Chemistry, U. S. Department of Agriculture, Washington, D. C.



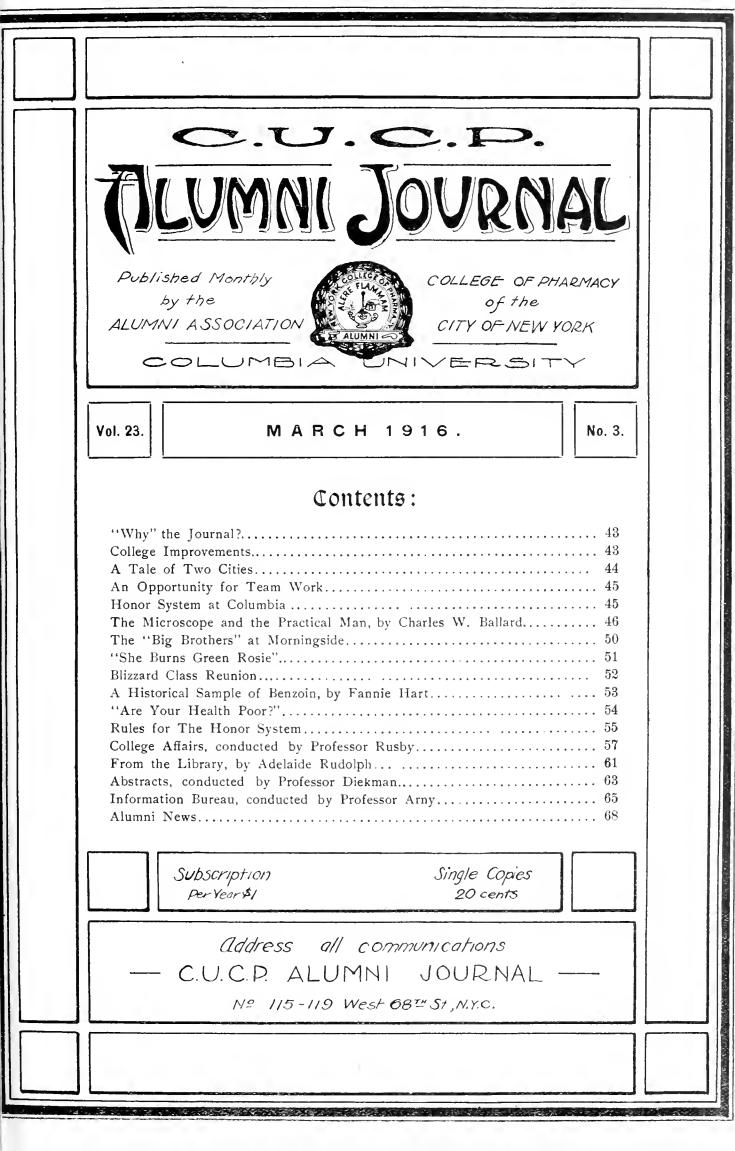
ESTABLISHED 1840 PEEK&VELSOR NEW YORK

OFFER NEW ARRIVALS OF Cactus Grandiflorus Aconite Root U. S. P. Colchicum Seed Belladonna Leaves U. S. P. Linden Flowers **Pulsatilla**

Corn Silk Henna Lavender Flowers Cuttle Bone Hyosciamus Leaves

Incorporated 1902

BROOKLYN, N. Y.



Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College, Open to Men and Ulomen,

will begin on Monday, September 18, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

As a department of Columbia University, the College offers courses of three, four and six years, of three and a half days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board.

The Isaac Plaut Fellowship provides five hundred dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis and Microscopic Pharmacognosy are offered in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION

OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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Vol. XXIII.

MARCH 1916.

Number 3

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Ster.



"WHY" THE JOURNAL?

"What good is the JOURNAL?" This question is often asked and usually answered. Still the doubter appears in our midst and will not down. We feel that we can safely say without fear of contradiction that any publication in which the members of our Association are personally interested must aid in keeping up that spirit which is so necessary to prevent the graduates of any institution from drifting entirely apart. As a rule when the value of an active alumni organization is discussed, the aid it can render to its Alma Mater is the paramount issue. This is as it should be. However, we feel that offtimes another very important feature is lost sight of. If the several thousand graduates of our College, scattered as they are throughout the country, were all firmly united in an active association, they could accomplish much now desired, that would not only aid their Alumni Association and their College, but each and every individual as well.

J. H.

COLLEGE IMPROVEMENTS.

The announcements of improvements and changes in equipment and curriculum as described by Dean Rusby on page 57 should prove of more than passing interest.

Probably the most important and far reaching change is the one increasing the entrance requirements beginning with 1918 term from "15" to "30 Regents' counts." Applying as it does to all the pharmacy schools in the State, it will serve to keep the latter in the vanguard of those who are ever striving to place pharmacy upon a higher and more honorable plane.

J. H.

A TALE OF TWO CITIES.

So much has been written and said apropos the lack of interest displayed by pharmacists in association work that, many no doubt think, that nothing concerning this subject has been left unsaid. Due to a recent occurrence, however, we cannot conscientiously refrain from again discussing this much mooted question, even though it were simply to repeat what has been said over and over again.

During the past four years the very efficient "Legislative Committee" of the New Jersey Pharmaceutical Association has been endeavoring to prevail upon the State legislature to place upon the statute books a Pharmacy Law similar to those in force in the neighboring States of New York and Pennsylvania. Just as regularly as the committee introduced the bill, just so regularly were they forced to see it die a lingering but sure death, if not in one branch of the State legislature, then in the other.

Undaunted and if anything spurred on by repeated rebuffs, the members of the committee continued their earnest efforts and when the usual bill was introduced at the present session of the law-makers, prospects for an early passage of this much desired piece of legislation appeared to be quite rosy.

Following shortly upon the introduction of the bill, efforts were made to insure the active support of the retailers in aiding to educate the members of the legislature as to the need and justice of the proposed legislation.

Why some associations are "live wires" and others "dead ones," why so much is accomplished by some and so little by others, we think will be forcefully demonstrated by a recital of some experiences during the above mentioned effort. The actions taken by the local associations of two neighboring cities will be cited as an example of the contrast of the spirit of "do it" and "let somebody else do it."

The pharmacists of Jersey City as an organization as well as individuals entered into the work almost to a man. By letter as well as by word of mouth, they endeavored to convince the law-makers that the desired law was needed to place New Jersey among the States desiring to properly care for the health and welfare of their citizens. A large majority of the druggists began plying the Solons with every argument at their command and apparently succeeded in convincing the former that, only by lending their aid in making the bill a law would New Jersey cease to be the dumping ground for those who could not enter the ranks of our profession in the aforementioned states.

When one member of the Hoboken Retail Druggists Association, an officer thereof, was appealed to for aid for the worthy cause, he exclaimed that he could not see that it was a matter that concerned that body. If any of the members chose to interest themselves, why well and good, if not, why-a shrug of his shoulders-certainly a fine example of the "why" of an association. A visit to another member, a former officer, proved just as disappointing. When asked how the organization was progressing he replied that he "belonged" but as the meetings were held on the evening when he "was off" he could not attend, as he thought he ought to have that evening for recreation.

A pitiful spectacle indeed when a man cannot devote one or two hours every month to an organization having no other excuse for its existence except the benefits its members might derive therefrom.

This self-same member was quite wroth when in the course of a discussion of the Harrison Law, he discovered that he was needlessly refusing to fill prescriptions. "Why don't the State Association keep us informed upon these points? What am I paying my dues for?" When asked what he did for the association, he could not reply, as he did nothing but pay his dues.

We wonder how long it will take men of this type, by far too numerous, to realize that if an association is to accomplish the expected results every member must take an active interest. Just so long as the many leave it to the few to do all the work, just so long will they wait in vain for real results.

Т. Н.

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AN OPPORTUNITY FOR TEAM WORK.

A bill has been introduced at Albany amendatory to the "Boylan" Law which prohibits absolutely the sale of all "narcotics" without a physician's prescription.

This means that if a person wants five cents' worth of Brown Mixture he will have to present a prescription to the pharmacist before the latter may make the sale.

Do the pharmacists of New York believe this to be proper? Is such a law just and necessary? If their answer be negative, NOW is the time for concerted action and team work.

Å

J. H.

HONOR SYSTEM AT COLUMBIA.

The rules for the "Honor System" now in force at the School of Mines, printed on page 55, have been sent to us by J. A. Steffens, N. Y. C. P. '09, who is chairman of the honor system committee. Dr. Steffens is very enthusiastic and optimistic as to the great value of the system and hopes that he may see a similar plan adopted at the College. We are presenting the rules in detail at his request, as a preliminary step to encourage discussion as to the availability or non-availability of such a system at the College. We join in his request that our readers will use the columns of their JOURNAL in expressing their opinions.

J. H

ANNUAL ELECTION

OF THE

ALUMNI ASSOCIATION

WILL BE HELD

Wednesday Evening April Twelfth 1916.

BE A COG - MESH IN

THE MICROSCOPE AND THE PRACTICAL MAN. By CHARLES W. BALLARD.

N. Y. C. P. '07.

Ordinarily when thinking of the use of the microscope we limit its applicability to pharmacognosy, bacteriology and pathology. Dr. Ballard, in a very interesting and readable way, points out the fallacy of this and enumerates and describes the many various other practical uses of the instrument.

The object of these paragraphs is to very briefly review the manifold uses of the microscope and microscopic methods; to consider the branches or research and practical work in which their use is extending; and a few added words concerning the weak points, real and apparent, of microtechnic.

The microanalysts of to-day are deeply indebted to the naturalists of the 16th and 17th centuries, for the history of the evolution of our modern compound microscope from the simple lens is intimately interwoven with their work in the development of the sciences of histology, pathology and bacteriology; we might even say that research in these fields is directly responsible for all the important improvements in lens manufacture. The desire for greater magnifications and clearer vision has been the prime incentive in the production of better optical parts for the instrument.

While the usefulness of the microscope in the conduct of scientific and research work in its original field of histology has never been disputed, it is only within the past few decades that analysts have demonstrated its value in other lines and its scope of application has widened until, from being an instrument used only by a few scientists, it has become almost as necessary in a commercial laboratory as the analytical balance. Its former use as an instrument of merely academic importance has engendered scepticism as to its value in practical and commercial work but, with the modern tendency to leave timeworn methods and appliances behind, to adapt those useful in one field of endeavor to other fields, and to use labor saving devices wherever possible, doubt as to the commercial value of microscopic methods is being dispelled. In the paragraphs following we will briefly discuss some of the uses of the instrument in routine work.

Food and Drug Work.

Enforcement of legislation relating to the adulteration of foods and drugs has been an important factor in calling attention to the utilization of microscopic methods in detecting adulterants and deleterious substances. The microscope is either used as an adjunct to chemical work as a guide to the chemist in his search for foreign materials, or the results obtained through use of the instrument are regarded as complete and are not subjected to substantiation by chemical tests. Even were the microscope only for use in work preliminary to chemical methods it would be a most valuable means of saving time. Several chemists of my acquaintance, recognizing that microscopy is a special and

highly technical branch demanding wide experience, use the instrument as a preliminary to more detailed work in the examination of materials of unknown composition and about which they have little information. This employment of microscopic methods as useful, but not entirely definite, preliminaries is probably as far as the majority of general analysts are capable of going unless they have been especially trained in microtechnic, but I imagine scarcely anyone will doubt the utility of such information, gained at so little expense of time and labor.

To a great extent the minor drugs and quite a few of more importance cannot be definitely determined by chemical Some of my chemist friends means. who have been engaged in the analysis of proprietary remedies in connection with Health Board regulations regarding the sale and labelling of such articles, have found it difficult, if not entirely impossible, to chemically determine the presence or absence of many substances said to enter into their manufacture. In cases where a powdered drug was present they have resorted to microscopic determination and have based their reports upon it. To illustrate the conditions they have encountered I cite a few instances. An itch powder was found to contain cow-itch or cowage mixed with starch; the latter was determined chemically but the active ingredient escaped discovery until a microscopic preparation of the material was examined. No chemical work should have been necessary in the identification of this sample as both ingredients have definite histologic structure. In dealing with the small amounts of cocaine gathered from illicit vendors of this narcotic entire reliance has been placed upon microeliemical methods of determination. A certain remedy in the form of a granular powder was submitted for examination and upon ether extraction yielded a volatile oil resembling eucalyptol. The question arose as to whether eucalyptus leaves were present or whether the material was merely a filler mixed with eucalyptol. Upon microscopic examination eucalyptus leaves were found together with a large amount of foreign leaves used as filler.

Many foods and particularly spices may contain adulterants which are not readily identified or which are impossible of recognition by chemical means, but the number of these articles which are incapable of analysis by either chemical or microscopic means, or a combination of both, is very small and almost negligible. The recognition to be accorded microanalysis in the forthcoming revisions of the Pharmacopoeia and National Formulary will go a great way toward popularizing the microscopic method of identitying and standardizing drugs. It is the official sanction of another means to this end, placing microscopic examination upon a plane with already existing methods of chemical, physiological and botanical valuation.

Metallurgical and Mineralogical Work.

The use of the microscope in identification and classification of mineral bearing ores, geological specimens and metals has only been worked out in late years but immense strides have been made in the application of microscopic methods to this field. So important has this branch become that instruments are now manufactured especially for use in metallurgical work. The metallurgical micro-

scope differs from the familiar type of instrument in that the illuminating apparatus is not mounted below the stage for as the objects to be examined are in almost all cases opaque, it is necessary to employ vertical or overhead illumination. The latter is accomplishel by having a mirror or prism set in the objective in such a manner that it will reflect downward through the lens combination, a pencil of light admitted by an aperture in the tube of the objective. The mirror or prism is either placed out of the line of vision or is perforated so that the light rays are not intercepted. An arc with a condensing lens is usually employed as the illuminant. Preparation of objects for examination involves the grinding and polishing of the specimen to obtain a perfectly plane or level surface. Where differential effects are desired, objects are subjected to the action of etching media which, by differing in action upon the constituents of the specimen, may give information as to its chemical composition. In more modern types of microscopes designed for this branch the instrument is reversed, the objectives being below the stage, the object being placed on the upper surface of the latter. Coarse focussing is performed by moving the stage instead of the body-This placing of parts has the tube. advantages of permitting the use of specimens of any size with but one side ground and obviates the moving of the source of illumination for each specimen.

Utilization of the microscope in this field furnishes information which, if not as accurate as that resulting from chemical tests, has the great advantage of being quickly obtainable. I have been informed that the instrument is being

extensively used in the iron and steel industries for the examination of castings and alloys.

Textiles and Papers.

microscope in a simple form The (linen testing lens) has long been employed in textile industries. In this field where the main requirements are identification and approximate quantitative estimation of the different fibers used in fabrics, it furnishes the desired information quicker and more satisfactorily than any other means. Its use has been extended to the fur manufactures, and although some of the sophistications practised in this business are almost impossible of detection by gross methods, even by experienced persons, microscopic examination is simple and furnishes reliable information. The various textile fibers and hairs show greater or less differences in histologic structure so that the procedure is but one of comparison was authentic samples. This is one of the simplest branches of microscopy because we are dealing with but one type of tissue instead of the many found in drug and pathological examinations. Microscopic examination of fibers used as paper material is a little more difficult. as such material usually consists of more than one kind of fiber together with mineral matter or a filler. But maceration of the material followed by examination of the pulp usually yields considerable information about the substances employed.

The examination of textiles is performed by teasing out both the warp and woof material followed by direct observation with objectives of moderate magnification. Papers are either teased

out and examined directly or are subjected to maceration and the pulp examined.

Bacteriological and Pathological Uses.

The advances made in the sciences of bacteriology and histologic pathology are to a great extent due to increased efficiency in the manufacture of higher powered objectives. While not all the work in these sciences requires the use of the microscope, we find that the greater portion of it does. Examination of bacteriological and pathological specimens demands the use of staining agents and a small but important branch of science has been brought into existence through the study of these reagents, their effects upon organisms and the reactions involved. In examining most materials included under this head we employ the so-called oil immersion lenses. We find that the higher powered objectives tend to disperse light rays and that a thin layer of air between the objective and the specimen will have a refractive power differing from that of the glass in the lenses of the objective. These factors while not as noticeable in lower powered objectives become very apparent in those of higher magnification. The use between the lens and the object, of a thickened oil of cedar-wood having a refractive index near that of optical glass, does away with these interfering differences of refraction. It displaces the air ordinarily occupying the space between the objective and the specimen. Microscopic examination is to a great extent the means of positive diagnosis in diseases such as tuberculosis, typhoid, carcinoma, diphtheria, tetanus and many others.

Microchemical Methods.

The use of the microscope in chemical analysis is a branch which has as yet hardly been worked. The great difficulties are inability to obtain exact quantitative results and the lack of workers who are well enough versed in microchemical technic to have confidence in their observations. The personal factor plays a larger part in microchemical analysis than in the usual methods of chemical analysis and much greater experience is required. These difficulties tend to decrease the number of microanalysts who are capable of applying the methods offered for the conduct of such As we are dealing with very work. small quantities of material we are also increasing chances of error through faulty manipulation. But if one has to examine minute quantities of material, especially the alkaloids and their salts. microchemical methods prove a great help. Microchemical analysis demands a good working knowledge of crystallography as we can often determine a sample from its crystal formation. The most useful accessory in this line of work is the polarizing ocular. In modern instruments this apparatus is readily adjusted by the analyser section being placed in the condenser mount and the polarizer in the body-tube in place of the usual ocular.

Crystallized salts of the alkaloids are a class of substances in which microanalytic methods of determination are as certain, if not more so, then the usual color tests employed. These color tests are often indefinite and subject to many interfering factors. They are in some cases wholly empirical, the reactions concerned in the production of the colors

noted being not entirely understood. In microchemical and crystallographic methods we can directly observe the reactions and crystal forms, being able to detect and rule out the interfering substances. Alkaloids differ from one another in crystal form and we can check results by crystallizing the unknown and comparing with a standard sample crystallized under the same conditions.

Some very elaborate schemes for complete chemical analysis have been put forth by different workers, notably Chamot, of Cornell University. This author gives complete directions for the separation and detection of practically all the metals and the more common acid radicals when working with small quantities of material. Much use is made of crystal forms resulting from the reactions occurring between the material and the reagents employed in various While the results obtained are tests. trustworthy in the hands of a careful investigator, one practised in microchemical testing, we must recognize that the chances of error from carelessness are greater than with the usual methods.

Prof. Chamot also gives methods for the determination of refractive indices, melting points and solubilities. These are operations which, while demanding a certain amount of skill, are more readily carried out than a complete analysis and which will furnish data of value in regard to the composition of an unknown substance.

The average individual engaged in pharmaceutical work is apt to consider the usefulness of the microscope limited to the fields of pharmacognosy, bacteriology and pathology. I have endeavored to briefly recount some of the other applications of the instrument in the arts and sciences and to show that it should stand first among apparatus in point of general utility to the analyst.

THE "BIG BROTHERS" MOVE-MENT AT MORNINGSIDE HEIGHTS.

An effort to extend the "Big Brother" movement in a modified form to Columbia University is indicated by letters written by several students to "Spectator," the undergraduate daily. That publication has taken up the proposal favorably and is recommending its adoption editorially.

The idea, first expressed by Theodore Du Bois Wiggins, of the junior clubs, is that students in upper classes selected for their ability and fitness be appointed as senior advisors to men entering the university. With these men the advocates of the idea would have the novitiates in the university's life discuss their courses of study, the activities they should pursue on the campus, athletic as well as literary, and such personal topics as furnish difficulty to the younger men.

This project, if it is adopted, will be a decidedly novel one for New York City undergraduates.

Under the new scheme the entire entering class at Columbia would be divided into about thirty sections. A junior or senior, selected either directly by a faculty committee or by the student board of representatives, with the recommendations of a faculty committee to assistit, would be in charge of each of these

groups. His selection would be based on both scholastic record and success in student affairs, and would be deemed a responsibility and an honor. To these men, the idea is, freshmen will come on intimate terms, feeling that a personal interest is and will be taken in their college problems by men not too old to be unable to appreciate their nature.

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"SHE BURNS GREEN ROSIE."

How the phrase came to be a classic yell among prospectors.

Although the prospector is generally supposed to be associated with the search for precious metal, his attention is by no means confined to that. A writer in the Los Angeles *Times* tells of a group of valuable claims in the Silver Mountain mining district which includes the whole of Black Mountain.

It was long considered worthless until an up to date prospector recognized it as "cement rock," the principal ingredient from which Portland cement is made.

Another example is furnished by the discovery of borax in Death Valley, one of the most valuable strikes ever made in California. The discoverer, Aaron Winters, was at that time living in a lonely little shack on the Amargosa flats at the south end of the valley.

Thither, attracted by the light, eame one night a vagrant prospector from Nevada. He had with him a sample of borax brought from a small deposit across the border. This Winters instantly recognized as being the same curious stuff which he had seen lying in great beds in Death Valley, but of which he had never known the name.

Adroitly questioned, the wandered explained to Winters the simple but little known test for borax. No sooner was their visitor safely gone than Winters and his wife, carrying food and water, a pick, a saucer and a bottle of alcohol, set out on foot northward into the valley. At nightfall the next day they arrived at the first of the strange beds.

Without even waiting to moisten his parched throat, Winters fell upon it with pick and bare hands till a little of the surface crust was removed. He scraped up a handful of the loose stuff, piled it in the saucer, moistened it with alcohol and struck a match. An instant later he hurled his hat in one direction, his pick in another, and seizing his wife. waltzed that astonished lady round the strange, flickering flame, whooping:

"She burns green, Rosie! She burns green!"

Winters realized a fortune from his discovery. Even today the man of the valley lighting upon something new heralds his find with the classic yell, "She burns green!"

"A good, hearty laugh is better than medicine," remarked the cheery citizen. "Yes," replied the fearfully calculating person. "But a druggist won't charge you near as much for a little medicine as it is liable to cost to see a genuinely funny show."—Washington Star.

BLIZZARD CLASS REUNION.

On March 13th the class of 1888, better known as the "Blizzard Class," celebrated its 28th anniversary by holding its annual dinner at Terrace Garden.

Twenty-five members of the class and seven guests were present when Toastmaster David Strauss called the happy gathering to order. President Walter S. Reed was unable to be present as he is just recovering from a serious accident.

The dinner as usual was very successful, and if possible, even more congenial than the preceding ones. Good fellowship prevailed until late in the evening when before adjourning renewed allegiance was pledged to "Our Grand Old Alma Mater."

Professor and Mrs. Chandler were kind enough to look in. Professor Chandler is a regular member of the class, and as goes without saying the most popular one. As usual he regaled those present with many happy reminiscences in his well known happy way.

August Diehl, chairman of the Executive Committee, and George C. Diekman, Secretary-Treasurer, were unanimously re-elected.

The Secretary was instructed to convey the condolences of the members of the class to the surviving members of the family of Charles F. Antz of Richmond Hill, a member of the class, who died on December 7th, 1915. A letter congratulating President Reed upon his recovery and lucky escape from death was also ordered sent.

The members of the class are looking forward to the 1917 dinner, and some-

thing real "large" may be expected when the thirtieth anniversary is celebrated in 1918.

The following members of the class answered the roll call:

William Oetinger, David Strauss, Louis Wedel, Emil O. Weiss, Frederick Tuthill, C. W. Bartlett, F. E. Kalkbrenner, William O. Luneberg, Chas. A. Shine, Wm. G. Kugler, W. T. Huggins, August Diehl, Geo. C. Diekman, August Volland, Arthur T. Brown, J. F. C. Luhan, Otto Raubenheimer, H. F. Eisentraeger, Chas. B. Sears, Leopold Freiberger, C. F. Trautmann, G. F. von Kummer, Philip Matty, J. G. Reevs, Fred. Plump.

Professor Charles F. Chandler and Richard A. Frank, son of August Frank, '88, who because of illness was unable to attend, were guests of the class.

Lewis W. Brown, '90, George Schweinfurth, '85, Curt P. Wimmer, '02, Lewis N. Brown, '14, and Arthur J. Reeder, '90, were present as guests of individual members.

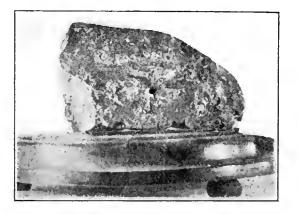
The following, although absent, were marked "excused" in view of the fact that the Secretary had received their regrets:

John G. Dickert, George G. King, Rose Brunner, Emil A. Bischoff, August Frank, Chas. S. Ely, Albert G. Pohly, William W. Keyler, W. H. Nicholson, J. D. Crosby, Nelson Y. Hull, Walter S. Reed, H. S. Miles, W. Pitt Rich, Andrew M. Guerin, Chas. F. Keale.

G. C. D.

A HISTORICAL SAMPLE OF BENZOIN. By FANNIE HART,

N. Y. C. P. '10.



One of the most interesting specimens, and perhaps the oldest in the College drug collection, is a sample of Gum Benzoin which is accompanied by a placard bearing the history of the sample. The facts of this description are apparently true and I have included the same with a photograph of the sample in this article.

"This sample of Gum Benzoin was found embedded under sand and sea on the shore of Table Bay, where it had lain for nearly two centuries. In the olden times, this (Cape Town) was the calling port of most of those richly-freighted Dutch East India Company's merchant ships, and there is no doubt whatever that this gum was being carried from the East to the European markets by a vessel belonging to that company, when she became a wreck on the shores of Table Bav. The lids of two cases have been discovered, and they are not only like the gum, in a state of perfect preservation, but they bear very plainly upon their surface the marks and numbers painted on in 1691. The following is a copy of the marks and numbers, distinctly legible on the cedar-wood lids.

No. 143	2 11 1691
Cabeff H	Benzoin
Netto	300 lbs.
Tarra	61 lbs.
Bruto	361 lbs.

The benzoin is of the Palembang variety, a kind now rarely met with in the market."

Benzoin was first mentioned in the travels of Ibu Batuta who having visited Sumatra during his journey through the East in 1325-49 noted that the island produced Java frankincense and camphor.

The word Java was at that period a designation of Sumatra and was used by the Arabs to signify the island and productions of the archipelago generally. Hence came the Arabic name Luban Jawa or Jawa frankincense which was corrupted into Benjarvi, Benjui, Benzui, Benzoe and Benzoin.

No further information is on record concerning the drug until 1461, when the Sultan of Egypt, Melech Elmaydi sent to Pasquale Malipiero, Doge of Venice, a present of 30 rotoli or 52.5 lbs. of Benzoi. In 1490 the Sultan also presented Agostino Barberigo, another Doge of Venice. with the same quantity of Benzui.

Among the precious spices sent from Egypt in 1476 to Caterina Cornaro, Queen of Cyprus, was 15 pounds of Benzui.

The Portuguese traveller Barbosa visited Calicut on the Malabar coast in 1511 and found Benzui to be one of the more valuable items of export. In fact, we can gather from various sources that benzoin was an article of Venetian trade at the beginning of the 16th Century.

In 1563 Gracia de Orta from Goa, was the first to give an intelligent account of benzoin, detailing the method of collection and distinguishing the drug from Siam and Martaban from that produced in Java and Sumatra.

The resin was obtained by making wounds or incisions in the bark of Styrax Benzoin and collecting the exudate after it had hardened. This method is still employed by the natives of Java.

By dry distillation the chemists obtained benzoic acid, a common pharmaceutical preparation known in the 17th Century under the name of Flores Benzoes.

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NILATON

This preparation is used as an antiseptic application to abraded surfaces and minor wounds. It was found to contain the following: 0.50 per cent. of tincture of iodine, 3 per cent. of sesamum oil, 2 per cent. of liquid paraffin, I per cent. of linseed oil, I per cent. of ethyl-ester of amido-benzoic acid, 2 per cent. of mucilage, 2 per cent. of glycerin and 88.50 per cent. of water.

The junior class exercises will take place on Wednesday evening, May 10, in the College lecture hall, at which time an interesting program will be presented and the honor students of the junior class will receive their awards.

ARE YOUR HEALTH POOR?

Patent medicine advertisements make good reading always. The following masterpiece of drug literature from the Canton (China) News-Letter is recominended to all persons who feel depressed and melancholy:

DIRECTIONS OF THE FOKI PILL.

The time which a man can really bring honour to himself and do good to the world is but a short duration. Before maturity he is chiefly engaged in developing, and when growing old he gets weak and incapable so that the period of sound health which elapeses is invaluable.

It is therefore the serious neglect of some people to allow their health fallen and their energy exhausted in expecting to save every cash and to ignore the necessary and proper remedy.

In view of the above the proprietor of the Foki Pill spares no pain and capital in the preparation of this Pill and puts it before the market.

The Foki Pill is greatly renowned in these five continents and is recognised as an invaluable tonic. It can remedy various diseases, gives unusual effect in strengthening the voice and circulating the blood.

In using the Foki Pill up to a month the whole body feels sound and strong the brain refreshed, the limbs active and the heart strengthened in contrast to the unhealthy condition as before.

Having all these advantages it is advisable to spare some money rather than to lose the benefits derived from this pill.

These pills are strongly recommended for aged people whose health are getting worse.—*Newark Evening News*.

RULES FOR HONOR SYSTEM.

The following Rules have been adopted by the School of Mines of Columbia University:

The honor system is defined as a system embracing student control of conduct of examinations.

ARTICLE 1.

Section 1. This system shall apply to all examinations in the courses given in the Engineering Schools.

Section 2. Fraud in examination shall consist of any attempt to receive assistance from written or printed aids, except as specified by department, or from any person or his paper; or any attempt to gain assistance, whether the one so doing has completed his paper or not. This rule shall hold within and without the examination-room during the entire time in which the examination is in progress.

Section 3. Each student must, in order to make his examination or any other written work done on paper in the classroom valid, sign the following statement: "I pledge my honor that I have neither given nor received aid in this examination (or exercise)."

ARTICLE II.

Approval of this Constitution implies that:

Section 1. The presence of proctors at examinations is hereby discontinued. It is understood, however, that the instructor shall remain in the examinationroom for such a length of time as is necessary for him to answer any questions that may arise. Section 2. All examinations held during the term shall be announced one week prior to the date on which they are to be held.

Section 3. During the examination each student shall have perfect freedom of action and conversation, provided he does not annoy, aid, interfere with the work of others, or refer in any way to the subject of the examination.

Section 4. The honor system committee shall have power to make special rulings governing the conduct of students during examinations, especially relating to unnecessary conversations, smoking, and unwarranted liberties taken by the students which, in the opinion of the honor committee, are detrimental to the system. The honor committee may recommend to the Faculty suitable punishment for violation of these rules.

ARTICLE III.

Section 1. The honor system committee shall consist of at least five members elected from each class. Each member shall serve on the committee until his successor is appointed by his class. The president of each class shall be ex-officio, a member of this committee.

Section 2. The chairman and secretary of the committee shall be elected by the members of the committee.

Section 3. The honor system committee shall deal with all cases involving the violation of the honor system.

ARTICLE IV.

Section I. Every student shall be expected to lend his aid in maintaining this Constitution, and to report to the committee any fraud observed by him in an exercise conducted under the honor system. Failure to do so shall be considered a direct violation of the honor system.

Section 2. If a student detects any apparent dishonesty in an examination, he shall at once quietly call the attention of a least one other person to the matter, and the case shall be reported to the honor committee.

Section 3. In case of reported frauds in examinations, the committee shall summon the accused person or persons, and witnesses, who shall be from the student body only (except that a member of the Faculty may present evidence of fraud in any paper handed in to him), and shall conduct a formal investigation, publicly or secretly, at the option of the accused. In case of conviction the committee shall determine the punishment, by recommending to the Faculty either expulsion, or suspension for a fixed period, in accordance with the rules of the University.

Section 5. The committee shall keep a record of all cases acted upon in their sessions, without mentioning names of the accused; also a record of successive actions of meetings with respect to the honor system. These records, together with the Constitution, shall be preserved by the secretary of the honor system committee, for the instruction of the committee.

Section 6. Four-fifths vote of the entire committee is required for conviction.

ARTICLE V.

Section 1. The Faculty shall make provision for printing and distributing this Constitution to the members of the engineering classes at the beginning of each year.

ARTICLE VI.

Section 1. Signatures of three-fourths of the total members of each section of the class shall be necessary for the adoption of this Constitution for that section.

Section 2. A three-fourths vote of the total membership of the sections of the class adopting this Constitution shall be necessary for the amending of the same.

Howard M. Burns, College '16, who has been seriously ill since the latter part of December is rapidly regaining his health. Some of our readers need not be surprised if they receive cards from our friend from the South, as he is spending some time in Cuba and Florida, hoping thereby to hasten his recovery.

This preparation is Ergotin Merck. claimed to contain all of the active constitutents of ergot, in unchanged form, and is made in accordance with special processes. It represents 4 times the strength of the best obtainable ergot. It is described as a dark red-brown liquid, clear and transparent, and perfectly sterile. It is suitable for hypodermic use as well as for administration internally. It is given in doses of 5 to 10 drops mixed with sweetened water, to be repeated after two hours. Hypodermically it is employed in doses of from 0.50 to 1 cc. injected preferably into the gluteal muscles.



Conducted by Prof. H. H. Rusby.

College Improvements.

Important changes, both in equipment and curriculum, are announced by the College, to take effect next year or in the early future.

In addition to a general overhauling that the building will receive during the summer months, there will be installed enough ventilated steel cases, of the latest and most approved pattern, to allow each student to have a safe and convenient place for storing his overcoat, overshoes, hat, umbrella, books, apparatus and other property. Each student will have his own key by which no other locker can be opened. These lockers will occupy the present coat room, but there will be a considerable overflow, which will be arranged around the walls of the basement hall.

Entrance Requirements.

No changes in entrance requirements are to be made before the fall of 1918. when the requirements will be two years' of highschool work, or 30 Regents' counts, for all pharmacy schools in the State of New York.

The new requirements for admission to the College of Physicians and Surgeons of Columbia University will be two years of college work, aggregating 72 points, as reckoned by Columbia College for the combined course, which shall include one year of physics, one year of biology, one year of inorganic chemistry based on college entrance chemistry, onehalf year of qualitative analysis and onehalf year of organic chemistry, two years of college English and the equivalent of courses A and B in either French or German, of Columbia College. It will thus be seen that our Ph. Ch. Course, aggregating 98¹/₂ points, is far in excess of these general requirements. It also meets the requirements as to each of its elements, with the exception of the languages, which must be studied as an "extra."

Other Changes.

The evening courses will be greatly enlarged and improved. Instead of occupying but one evening of the week, as heretofore, so that the student was compelled to elect the work of but one department, each department will now employ a different evening, those so disposed being enabled to secure a full course of instruction, consisting of three hours' work weekly in each of the three departments. This work has been formally adopted by the University as a regular part of its Extension Teaching:

In the new prospectus, the two years of the College Course will be respectively designated as the "First" and "Second" years, those of the University Course, as the Freshman, Sophomore, Junior and Senior.

Hereafter, the division of the class for practical work in Pharmaceutical Accounting will be into the regular three sections. Section one and two will meet on Thursday evenings, one in the lecture room and the other in the pharmacognosy room, section three on Saturday. The teaching force will be increased to provide for the new arrangement. The special fee of \$8.50 will be abolished and only regular charges for necessary supplies will be made.

The curriculum for the fourth or senior year of the University Course is now being arranged by the faculty, and will be announced in the new edition of the College Bulletin.

At the last meeting of the Board of Trustees, the Treasurer announced that the legacy of \$15,000.00, bequeathed by the late Vice-President of the College. Mr. Albert Plaut, to provide for the Isaac Plaut Fellowship, had been received and arrangements for its investment were made. It will yield an annual revenue of about \$750.00, a sum that is ample to provide for the year of foreign study contemplated by the generous donor.

Commencement will this year be held on the evening of Thursday, May 11, and as usual, at Carnegie Hall. It is hoped that*President Butler will be able to preside, but in his inability so to do, the Provost of the University, Professor William H. Carpenter, will assume his duties. The Hon. T. C. T. Crain has consented to address the graduating class. All those interested may obtain tickets by writing to the College office.

EVENING COURSES.

These courses of instruction, offered for the first time last year, have been completely reorganized and largely extended. Although they cannot for the present be substituted for any of our regular work, leading to degrees, they are now recognized as a part of the Extension Teaching of the University and general educational credit is allowed them. They are designed for the benefit of special students, as well as of members of our regular classes. Certificates will be awarded to those who successfully complete any of these courses.

The work occupies three evenings of each week and students may pursue any or all of them.

Tuesday, 7:30 to 10:30 P. M., Department of Chemistry

Wednesday, 7:30 to 10:30 P. M., Department of Pharmacy

Thursday, 7.30 to 10:30 P. M., Department of Materia Medica

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COURSES OF INSTRUCTION.

Department of Chemistry.

Chemical Urinary Analysis (Conditional on the enrolment of at least five students).—Lecture and laboratory course, 6 points.

Instruction is given in the determination and quantitative estimation of all constituents of the urine, normal and abnormal.

Gravimetric Analysis (Conditional on the enrolment of at least five students).—Lecture and laboratory course. 6 points.

Instruction is given in the quantitative estimation of the constituents of compounds by the determination of their weight.

Food and Drug Analysis (Conditional on the enrolment of at least 5 students).—Lecture and laboratory course, 6 points.

This course is intended to take the place of the chemical instruction in food and drug analysis heretofore given in the regular food and drug course of the College of Pharmacy, which is now discontinued.

Department of Pharmacy.

Pharmacy of the Newer Remedies (Conditional on the enrolment of at least five students).—Lecture course, 1 point; laboratory course, 5 points. Professor Wimmer.

Instruction is given in the pharmacal characters and behavior of new drugs and preparations, as they are introduced into medicine, with special reference to those of the preceding year.

Pharmaceutical Manufacturing (Conditional on the enrolment of at least five students).—Lecture course, 1 point; laboratory course, 5 points. Professor Wimmer.

Instruction is given in the most modern methods of manufacturing the different classes of medicinal preparations, as well as of cosmetics, insecticides, inks, photographic preparations, etc.

Advanced Pharmacy (Conditional on the enrolment of at least five students).—Lecture course 1 point; laboratory course 5 points. Professor Wimmer. Instruction is given in the unusual and more difficult classes of problems which from time to time confront the practicing pharmacist.

Department of Materia Medica.

Microscopical Analysis of Urine (Conditional on an enrolment of at least ten students).—Lecture and laboratory course, 2 points. Professor Mansfield.

Provided as a companion course to that in the chemical analysis of urine. Provides instruction in the physical identification of crystals, casts, blood cells and other solid contents of the urine.

Pharmacognosy, Microscopical Conditional on an enrolment of at least ten students).—Lecture and laboratory courses, each 3 points. Professor Mansfield.

Instruction in the identification, valuation and selection of drugs from a study of their gross characters.

Pharmacognosy, Macroscopical (Conditional on an enrolment of at least ten students).—Lecture course, 2 points; laboratory course, 4 points. Professor Mansfield.

Instruction in the identification, valuation and selection of drugs, whole or powdered, from a study of their microscopical characters. This work assumes some previous familiarity on the part of the student with the use of the microscope in the study of vegetable tissues. Those not possessing this ability should take the summer laboratory course. June 24 to July 12.

Histology of Medicinal Plants (Conditional on an enrolment of at least

ten students).—Lecture course, 2 points; laboratory course, 4 points. Professor Mansfield.

Instruction in the structure of drugyielding plants, as studied with the microscope. This work assumes some familiarity on the part of the student with the use of the microscope in the examination of vegetable tissues. Those not possessing this ability should take the summer preparatory course, June 24 to July 12.

SUMMER PREPARATORY COURSE.

It will be seen that the work is not definitely fixed, but is made sufficiently elastic to allow it to be adapted to the special needs of individuals.

Scheme of Attendance.

1917

June 4th to June 22nd Department of Chemistry.

June 25th to July 14th Department of Materia Medica.

July 16th to August 4th Department of Analytical Chemistry.

August 6th to August 25th Department of Pharmacy.

These courses are designed to assist students who have failed at the spring examinations to prepare for those of the fall, and to provide instruction for special students in the use of the microscope, in the examination of drugs and in pharmaceutical processes.

NEWS ITEMS.

The Secretary's office, in conjunction with the Membership Committee, is engaged in the publication of a list of members which, together with an outline of the objects of the institution, will be sent to all the pharmacists of Greater New York.

At the annual meeting, held March 21, the following officers and trustees were elected: President, Nicholas Murray Butler; First Vice-President, Charles F. Chandler; Second Vice-President, William J. Schieffelin; Third Vice-President, Henry C. Lovis; Treasurer, Clarence O. Bigelow; Secretary, Thomas F. Main; Assistant Secretary, Charles W. Holzhauer; Trustees, to serve three years: Otto P. Amend, Adolph Henning, Caswell A. Mayo, Reuben R. Smith, J. Leon Lascoff.

At this meeting, Professor Henry P. Hynson addressed the members on "Commercial Training for the Pharmacist."

The following gentlemen have recently been elected to membership in the College: Louis Berger, H. H. Blomeier, John H. Kimmel, R. M. McCutcheon, Morris Manheimer, Nelson P. Snow.

RECIPROCITY.

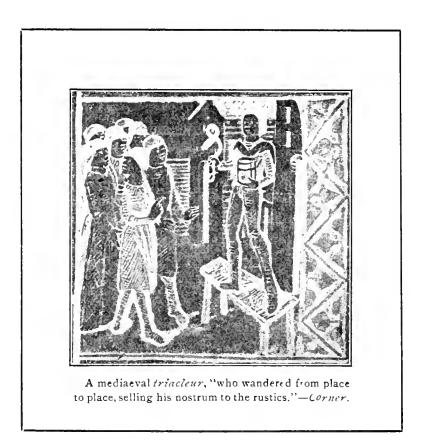
Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian



The paper by Dr. George W. Corner on the old antidotes and cure-alls, Mithridatium and Theriac, published in the *Johns Hopkins H spital Bulletin* of June, 1915, has been widely quoted by the press. Naturally it has appealed to those interested in the history of remedies. And since we have so good a collection of old dispensatories in this library, it was decided to use them for an illustrative exhibition of the source material upon which an historical paper, like that of Dr. Corner's, is constructed. The *Bulletin* mentioned above was accordingly, obtained, and forms, in fact, the nucleus of the present exhibit in our show-case. We append a short description of this exhibit for the benefit of those interested.

On the left of Dr. Corner's article is seen the Greek Ciambic poem of Democrates, which introduced Mithridatium to the world in the middle of the first century A. D. On the right is the much longer Greek poem of Andromachus, Nero's physician, which did the same

thing for Theriac. Also, nearby, is seen pictured in M. Planchon's article on Theriac for the "Journal de pharmacie et de chimie" the great earthen jar for these precious electuaries which were prepared for over a hundred years at Paris with the most imposing carefulness are ceremony. At the top of the jar one sees the three locks of which three different dignitaries of the city kept the keys. A little farther on, and below, in the show-case are displayed photographs of handsome porcelain vases of the 16th century, marked respectively Mithridatium and Theriaca, which have been found in apothecary shops of Bordeaux, France. Both are decorated with viper handles, though Theriac alone of the two contained vipers' flesh as one of the sixty-two to a hundred and twenty ingredients composing the old prescriptions.

By the kindness of the Public Library, from whose books we have obtained all our photographs, we are able to show reproductions of pages in the "Coverdale Bible," 1535, and the "Bishop's Bible," 1568, where the word that is translated *balm* in the "Authorized Version" appears as *triacle* (treacle) in these.

At the end of the theriac, or treacle, exhibit is the photograph of the miniature given above. It is taken from a beautifully illuminated MS. of Galen's works preserved in the Dresden Library, and represents a triacleur, or treacle peddler, recommending his wares by holding in his right hand an adder from which he takes no harm because of his use of the treacle that he is selling from the jar in his left hand.

Dr. Corner says that a magistrate's license of the 16th century has been

found, giving a friar and a triacleur permission to travel in company. This, he continues, was "a convenient arrangement which permitted a layman to buy pardon for his sins and balm for his diseases from the same firm."

The remaining spaces of the three shelves are occupied by old dispensatories, beginning with that of the Arabian physician Mesue of the 10th to 11th centuries, and ascending in regular order through those of Valerius Cordus, Moyse Charas and Renodaeus, to James's New Universal Dispensatory, editions of 1752 These make a very good and 1764. showing, indeed, opened to one or the other of these complicated recipes. In fact, all is here to give a complete survey of the reign of Mithridatium and Theriac for eighteen hundred years, except the French Codex of 1884 in which they received their last official recognition.

If any one of the readers of this note happens to know of the latter book, within begging, borrowing, or buying distance, a communication with this library on the subject will be regarded as a friendly deed.

For the rest, a sentence on the bulletin board, translated from Renodaeus, physician and writer on pharmacy of the 17th century, presents the consensus of opinion in these dispensatories as to the virtues of the two remedies:

"Not inaptly," Renodaeus says, "do some call Mithridatium the father of medicine, and Theriaca, the mother, since, for a truth, they surpass all other medicines in value and efficacy, and include the virtues of all; for hardly is there a disease, to which one or the other, when rightly prepared, does not bring relief."



Conducted by Prof. George C. Diekman.

Valuation of Rhamnus Barks.

O. Tunmann, in Apoth. Ztg., 1915, 495, proposes the following: 1.60 gms. of the finely powdered and well dried drug are extracted in an Erlenmeyer flask with 100 grammes of solution of sodium hydroxide (for rhamnus purshiana 4 per cent. and for rhamnus cathartica 3 per cent. strong). The mixture in the flask is heated to boiling and then shaken for at least 10 minutes. After the drug particles have settled, the liquid is passed through a double plaited filter into separator. The drug residue is again thoroughly shaken for a period of at least 10 minutes with 60 grammes of the alkaline solution. This liquid is added by filtration to that already in the separator, and the drug residue washed with another portion of 10 grammes of the alkaline liquid, together with an equal weight of water, and the washthrough a double plaited filter into a separator. The combined filtrates are acidulated and 160 grammes of chloroform added and the whole shaken vigorously for a period of not less than 30 minutes. Set aside for two hours and then collect most of the chloroform in a suitable vessel.

One hundred and twenty grammes of this chloroformic solution (equal to 1.2 gramme of drug) are then shaken for several minutes with 120 grammes of the

alkaline solution. After the liquids have separated, the now colorless chloroformic layer, together with a very small amount of the colored, aqueous layer, is drawn off. Subsequently, 100 grammes of the alkaline liquid are collected, passing through a filter (equal to 1 gm. of drug), and then acidulated with diluted hydrochloric acid. The mixture is allowed to stand for a number of hours, and the precipitate is collected on a plainly folded tared filter, washing thoroughly with water containing a little hydrochloric acid (I : 100). After drving carefully at about 60° C., the precipitate is weighed. This weight multiplied by 100 equals the amount of anthrachinon derivatives contained in 100 grammes of the sample under observation.

The Detection of Minute Quantities of Oxalic Acid in Wines.

H. Kries and W. J. Baragiola (Swiss Phar. Jour., 53-1915-399) recommend the following described procedures:

(a) 50 cc. of wine are heated to boiling, and then decomposed with 3 cc. of a 5% solution of calcium chloride, and enough ammonia water, to produce a decided alkaline reaction. Boiling is continued and the mixture acidulated with 50% acetic acid, avoiding excess. The mixture is then allowed to cool, and is centrifuged. In the presence of oxalic acid characteristic crystals of calcium oxalate will be shown under a magnifying power of from 200 to 300 diameters.

(b) 50 cc. of wine are mixed at room temperature, with 2.50 cc. of a 5% solution of calcium chloride, 2.50 cc. of 99% acetic acid and 5 cc. of a saturated solution of sodium acetate.

This mixture is set aside for 24 hours, and after shaking, is centrifuged. If oxalic acid is present, this will be shown microscopically. The authors claim this method will show the presence of oxalic acid if as little as 0.01 in 1,000 is present.

Active Constituents of Squill.

Kopaczewski describes two active constituents which he succeeded in isolating in the pure form from Scilla maritima. One of these he calls scillitin. stating that it is an active poison. The other he calls scillidiuretin, stating that he found this constituent to be strongly diuretic in action. This latter constituent would seem to be identical with the substance described by Mandet under the name of scillitin. Scillitin (Kopaczewski) is a permanent yellow powder, possessing a very bitter taste. It is sparingly soluble in water (0.15 : 100), the solution possessing a neutral reaction. It is more soluble in alcohol. The author believes it to be a chemical unit, a nonnitrogen containing glucoside having the following formula: C17H25O6. He obtained from 2 to 3.70 grammes of the substance from one kilo-gramme of the drug. 0.001 gramme of scillitin represents the poisonous activity of about 1 gramme of the dried drug.

Scillidiuretin occurs in the form of an amorphous, yellow powder. It is quite soluble in water, but practically insoluble in alcohol. The aqueous solution possesses an astringent taste. Experiments on animals showed that it is capable of increasing the amount of urine very materially.

Lapachol.

Konrad Bournot, in Arch. a. Pharm., 251, states that he has obtained lapachol from the heart-wood of Avicennia tomentosa, by extraction with ether. benzol or petroleum ether. The plant is a member of the Verbenaceae, and is found widely distributed through the East and West Indies, and along the western coast of Africa. This must be considered a new source for lapachol.

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NEW REMEDIES.

Corypinol is a remedy employed in the treatment of inflamed mucus membrane, particularly that of the nose. It is applied by means of a pledget of cotton. It consists of a mixture of coryfin and pine oils.

Manarsen is the name given to tablets, each of which contain 0.005 gm. of manganese glycerophosphate, 0.00016 gm. of arsenous acid, 0.02 gm. of extract of gentian and 0.05 gm. of powdered licorice root.

Juvenileau. This is a preparation intended for external use. Upon anaylsis it was found to consist of an aqueous solution of lead acetate 5:100.

Kalzan. Under this title tablets containing a mixture of sodium and calcium lactate are marketed.







Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Magnesium Peroxide.—S. M. P., New York.—Magnesium peroxide MgO₂ is prepared by treating sodium dioxide with a double magnesium salt, preferably in the presence of an ammonium salt.

It is a white powder that should contain not less than 15 per cent. of MgO_2 . When brought in contact with water, oxygen is produced, while treatment with diluted acids produces a solution of hydrogen dioxide.

It is used as an antiseptic especially in tooth powders and similar preparations. For further details, S. M. P. is referred to "New and Non-Official Remedies."

The Composition of Proprietary Preparations.-A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackerv" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Assay of Minute Quantities of Arsenic.--J. Z., New York desires information concerning the assay of minute quantities of arsenic such as are necessary in investigations as to the fate of salvarsan and similar arsenical organics in the animal body. A chemical method-destruction of tissue with potassium permanganate, removing excess of permanganate with hydrogen dioxide and eventual titration of the arsenical distillate with hundredth-normal jodine and thiosulphate solutions-has been worked out by Rupp and Lehmann and can be found in full in the Archive der Pharmacie 250 1912 382 and 251-1913-1. These may be consulted by our queriest in the College Library or will be translated for an appropriate fee. An interesting type of qualitative test for minute amounts of arsenic is that devised by Gosio (Berichte dtsch. Ch. Gesell. 30-1897-1024) and modified by Maassen (Chem. Centralblatt 73 1902-1245). This is based upon the fact that certain moulds (notably Penicillium brevicaule) grown upon media containing minute amounts of arsenic produce volatile arsenic compounds possessing a garliclike odor. It is claimed that 1/100 milligramme of arsenic can be detected in this manner.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted. Hydrogen Dioxide Literature.—M. A. C., New York, desires articles discussing at some length, the manufacture of solutions of hydrogen dioxide. The two most satisfactory articles on this subject with which we are acquainted are one of G. C. A. Fawsett (*Jl. Soc. Chem. Ind.* 21-1902-229) and another by J. S. Brewer (*Drug Circ.* 56-1912-601). Both of these are to be found in the College library and are therefore at the disposal of our querist.

Detection of other Cinchona Alkaloids in Quinine.—G. H. S., New York, desires the test given in the fifth edition of the German Pharmacopoeia for detecting the presence of other cinchona alkaloids in quinine sulphate. This is a modification of the well-known Kerner's test and reads as follows:

"Two grammes of the sulphate dried between 40° and 50° are placed in a test-tube, 20 cc. of distilled water are added and the mixture is warmed for one-half hour with frequent shaking in a water bath heated between 60° and 65°. Then the test tube is placed in water chilled to 15° and is kept therein for two hours with frequent shaking. The mixture is then transferred to a dry piece of linen of about 100 square centimeters surface and is expressed, the strained liquid being then filtered through a paper of 7 centimeters diameter. Five cubic centimeters of the filtrate cooled to 15° are mixed with 4 cc. of 10 per cent. ammonia water, whereupon there is formed a precipitate which must upon gentle agitation, redissolve forming a clear fluid."

If other cinchona alkaloids are present, the precipitate will not wholly dissolve.

Protective Varnish for "Movie" Films.—A. R. A., New York, desires a receipe for a varnish to be applied as a protective coating to moving picture films. This is scarcely a pharmaceutical question and while we suggest that our querist experiment with a varnish made by dissolving celluloid or else acetylcellulose in an appropriate solvent, such as "banana oil," we proffer the advice, chiefly in hope that some of our readers who know may come to our aid with a tried recipe.

Berthelot's Salt.—C. C., New York. —According to Hager's "Handbuch." Berthelot's salt is a synonym for potassium chlorate.

Ag-mel.- J. T. W., New York desires information concerning Ag-mel. According to Martindale's "Extra Pharmacopœia," this is a synonym for succus agavæ concentratus, the concentrated juice of the Mexican plant Agave Mexicana. This, states Martindale, is used with considerable success in kidney troubles in doses of one-half ounce three or four times a day. From the account given one judges that Martindale has in mind some English proprietary article, our reference to price-lists shows nothing listed under the synonym given above. Donald McEwan (Chemist and Druggist 76-1910-446) describes at length pulque which is the fermented sap of the maguey plant, Agave Mexicana. In the article he states the fresh sap is called "agua miel" (honey water); so the connection between that and Agmel is plain. Perhaps some of our readers can inform us as to where either product can be obtained in this country and thus oblige both us and J. T. W.

Tests for Aspirin.—S. D. S., New York.—The following tests for aspirin are taken from the monograph on that chemical found in "New and Non-Official Remedies"; that valuable and authoritative handbook on new remedies which is published by the American Medical Association and which should be found at every prescription counter.

"It forms small colorless crystalline needless melting at 135° C..... It forms clear colorless solutions which do not develop a violet color on the addition of ferric chloride, unless previously hydrolyzed by boiling with sodium hydroxide. It gives no reaction with silver nitrate and should leave no residue, when heated on platinum foil."

As to detecting the difference between aspirin prepared for the American market and that intended for the Canadian trade—a condition that scarcely obtains now that the war is on—it is claimed that by crystallizing the batches from different solvents, different and distinctive crystal forms are obtained. For details concerning the crystal structure of aspirin and its substitutes, we refer our querist to a paper by Dr. William Mansfield (*Pract. Drug.*, Dec. 1912 p. 25).

Extract de Palo de Lima.—G. H. K., New York.—This Spanish name means the extract of Lima wood, which is a synonym for "hypernic" which is a variety of Brazilwood or pernambuco wood or red campeche wood. We presume that our querist can obtain a commercial extract of hypernic from some dealer in dve stuffs. 829 ALUMNINEWS 1916

THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1915-1916

President JEANNOT HOSTMANN, 115 West 68th Street, New York City Honorary President

THOMAS F. MAIN

Vice-Presidents

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Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

MINUTES OF THE ALUMNI ASSOCIATION MEETING HELD WEDNESDAY EVENING MARCH 8, 1916.

Meeting called to order at 8:45 P. M. by President Hostmann.

Present: A. J. Bauer, '03; L. N. Brown, '14; E. M. Drury, '13; B. Maslon, '13; V. M. Orefice, '15; H. H. Schaefer, '12; N. A. Smedira, '15; J. A. Steffens, '09; E. C. Steinach, '00; C. J. Watters, '13; L. Roon, '10; Jeannot Hostmann, '96.

Upon motion, the minutes of the previous meeting were adopted as printed in the C. U. C. P. ALUMNI JOURNAL.

Treasurer's Report: Treasurer absent due to illness.

Registrar's Report: Registrar absent. The Nominating Committee which had been appointed by President Hostmann and of which the following were the members: H. H. Schaefer, '12, Chairman; A. J. Bauer, '03; W. Morlath, '96; B. Maslon, '13; V. M. Orefice, '15, presented their report as follows:

Candidates for office for the year 1916-17 Alumni Association of College of Pharmacy of the City of New York:

President....J. A. Steffens Honorary President...Thos. F. Main First Vice-President....M. H. Weil Second Vice-President....E. Windt Third Vice-President....V. Orefice SecretaryLeo Roon TreasurerF. A. Leslie RegistrarJ. Hostmann

Members of Executive Board:

C. W. Ballard, E. C. Steinach. F. N. Pond.

Motion was made, seconded and carried to accept the report of the Nominating Committee, and the committee was discharged with thanks.

A communication was received from Dr. S. F. Brothers asking that the Association appoint delegates to attend the 19th annual convention of the American Medico-Pharmaceutical League.

A motion was made, seconded and carried that two delegates be appointed to attend the convention.

The President appointed L. N. Brown, '14 Chairman of the Junior Class Day Committee, and Mr. A. Henning, '76 a committee of one for obtaining the usual Alumni Day prizes.

Election of New Members: Application of Mr. J. Fleck, '15, was received and duly passed upon. There being no further business, the meeting was declared adjourned.

LEO ROON, Secretary.

PERSONAL.

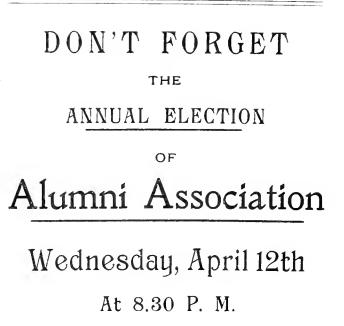
Congratulations are in order. Maurice L. Epstein, winner of the 1915 Alumni gold medal, was married on March 26th to Miss Lillian Meisenberg of New York City. Good luck to him and his from his classmates and other College friends.

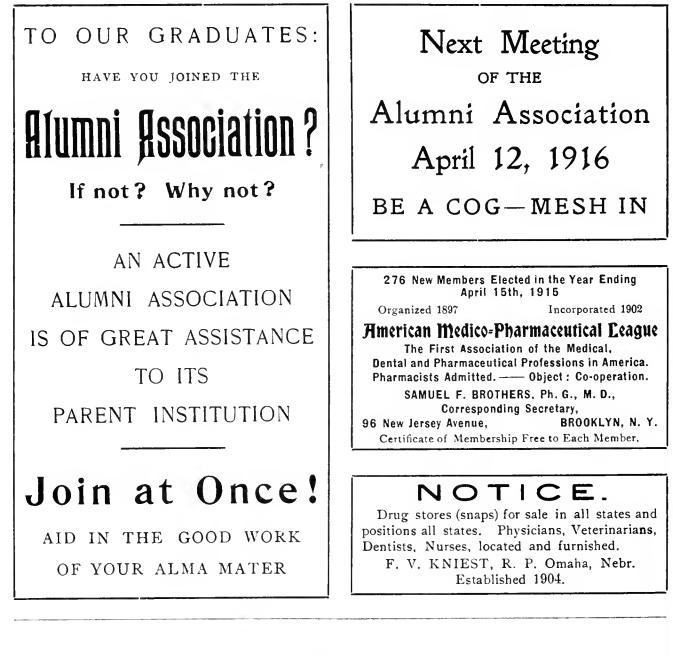
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Mr. Joseph Cariffe ('11) has accepted a position with the Globe Drug Company in Manila, Philippine Islands.

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More congratulations. Mortimer Jacobs, N. Y. C. P. '14, now located in Paterson, N. J., has recently become engaged to Betty Jacobs of the same city. The members of the Alumni Association extend their heartiest congratulations.





PEEK& VELSOR NEW YORK

OFFER NEW ARRIVALS OF Cactus Grandiflorus Aconite Root U. S. P. Colchicum Seed Belladonna Leaves U. S. P. Linden Flowers Pulsatilla

Corn Silk Henna Lavender Flowers Cuttle Bone Hyosciamus Leaves

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Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College, Open to Men and Women,

will begin on Monday, September 18, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

As a department of Columbia University, the College offers courses of three, four and six years, of three and a half days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board.

The Isaac Plaut Fellowship provides five hundred dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis and Microscopic Pharmacognosy are offered in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

Address all communications to the C. U. C. P. ALUMNI JOURNAL, 115-119 West 68th Street, New York.

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Vol. XXIII. APRIL 1916. Number 4.

1916.

When this issue reaches our readers the final examination of the class of 1916 will be in full swing.

For several weeks the usual excitement, both suppressed and otherwise, has been very noticable throughout the College.

The students as well as the faculty were preparing for the final test that will send the majority of the members of the class forth, well equipped to take their places in the ranks of progressive pharmacists and "pharmasisters."

2.

To those who will be successful we extend our heartiest felicitations. To those who tried and tried hard but were unfortunate, we extend our sympathy and wishes for better luck in the fall. To the laggards, those who did not try, we can simply say that they were warned time and time again and that the College and pharmacy would be better off without them.

J. H.

THE TEACHING OF COMMER-CIAL PHARMACY.

On page 75 will be found the address delivered by Professor Hynson before the members of the College at the March meeting.

On account of the thoroughness with which the speaker discussed his subject we ask those of our readers who are interested in the welfare and future of pharmacy to carefully read this very interesting paper.

Professor Hynson treats of many details that usually are not considered when the subject matter of his theme is being discussed.

PAPER AND PAPERMAKING PROCESSES.

By THOMAS J. KEENAN.

In this, the first of two papers, based upon a lecture delivered by the author to the University Class of the College of Pharmacy the development of the art of paper making is traced from earliest to modern times. The chemistry thereof will be discussed in a second paper which will appear in the June issue.

In addressing the University class in Pharmaceutical Chemistry on Paper and Papermaking Processes, I desire to express the pleasure it affords me to be again among pharmacists and how greatly I esteem the privilege as well as the honor implied in Professor Arny's kind invitation to tell you some of the things I have learned of the papermaker's art in the course of my connection with it. My early years were spent in pharmaey and it was impossible for me to remain untouched by association with the things handled by pharmacists, to escape the glamor and the romance of the East that cling to the gums, spices and other drugs that reach the dealer and the compounder after traversing long stretches of desert sands on camel back and in caravans. He is, indeed, a dull or unimaginative person whose fancy fails to be inspired through association with the products of the East that form part of the materia medica. When a man of burning imagination and great intellectual gifts like the poet Keats is brought in touch with the associations of the pharmacy his verse reflects the enchantment in the spell of "lucent svrops, tinct with cinnamon" and literature is decked with fresh gems; while on the scientific side we can recall men like Newton, Scheele and Humphrey Davy who began

life as pharmacists and afterward attained to eminence and fame. It is good to think that they perhaps owed the first stirrings of their genius to the associations of the pharmacy; and when my talk is finished I hope it may leave with you some impressions that will lend new associations to your thought of paper, which has a history of its own equaling in interest any drug or preparation of the pharmacopoeia.

In discussing the form which my address should take, Professor Arny and I agreed that the historical method of study would be best for a discourse on papermaking; he, perhaps, because it is the more logical method of study, and I because it is the easiest road to travel. Before going back to beginnings, however, I should like to touch on some of the striking analogies and contrasts which the modern art of papermaking presents to pharmacy. The same uncertainty that once prevailed in pharmacentical operations regarding the extractive or alkaloidal strength of the ultimate tincture or extract, is experienced by the papermaker in regard to the nature of the product he may obtain after extracting his wood and mixing the residuum or marc—the papermaker throws away the extractive liquor-with filling and loading substances in a beat-

ing engine, the modern analogue of the crude mortar and pestle used by the Arabs for the separation of the vegetable fibers that was the basis of primitive paper.

In the primary processes of separating the pulp or cellulose from the wood, the pharmacist will perceive no analogy with any operation known to his art. On the contrary he will observe methods employed and results obtained as astounding by their destructive wastefulness as by total opposition to galenical methods in the extraction of valuable plant coustituents. It is in the intermediate and later stages of papermaking, in the combining of the "furnish," as the assembled ingredients of the formula for a given paper are conveniently termed, and in the testing of papers, that he will note familiar combinations and reactions and perhaps find scope for the exercise of his galenical skill and the application of his chemical knowledge.

Having connected papermaking processes with pharmaceutical operations by analogy and contrast I will turn to the ancient history of papermaking and invite your attention to some pictures from the General Exposition of the Swiss Paper and Pulp Manufacturers held at Berne in 1914. These are reduced reproductions of a frieze showing the development of papermaking through the ages, and will form a convenient text for my discourse.

The first picture, date 5000 B. C., shows a group of Egyptians collecting the papyrus plant somewhere on the banks of the Nile, Pliny was the first chronicler of papermaking. In his Natural History he gives a minute description of the manufacture of papyrus sheets. The name papyrus is derived from an Egyptian word Pa-p-yor, signifying the thing or product of the river. The papyrus plant is mentioned in the Bible: the "ark of bulrushes" (Exodus ii:3) in which Moses was laid being a small papyrus boat like the vessels of bulrushes referred to in Isaiah xviii:2.

According to Pliny, the papyrus sheet was made by pasting together strips of the pith of the stem. The strips were laid side by side perpendicularly, in length and number sufficient to form a sheet of the desired size. Upon these another layer of strips were laid horizontally and interwoven, the whole being moistened with some adhesive material of which Nile water was one of the ingredients. Pressure was then applied to the resulting sheet, and after drying on a board in the sun, the sheet was glazed by rubbing with a smooth shell or bone. For most nonliterary documents (letters, accounts, receipts, etc.), a single sheet, measuring eight by fifteen inches was sufficient; for longer texts, especially literary ones, the necessary sheets were made into a roll by pasting them together end to end. Rolls have been found measuring as much as sixty feet and even 135 feet.

In the reproduction of the frieze from the Berne Exposition a picture is shown of the Greeks making parchment from the skins of animals. Parchment was used for writing as early as 250 B.C., and its use was continued long after the invention of paper. Of its origin, the story is told that Eumenes, king of Pergamus, started to collect a library that should vie with that of Alexandria. In doing this, he aroused the jealousy of the Ptolemies who prohibited the exportation of papyrus and sought in this way to stop the progress of the library. Eumenes had recourse to a substitute made from the prepared skins of sheep and goats, and the material was called Pergamena from which we get the word parchment. A fine thin variety made from kid and lamb skins is called vellum.

Adhering to the historical method of study we come to the invention of wood paper by the Chinese, which is of older date than is generally supposed. One of the pictures in the Berne frieze shows the cutting and transportation of stalks of the paper mulberry (Broussonetia papyrifera) by Chinese. It is believed that paper was made in China from the fibrous pulp of plants at least 200 years before the Christian era, but in the days of Confucius the Chinese wrote upon the thinly pared bark of Bamboo, etching the characters with a style. True paper from China was not known before 95 A. D. This paper was made of bamboo by a primitive method, the stems being cut into short lengths and soaked in pits of mud and water to soften them. The mass was then taken out and beaten in mortars to a pulp with large wooden pestles. The pulp was cleaned, partly strained and transferred to a vat where it was further treated until of a consistence to form paper when dipped out with a mold or frame constructed of bamboo in small strips made smooth and round like a wire. While the water was draining away from this mold or sieve the mold was shaken back and forth so as to cause the fibers to felt or interlace. The sheets of fibers was transferred from the mold to a heated surface to dry, the transference being effected by removing the edge of the frame or deckle and reversing the mold. The paper was then sized by dipping it in fish glue or by brushing the sheet with a thin rice starch. The sheets were usually three feet and a half in length and two in breadth. The fine paper used for letters was polished, after sizing, by rubbing it with smooth stones.

An epoch in the history of papermaking dates from the capture of Samarkand by the Arabs in 676. This city, which is on the borders of Bokhara in Turkestan, was inhabited by Chinese and Persians, among whom were probably Chinese workmen skilled in the art of papermaking. After its capture Samarkand came under the rule of the Caliphs of Bagdad, under whose government it may be supposed the arts and industries flourished. Among these papermaking was fostered until Samarkand became the home of this industry. In 795 the Caliph Haroun Al Raschid, of "Arabian Nights" fame, sent for workmen from Samarkand and established a paper mill at Bagdad, where the industry was maintained as a State monopoly for a period of 500 years. The use of rags as a papermaking material is credited to the Arabs, who, however, kept their process a secret, until the arrival of the Crusaders, by whom the veil of the mystery of papermaking was lifted.

The illustrations of the Berne frieze show the Arabs operating a stone pulping mill, and the picture following this gives a representation of the return of the Crusaders to Europe bringing specimens of the paper and books manufactured in the East. Other pictures show the introduction of the stamp mill, operated by water power, the dipping vat and press, the appearance of watermarks on

paper, the Holländer, or improved pulping mill, and finally the epochmaking invention of the continuous paper machine by Nicholas Louis Robert in 1798, which revolutionized the industry, and made possible the modern newspaper.

Paper mills were established by the Moors in Spain in 1085, but the art was not generally introduced into Europe until the last years of the twelfth century, when paper of good quality was made in France and Italy. Watermarks were invented by the Italians who also improved the manufacture of paper. Italy at the present time being the chief source of fine handmade paper. The industry was established in Germany at Ravensburg in 1200, but French papers were preferred up to the time of the revocation of the edict of Nantes, when Huguenot refugees settled in Holland and began the manufacture of so-called Dutch paper, which soon acquired a reputation that brought it into great demand and developed an industry that added greatly to the wealth of the country. In mechanical appliances the chief invention credited to the Dutch is the improved pulping or beating engine known to papermakers the world over as the Holländer.

England was slow in introducing the art of papermaking, the first record of a mill dating from 1490, when John Tate made paper at Hertford. The first edition of Shakespeare's plays is supposed to have been printed on paper made by John Spielman at Dartford in 1588.

It was in 1690 that papermaking was begun in America with the mill operated by William Rittenhouse at Germantown on the Wissahickon river.

WHY WOMEN ENTER PHAR-MACY AS A PROFESSION.

ESTELLA V. BADDOUR, N. Y. C. P. '16.

From time immemorial, the art of Pharmacy has been practiced with success. From time immemorial, women has depended upon man. Why?

In the ancient past man won the woman by sheer strength, doing valiant deeds. The woman was content and happy. Why?

Because she knew no other way; it was the way she had been taught. In those primitive days there were no schools, and in all controversies the physically strongest won.

When schools came and education was free for all, the girls and boys were side by side competing for knowledge. The girls have always held their own with their physically stronger brothers.

What has all this to do with women entering Pharmacy as a Profession, you will say.

I wish to show that as soon as knowledge was free for all, the woman has not been found wanting; also that in this day of more or less business equality, she is succeeding in every walk of life. And it means a great deal more for her to succeed, for has she not had hundreds of years of dependency to overcome, more or less?

There are always persons with whom the woman comes in contact, in a business way, who, no matter how ignorant themselves, cannot conceive that she could possibly equal them in knowledge. That reminds me of an experience of a friend, who is now successfully corducting her own pharmacy:

One of our numerous good natured brothers from the "ould country" came to her store, to get something to relieve a Upon entering and seeing a cold. woman to whom he must make his wants known, he said, "Where's the druggist?" She replied, "I am a druggist; what do vou wish?" After this remark an inspection was given her from head to foot, then the man remarked: "Why! Kin you give me somethin' fer a cold?" "Yes," she replied, "I certainly can." "Wa'al, I dunno," he said, "I think I'd rather see the druggist." "But I am a druggist," she replied. "Wa'al, all right," said he, "vou may be, but wimmin never did know nothin' nohow."

Generally speaking, it is a difficult matter to say just why women take up pharmacy as a profession; there are so many reasons.

The profession is a good one, and the field for the woman pharmacist is not overcrowded. The woman makes a good pharmacist, for accuracy and cleanliness are two very important factors, and the average woman can compete more than favorably with the average man in these lines.

All men acknowledge that housekeeping belongs to women, but few of them will acknowledge that housekeeping is an art. Nevertheless, it is as much of an art to keep the average home in a clean systematic condition as it is to keep the average pharmacy in like condition.

I once heard this remark, which I think true: "A good housekeeper should make a good pharmacist."

A successful pharmacist, be it man or woman, is only successful as he is capable.

Many a woman takes up pharmacy because she has relatives or friends who need help that they feel they can trust and depend upon. Many a woman has "helped out" these friends or relatives, at different times, and has been found willing and capable. Consequently a few words encourage her to fit herself to occupy a position of trust as well as responsibility.

The average married woman who takes up pharmacy, does so to help her husband, to relieve him. For what husband would not rather trust his business to a competent wife than to a competent stranger?

The young woman who takes up pharmacy as a profession, who has never had any experience in a pharmacy, does so either because she is seriously minded. and interested in learning how to be able to help mankind, or as a primary step towards taking up medicine as a profession, or because the field is not crowded, and the demand for lady dispensers is steadily on the increase. And the reason the demand is increasing is because women make good pharmacists.

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I wisht I was a little rock A-sittin' on a hill;

- A-doin' notl.in' all day long But just a-sittin' still;
- I woudn't eat, I wouldn't drink, I wouldn't even wash;
- I'd set and set a thousand years, And rest myself, by gosh.

-Boston Transcript.

THE TEACHING OF COMMERCIAL PHARMACY.

By HENRY P. HYNSON.

We believe that Professor Hynson in his address at the annual meeting of the New York College of Pharmacy discussed the many sides of commercial pharmacy in rather an unusual manner and that a careful reading and analysis thereof will greatly benefit every retail pharmacist, be he employer or employee.

Strongly obsessed with a sense of importance of this occasion and deeply impressed by the far-reaching opportunities offered me, I retrain from apologizing, explaining and, indeed, from reciting the usual opening anecdote, that might put me more fairly before you.

If you question why I regard the occasion of so great importance, I answer, without hesitation, that pharmacy and pharmacists are now suffering more from the lack of proper commercial teaching than from any other cause or, it may be, from all other deficiencies combined, and what affects pharmacy and pharmacists concerns all those with whom these have to do, meaning the multitudes who are patrons of pharmacists. And more, this is just the time when commerce and commercial things are claiming the attention of the world-next to war-and it is now that the best of the world's knowledge is being applied to commerce, and it is now that the difference between the commercialist and the professionalist, merely because of their vocations, has faded entirely away or into the faintest shade.

A word regarding our mutual responsibilities. While uncomfortably sensible of my own responsibility and fearing that I have presumed to accept one so great, I am not afraid to warn you that yours is even greater than mine. Not only must you try to understand me and comprehend my meaning, but you must put my offerings to the test and, if I am incorrect, you are, in duty bound, to find the truth upon this subject and not only set it upright in your own minds, but you, in your responsible various connections with this great institution and its unusual influence, and you with your responsible connections with the drug trade and the pharmaceutical press of this great metropolis, considering the limitless influence of the latter must make the truth, as you find it, felt all over this land of ours. I have no desire to flatter you and your city, but New York is now, or soon will be, "*The World*" and as goes New York, so goes the world. I should feel that I had filled my greatest possible mission, could I make you really appreciate how much you could do for pharmacy and then induce you to do it.

One may reach an age when he feels that he must not always make favorable criticism and when he must, for the good he may do, run counter to the views of others. I trust, therefore, that I may be pardoned for stating that I believe all the addresses which have heretofore been delivered before you upon different phases of commercial pharmacy have failed to impress you with the importance of making commercial training a prominent part of the curriculum of a school of pharmacy, because all of them, in my opinion, were distinctly post-graduate in character and did not set forth plans for the more elementary teaching of the commercial science, as it may be applied to pharmaceutical practice, nor did they show how practical a commercial course may be made.

I feel that I must protect myself behind an actual "wall of necessity" for this training, otherwise I will be pounded with the old wellworn protest that: "All this knowledge should have been acquired before the student enters a school of pharmaey," and I very confidently believe that those who would so argue know very little about the condition and character of mind that is required to take up this study. It is not the proper kind of study for a child —for an undeveloped mind. Educators discredit themselves when they include specific commercial training in a high school course. Commercial science is justly classified with the other practical sciences, such as those that are combined in a course of pharmacy. It is much the same as the different phases of engineering, and back of all this, as greater support to the "wall of necessity" are the *actual nceds* of the students, even high school graduates, which may be easily ascertained by requiring them to write a commercial letter, such as an application for a position or a request for credit. Scientific farming may have improved the quality of grain, but the mills must still grind the grist that is brought to them.

It has occurred to me that I may more successfully present to you my ideas regarding the details of a course in commercial pharmacy, by reading to you, as far as time will allow, from the manuscript of a treatise on the subject that I have had under preparation for a number of years, but which I have not hastened to finish and publish, because of my numerous enemies. "Oh, that mine enemy would write a book." And if I may be permitted to do so, I will give extracts and examples from the actual course I have been giving, with more or less changes, during the last fourteen years.

It will please and greatly assist me, if as many as are interested will bear with me patiently during the remainder of my address and, having heard what I have read and said, will be good enough to write me their honest convictions as to whether or not they believe such a treatise as outlined would be helpful to students of pharmacy, or if such a book, slightly or even greatly modified, would meet the needs of the time. For such criticism, I will be truly and greatly obliged.

From the proposed treatise I read as follows :

COMMERCIAL PHARMACY

INTRODUCTORY DESCRIPTION

Commercial Pharmacy, as contemplated by this treatise, includes all those doings, peculiar to the business life of the pharmacist, which are not usually regarded as scientific or technical and which have not been generally taught in colleges of pharmacy nor fully discussed in pharmaceutical text-books and other books relating to pharmacy. It has much to do with such practical and oftentimes intricate subjects as were formerly taught apprentices by their preceptors. It includes knowledge of general business principles, facility in business practices and familiarity with business forms; all of which are desirable and becoming accomplishments that will greatly assist their possessor in acquiring creditable pharmaceutical and business standing. They are qualifications such as all classes of tradesmen might use to advantage and are not peculiar to the drug business, but are such as are absolutely necessary to make one competent to properly conduct a retail pharmacy, maintain necessary credit and win financial success.

Leading credit men connected with the wholesale drug trade have freely announced the belief that the business education of pharmacists needs to be advanced and that a lack of commercial training is often the cause of many of them failing to meet their obligations, which means that, while they may be well trained in the scientific and technical phases of their profession, they are not, as a class, successful in a business sense; that is, do not accumulate money, a conclusion that is emphatically endorsed by pharmaceutical journals, leading writers and successful pharmacists. This defect in the preparation of pharmacists for business has been found, upon further investigation, to be so pronounced, that the National Wholesale Druggists' Association has thought it wise to urge its members to exercise almost a paternal supervision over retail druggists who deal with them, regarding their purchases, their investments and their bookkeeping, which, although, no doubt, warranted, is, nevertheless, very humiliating to those of us who are ambitious regarding our calling.

Justice cannot be done the *profession* of pharmacy unless we accept the truth that, while the practice of the profession may, for purposes of profit, be dependent upon good commercial practices, pharmacy is not, itself, dependent upon them. The science and art of pharmacy might be quite successfully and most creditably practised without the slightest reference to trade considerations, just as the science and art of surgery may be practised without the slightest consideration as to how much is done or how much it pays. Let it be understood, then, that trade—what is known as barter and sale—is not an essential part of the profession of pharmacy, but is merely in-

cidental to it; yet, trading is the money-making feature of pharmacy.

The handling of articles which are entirely apart from the real purposes of pharmacy and which may be supplied without the use of pharmaceutical knowledge or pharmaceutical technic, cannot be considered a part of the practice of pharmacy, but, since the purchase and sale of many such commodities are largely made by pharmacists, they may be consistently considered in a treatise on commercial pharmacy, side-lines auxiliary to pharmacy, but not a part of it. This must not make it appear that they must receive different commercial treatment. Drugs and medicines are merchandise and subject to exactly the same commercial control as the side lines.

THE SCIENCE OF COMMERCE.

If we regard the science of any subject to be the exact truth concerning that subject, so far as the truth has been discovered, then we may very properly regard the truth that may be learned about commercial things and doings as the science of commerce. And this real scientific knowledge to be had about trade and trading, bears the same favorable relationship to haphazard knowledge of such practices that the true and accurate knowledge of chemistry bears to the superficial kind that is learned in practice without training. The real, truthful knowledge of commercial practices is the kind that we should try to acquire, in spite of the fact that what we call commercial pharmacy, necessarily, deals with money getting, with profit making and is largely influenced by such considerations.

Regarding the different classes of pharmacists, while it is true that there are qualified pharmacists and assistant pharmacists, proprietors, managers and clerks, the commercial line dividing any one of these classes from another is generally imperceptible. Therefore and because members of these several classes are constantly changing their relative positions, no attempt will be made, in this treatise, to provide special teachings for any particular class of pharmacists.

THE GENERAL AND FAR-REACHING USEFULNESS OF COMMERCIAL PHARMACY.

Those who are just beginning the study of pharmacy should gain, as rapidly as possible, commercial knowledge similar to that which may be acquired from the following pages, because the possession of some such knowledge will not only *prepare* them for promotion, but its use and application will greatly assist in securing the promotion and the greater financial reward that every properly constructed person desires.

To the registered pharmacist and salesman. it will be, for the same reason, most helpful and, to the manager, proprietor, member of a firm, or officer of a corporation, commercial accomplishments are, unquestionably, necessary, and, since a great many retail pharmacists develop into jobbers and manufacturing pharmacists, who *must* follow good business principles, this training, which is meant to be fundamental, will serve admirably as preparation for these larger fields of commercial activity.

FUNDAMENTALS: THE ADOPTION OF STAND-ARDS; FORMING MODELS FOR IMITATION.

The very first and, by all means, the most important move that a student of pharmacy should make, is the one which will establish standards for himself. He should fix in his mind models with which he may compare himself by which he may ascertain his needs, discover his short-comings, and test his progress. Without these standards of models and without these comparisons, he will be unable to know how he should appear and act, or what he should study and how much he should know. While at school, standards of study are fixed for him, but, when he has successfully passed out of college, in addition to the standards for his personality, which he has already adopted, he must also create, for himself, social and business standards of excellence.

THE FIXING OF STANDARDS.

Nothing so greatly affects the progress and success of an individual as do the standards or models he has set up for himself, and these must be many, including those of: carriage, manners, cleanliness, conversation and character, in addition to educational and technical standards.

When looking for these, especially for standards relating to our own personalities, we should often go out beyond our own homes and out beyond our own circle of friends and

acquaintances. We must ascertain if those among whom we have been thrown are what are known as "conventional," meaning in accord with the times and the better doings of the time in which we are living. One must not follow the mannerisms or styles of his natural surroundings, if these do not agree with what is accepted by the world as being in good form. This is best illustrated by the outrageous and disgraceful table manners of many reputable families, which, to follow, would ostracize one from anything like polite society. Extravagant or snobbish standards should not be thought of, but standards that are based on good usage should be adopted, such as would be acceptable to the majority of the more intelligent people of a community; acceptable, especially, to persons who are educated and have travelled.

Standards may not, necessarily, remain fixed, or the same, indefinitely. They should be changed as greater intelligence and better opportunity may indicate, but they should not be changed merely to agree with fads, so-called, or influences that are not creditable to follow, such as the tendency to imitate foreigners or those much given to exaggeration. Reference will be made to particular standards, while treating the various subjects that will follow.

THE PERSON.

The personality of the pharmacist, or of one who proposes to become a pharmacist, is of much importance. While pharmacy is a vocation requiring no great physical strength or power, it does require a considerable amount of endurance and, because the hours of attendance upon duty are comparatively long and because most of the time devoted to business is, necessarily, spent indoors, it is not the proper engagement for those predisposed to tubercular trouble or those with anæmic tendencies. It is a business suited neither to a deformed nor to a crippled person; quick, well-ordered movements are required and extraordinary control and use of the hands and fingers are necessary.

As successful salesmanship is an important qualification of the pharmacist and since the personality of the salesman has much to do with his success, appearance, or address, as it is more politely called, must be seriously thought about, much thought about. One can-

not, of course, change his features, neither can he materially alter his size, but there are some defects which may be remedied. The habit of stooping, for instance, may be and should be overcome, by thoughtful and determined effort; rounded shoulders may be corrected by similar effort, assisted by braces; an awkward, ungainly gait or slovenly carriage may be easily changed; bad, unsightly teeth may be improved or replaced by a dentist; nothing so greatly hinders good conversational effects as do imperfect teeth. To a careful, discriminating person, such remediable defects will create disgust of a most uncomplimentary nature. Besides, decayed teeth are frequently the cause of one of the most repulsive characteristics a person may possess; one that may be a great hindrance, even to commercial success, and always a nuisance to those who must come in close contact with such an unfortunate, who, in many instances, is not at all conscious of the heavy handicap he is carrying-an offensive breath. One should strive to ascertain the true condition of his exhalations and, if far from normal, he should seek, by all possible means, to correct the trouble, which must arise from either: carious teeth. as before stated; an unhealthy condition of the mucous membrane lining the mouth. nose or throat; a disordered stomach; lack of care, or uncleanliness. Unfortunately, we become used or insensible to odors that are a part of us and we must not, therefore, he too sure regarding our bodies. There are many conditions, especially diseased conditions, which may make us very unpleasant associates, consequently, effort should be constantly made to discover such troubles and, when found, they should be treated medically, surgically or dentally, as the special defect may require.

PERSONAL CLEANLINESS.

Personal cleanliness includes, besides the general cleanliness of the body, proper attention to the hair and beard and, *especially, care of the hands and nails;* regular, daily and persistent attention to the latter is suggested. One should, early in life, learn to be his own barber, so far as his beard is concerned, and certainly his own accomplished manicurist.

Consideration of the delicate—rather, the indelicate—subject of personal uncleanliness will, no doubt, be thought out of place,

by some persons, in a course of study bearing the title this one bears but, when it is remembered that conditions, actually existing conditions, need to be treated and that it is intended to remove, as far as possible, all hinderances to commercial success, criticism upon this point, at least, should be withdrawn. Indeed. our best efforts should be directed towards rescuing the one stray sheep, while congratulating those more highly favored. It has been oftentimes and generally reported that the emplovment or continuance in employment of many technically qualified assistants has been impossible because of their very apparent uncleanly condition, which, of course, would render them objectionable to discriminating customers. It is also well-known that the outrageous want of personal cleanliness and the disgusting habits of some able pharmacists, who have been in business on their own account, have not only been the subject of much derision, but the real cause of financial failure. It is positively dangerous, then, for a young person seeking a creditable position in pharmaceutical or business life, not to have proper standards for his body and its keeping, or not to live up to these standards. Home training, it is admitted, should have provided for all this, but its failure should not be allowed to make commercial disaster certain. Let each individual make of himself, so far as possible, something of a model for those with whom he is to be associated, then, surely, he will not tail. Besides, next to a physician, surgeon or nurse, who should be more cleanly in person and habits than a pharmacist, and who, as a salesman or man of business, seeking to make tavorable impression, should be more attractive? The standard for personal cleanliness should be fixed at the highest possible point and should be intelligently and conscientiously met.

Dress.

Nothing can add so much to the business man's attractiveness as proper and careful attire, and nothing will so greatly detract from uatural personal advantages as will careless and improper dressing. It was Disraeli, the great Lord Beaconsfield, who won distinguished and substantial success against the most trying obstacles, who said a man's success in life is largely dependent upon his tailor. Dress is a subject that requires observation, thought and study. To the possessor of ample means, it is a comparatively easy matter, but when one has correct and sufficiently high ideals in this direction, with but scanty means, it offers a serious perplexity at times. It is, however, a business difficulty which must be overcome in a business way. A pharmacist had better slight his store and stock than his wardrobe.

The selection of a tailor is a matter of nearly as much importance and about as difficult as the selection of a physician, a dentist or even a pharmacist! One is no more able to properly treat personal ailments than he is able to properly fit himself with a suit of clothes or select the proper quality of cloth. It is often because of their presumed abilities, in this regard, that so many persons are oddly and badly dressed. Warning is made against the average clothing salesman whose one object seems to be to sell, and who frequently makes veritable monkeys out of his too confiding customers.

Warning is as earnestly made against your own personal oddities, generally, and, especially, in this matter of dress, which often lead to the wearing of conspicuous and inappropriate apparel; including, of course, head and foot wear.

It is a perfectly safe rule that keeps one inside and along the middle lines of fashion, but away from extremes and fads. Seasonable dressing is important, not only for reasons of personal comfort, but for effect, also, as is *respectful* dressing. Respect and deference are always due customers, especially ladies; shirt-sleeves are never and nowhere respectful. Dress should be consistent with one's age and station. A professional man should invariably maintain the dignity of his profession in dress, as in every other respect.

If personal cleanliness is important, so is cleanliness in dress; indeed, it is paramount; to it, style and quality are secondary. Fine, fresh linen is the stamp of the gentleman, and the reverse is a heavy handicap to anyone who aspires to hold the position of a gentleman and win favor with the more refined. The pharmacist must be carefully dressed; it argues well for his prescription case and for his soda water counter. Surely it is most unfortunate ignorance or the direct necessity that leads one to use celluloid collars and cuffs. Yet, as vulgar and discreditable as these are, if clean, they are far better than is soiled linen.

Caution might be added here, against the possible offensive condition of the pharmacist's clothing, through the absorption of such odors as are produced by iodoform, asafætida and the valerates; odors to which the operator becomes very nearly insensible, but which are particularly disagreeable to many laymen, especially to ladies. This condition prevails with smokers, particularly those using cigarettes; they have no idea how disagreeable their very presence may be, more certainly to those in ill health. The practice many pharmacists have, of using large quantities of perfume extracts, largely because they are at hand and are repeatedly handled, renders such persons very offensive to those of refined sensibilities. All of these very common-place matters need our closest attention and apply to the case of salesrooms and laboratories with as much force as they do to person and clothing.

To these chapters, I have added a chapter on the mind and its training, setting forth the necessity of orderly training of the mind for business purposes; a chapter on the application of general education to business purposes, making effort to show just where such general attainments may be made profitable; another on correct and pleasing speech, including, as sub-subjects, "The Voice," "Pronunciation," "The Selection and Valuation of Words," "Common Grammatical Errors," and "Improper Construction of Sentences." Also in this first part of the treatise, which is devoted to the personality of the commercialist, I have given considerable space to character, especially business character, and to personal address and manners.

In the second part of the proposed treatise, 1 have discussed, with great pains, business writing as being of paramount importance to the business man of to-day, referring more particularly to correspondence, including circular writing, and to the writing of advertisements. This chapter treats such subjects as writing material; stationery; penmanship; typewriting.

Under "Contracts," a most important division, is discussed the rental and purchase of real property, agreements with public utility corporations, insurance policies of all kinds,

yet following this consideration of contracts, serious warning is given against depending too far upon one's own knowledge; the employment of a competent attorney for complicated situations is strongly urged. Other subjects are: "Credits," "Credit Men," "Commercial Agencies," "Banks" and "Banking." Especially is the usefulness of the bank in its various phases fully set forth, which is closely connected with loans and the securing of capital. The control of capital sufficient to meet the requirements of the undertaking is seriously dealt with and the warning is plainly given against entering business without ample provisions of this sort.

Many of the daily details and many commercial practices are given practical demonstration in the division devoted to bookkeeping and, if, when I reach the opportunity, I have not already too greatly extended this address, I will illustrate the possibility of stating the theory and giving the practice of a commercial transaction at the same time.

Bookkeeping, which I prefer to style "Busi-Record Keeping," is comprehensive ness enough to be considered alone, at such an occasion as this. It should be taught in accord with the more modern and really scientific methods. It is no longer a system of forms and there is now an aversion with those who know bookkeeping to such terms as "single entry" and "double entry." Instead of these, should be used "incomplete" and "complete." There are fundamental principles or rules controlling the keeping of business records that are as fixed and as certain as their names imply: "Truth," "Fairness," "Justice," to men and things, are the directing and controlling influences. An accountant who cannot test the propriety of a charge by the "Golden Rule" fails to use his surest and best safeguard. The teaching by some that there is a difference between a personal and an inanimate account is pernicious.

So-called "bookkeeping" may be made very practical for the student of pharmacy, by using a month's business for an average retail store and by selecting December as the month and by giving the desire to close the fiscal year concurrent with the calendar year as an excuse for taking inventories and closing the books, the principles and practices involved in an entire year may be covered in this one month.

I have such a record. It includes entries sufficient to illustrate the principles involved in almost any transaction that may come up for treatment in the business life of the average pharmacist.

I will read three days of this record:

December 1. Began business with a capital of five thousand dollars in certified check, gift from Father, which was deposited in bank. Drew twenty-five dollars from bank to be used for small expenses, as needed.

Received invoice for shelving counters and wall cases amounting to \$1,200.00 from F. G. Bracket. Received invoice from H. O. Sale & Co., amounting to \$905.10 for drugs, medicines, patent medicines. Paid 25 cents for bucket, 15 cents for scrub brush. 10 cents for soap, 25 cents for broom. Paid woman for washing windows and cleaning store, \$1.00. Bought hatchet, 50 cents; nail puller, \$1.25; Paid B. E. Good \$6.00, insurance on fixtures. Paid T. E. Householder \$50.00 for rent, in advance.

December 10th. Received invoices from: Keen and Heighs, \$19.20; II. O. Sale & Co., \$34.92; a second invoice from H. O. Sale & Co. for \$16.05; Cecil Cigar Co., \$14.20. Paid for lemons, 25 cents, for soda fountain, and took out of stock for same, one bottle bromo seltzer, 34 cents; 4 ounces aromatic spirit of animonia, 15 cents; 1 pint of alcohol for eigar counter, 38 cents. Cash sales: Merchandise, \$16.40; soda water \$5.00; eigars, \$3.50. Paid \$2.50 for Pharmacopœia and \$7.50 for Dispensatory.

December 15. Paid \$25.00 for suit of clothes, by check. Received invoices from G. Lass Ware & Co. for bottles and corks, \$0.50; H. O. Sale & Co., \$14.60; freight on G. Lass Ware & Co.'s goods, 34 cents. Invoice from Charles Wright & Co., \$6.35. Paid annual State Association, \$2.00; American dues: Pharmaceutical Association, \$5.00. Sold C. K. Harrison on account: Prescription 4697. 50 cents; 4698, 40 cents; 4699, 60 cents; atomizer. \$1.00; dropper, 10 cents; 1 pound absorbent cotton, 40 cents. Sold Dr. A. R. Blaud I ounce calomel, 25 cents; 1 ounce Dover's powder, 35 cents; 1 pound absorbent cotton, 30 cents. Sold H. O. Sale & Co., 1/4 dozen compound syrup of hypophosphites at \$8.00, less 10 per cent.: ½ dozen aromatic castor oil, at 75 cents, less 10 per cent. Cash Sales: Merchandise, \$34.90: soda water \$3.35; cigars, \$1.50. Paid subscriptions to drug and soda water journals, \$5.50.

It would be tedious to write of the multitude of items that may be presented to the student of a most practical nature, in connection with these records. All the details of making deposits, keeping a bank account, drawing checks; the purchase of certified checks, the responsibilities regarding checks, may be so demonstrated and actual practice regarding them secured.

The segregation of charges to the proper accounts is interesting and important. The establishment of proper and profitably kept "Department Accounts" may be fully set forth. Remarkable instances may be given of universal difficulties students have with some of the problems appearing in this record of thirty days, which is not only interestingly comprehensive, but is most profitably worked out by the embryo business man.

On the tenth and twentieth of the month, trial balances are required to be made and, following the thirty-first day, the following appears:

"Make up inventories: make trial balance; take off a balance sheet, balance cash account and balance or arrange the other accounts to make the business or fiscal year begin with the calendar year."

In conclusion, let me commend to you who are already in business and have not become sufficiently familiar with accounting to be fascinated by it, the further study and investigation of the subject, that you may not only profit by its helpfulness, but that you may have this additonal interest in your work and the added happiness it gives in your lives.

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

We beg to acknowledge this month, with many thanks, the receipt of duplicates for our reading-tables of Drug Topics, The National Drug Clerk, The Pharmaceutical Era, and Title and Till; also the handsome illustrated advertising circular of the H. K. Mulford Company, with views of their laboratories by the new Lumiere, or color photography, process.

Illustrated advertisements, published in the form of booklets, often make valuable additions to a library. We call to mind especially one issued by Burroughs, Wellcome & Company, of London, which bears for its title, "Anglo-Saxon Leechcraft; an historical sketch of Early English medicine," and is profusely illustrated with facsimilies of texts and pictures from old manuscripts. For a copy of this, the Library is indebted to The Alumni Journal.

An acknowledgment is also due to Professor A. R. Bliss, Jr., editor-inchief, for his kindness in completing our file of The Mask with the desired numbers that he still had in stock, and in promising to use his good offices for the Library in obtaining Nos. 1 and 2 of Vol. 8. 1911, in case he hears of any Kappa Psi member having those numbers to spare. A "reading-table copy" of The Mask has also been gratefully received. Besides these additions we have the following books to report:

- By purchase:
 - The British pharmaceutical codex, Lond. 1911.
 - Codex medicamentarius gallicus: pharmacopee francaise. Paris, 1908.
 - Nederlandsche pharmacopee. Ed. 4. 's-Gravenhage, 1915.
 - Supplement to the British pharmacentical code, 1911. Lond. 1915.
 - A synopsis of the British pharmacopoeia, 1914, and the poison laws of Great Britain and Ireland; by H. W. Gadd. Ed. 8. Lond. 1915.
 - Chemical German; by F. C. Phillips. Ed. 2. Easton (Pa.) 1915.

By gift:

- Elements of materia medica and therapeutics...by Johanathan Pereira. Ed. 3, v. 1. Phila. 1852. (From S. A. Rubinfield, senior student, 1915-16.)
- An Ethical problem; by Albert Leffingwell. Lond. 1914. (From Mrs. G. C. Diekman.)
- Plant Names, scientific and popular; by A. B. Lyons. Ed. 2, Detroit, 1907. (Presentation copy from the author.)

Last, but not least.—We mention with exceeding pleasure the loan by Dr. Horatio N. Fraser of four handsomely dec-

orated blue and white faience apothecary jars. These jars resemble very closely in shape those seen in the miniature of a 15th century ms. showing the furnishings of an apothecary's shop of that time; and they add materially to the interest of our Mithridatium and Theriac exhibitions.

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Honorary Fraternities.

New York, March 30, 1916.

To the Editor of the C. U. C. P. Alumni Journal:

Should pharmacists have an honorary society? This question often arose in my mind. My answer is yes, and I will endeavor to prove my case.

In all professions there are honorary societies, and since pharmacy is a profession, there is no reason why it should not also have one.

These societies are an asset to a profession, because of the fact that they carry on research problems and the profession derives the benefit ultimately. In this way they keep their professions informed of the most recent advances in their fields, by holding lectures at stated intervals.

I will try to show you how these societies carry out their work. Out of the senior class 10% of the men attaining an average of 80% or over are recommended by the faculty to the society. The society then votes on the man. The society elects not only on scholarship, but on character, and what a man has done for the college outside of his regular work. The key which is awarded to each of the members is a much coveted honor which is only attained after persistent and conscientious effort. The society holds lectures monthly at which the most prominent men are invited to address them in his particular field.

To show you how successful these societies are you need only look at Columbia University, which suppors six of them, which I will name.

Phi Beta Kappa	.Coilegiate
Tau Beta Pi E	Engineering
Sigma Xi	Scientific
Phi Lamba Upsilon	Chemical
Delta Sigma Rho	Law
Pi Delta Epsilon	Journalism

I hope that this suggestion will meet with the approval of the faculty and students and in the near future see Columbia College of Pharmacy supporting a society.

J. M. Rosenthal, 14.

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THE DAY OF OPPORTUNITY.

Modern Business urgently needs men who can increase sales, reduce expenses, devise productive policies, detect errors and rectify them, analyze past records and forecast future development, swell profits expected, and create profits unexpected, men who can collect facts and observe facts and figure out facts, and base sound conclusions upon such facts; men who can and do *think* and *reason*. To develop such men within the organization itself is now a widely accepted policy of business management. This is the new spirit in Modern Business, and Modern Business itself is responsible for it.

The Pace Student.

ANNUAL PHI DELTA CHI DINNER.

The Gold Room at Healy's presented a very lively appearance on the evening of March 22, when Gamma Chapter of Phi Delta Chi Fraternity held its annual banquet. About fifty diners were present when the covers were raised.

After disposing of the many good things to eat, Chairman Clemens presented the toastmaster, Dean Rusby, who announced that the chairman would read letters of regret that he had received from Professors Coblentz, Oehler and Ferguson and from Brothers Neundorfer, MacQuillan, Baker, Donovan and Kirk.

The toastmaster, in his introductory remarks, told his bearers that he had at one time had his doubts as to the value of fraternities but admitted that he had been converted and stated that if the members would only strive to do what was right they and their fraternity would be of benefit to themselves and their college. In closing, he said he believed that fraternities ought to be supported by the College and the Faculty and pledged his personal help. He then called upon Mr. Caswell A. Mayo who entertained with several witty stories. He then discussed the foundation of the Mother Chapter and compared present conditions at the College of Pharmacy with those of the old days.

Professor Arny dwelt at length upon the value of organization in all fields of endeavor and asked those present to become actively affiliated with the Alumni Association as well as the American Pharmaceutical Association. In closing, he asked the younger members to become active and not to join the "slackers."

The toastmaster then introduced Professor Diekman who presented a very interesting resume of fraternity statistics which covered their entire history.

In calling attention to the value of Alumni support he made a special plea to the seniors to join the former as 500n as they became eligible.

Dean Rusby had to hurry away to Jersey and Mr. Mayo assumed his duties as toastmaster.

Brother Greenleaf of Epsilon Chapter briefly delivered greetings and congratulations.

Brothers Linck and Clemens expressed their ideas and hopes for the future of Gamma, also referring to past achievements.

Dr. Leslie pleaded for Alumni support and told about the troubles of the Alumni chapter.

Brother Bonta of Philadelphia, after entertaining with several humorous stories mentioned several instances of the value of fraternities.

President Hostmann of the Alumni Association urged the members to become active both in their fraternity alumni chapter as well as in the former.

The Alumni chapter was represented by Brothers Leslie, Roediger, Miller, O'Malley, Oehlers, Guerrieri, Traub, Hutton, Brown and Hakes. The active members present were Clemens, Cloherty, Spottke, Rulon, Aronstamm, Semon, Vogel, Linck, Cool, Hatch and Brennan.

KAPPA PSI BANQUET.

The nineteenth annual banquet of Gamma Chapter of Kappa Psi Fraternity was held at the Hotel Marie Antoinette on April 5th. About fifty members and guests followed chairman of the dinner committee, Kenneth A. Bartlett, when he led the way to the dining room.

When the liquids, semi-solids and solids had been disposed of the chairman presented the toastmaster. Professor Diekman, who asked the former to read letters of regret he had received from Professors Chandler, Coblentz, Rusby and Wimmer.

Professor Diekman deplored the unavoidable absence of Professor Chandler and then called upon Professor Arny to speak in his stead, who entertained the company by telling some witty stories and then admonished the younger men to become active and good members of the fraternity so that they might do their share of the needed work.

The toastmaster then asked Professor Mansfield to say a few words, who in responding, brought several messages from Dean Rusby, one dealing with the future of college fraternalism and another in reference to a "Medicinal Drug Farm" at the Botanical Gardens which, apparently, will be shortly inaugurated by the Trustees of the College.

Brother Julian of George Washington University pleaded for closer relations between physician and pharmacist, calling attention to the mutual benefits that would be derived therefrom.

Professor Diekman then introduced Regent Roy Lehman, who told of the chapter doings for the past year and asked for continued assistance from the brothers who would soon graduate. Brother Genung, in responding for the Juniors, thanked the Alumni members for their assistance and remarked that there was much hard work ahead as so many members would be lost to the active chapter by graduation. However, he expressed the wish and hope that they would one and all assist in the work to bring Gamma to a higher and better point than ever before.

Dr. Leslie called attention to the value of fraternities and urged all present to remain in harness after leaving college.

Brother Reynolds, a charter member, referred to the early struggles of Gamma and expressed the hope that each coming year would see a bigger and better chapter.

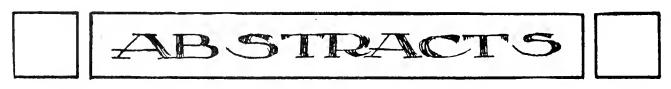
Brothers Ballard and Hostmann asked the alumni present to take more interest in the Alumni Chapter so that the latter would be better able to be of assistance to the active chapter.

Brother McCarthy of Baltimore, Doctor Brown, and Brothers Doolittle, Baldwin, Moore, Madden, McBride and Dowsey also spoke.

The Alumni Chapter was represented by the following members:

Brothers Ballard, Moore, Reynolds, Baldwin, Schaefer, Drury, Crockett, Watters, Brandt, Doolittle, Hostmann, Bradner, Alliton, Hayes, Richmond and Hagaman.

The following "actives" were present: Brothers Lehman, Bartlett, Bankert, Bacon, Johnson, McCloskey, McAdams, McBride, Miller, Genung, Madden, Triner, Dowsey, Whalen, Burns, Kaesman, Russell, Johnston, Masini and Buccanning.



Conducted by Prof. George C. Diekman.

Action of Chlorine on Quinine.

A. Christensen, in Ber. d. Deutschen Pharmaceutische Gesellschafft, 1915, presents an exhaustive report on this subject, from which the following is taken: Chlorine water added to a solution of quinine hydrochloride, in the proportion of Cl₂ to one molecule of quinine, forms quinine oxy-chloride, C₂₀H₂₄Cl, (OH)- N_2O_2 . If the chlorine water is added in the proportion of 2Cl₂ to one molecule of quinine, 5-chlor-6-oxycinchonin-oxychlorid is formed, a molecule of methyl alcohol splitting off. And if the chlorine water be added in the proportion of $3C_{2}$ to one quinine molecule, this will result in the formation of 5-chlor-6-ketocinchoninoxv-chlorid.

Syrupus Colae Compositus.

The following formula and directions appear in Pharm. Weekbl. 1915, 821:0.20 gramme of quinine hydrochloride, 0 04 gramme of strychnine nitrate and 0.20 gramme of citric acid are dissolved in sufficient distilled water to make the product weight 10 grammes. Then add, syrup, 150 0 grammes, solution of sodium glycerophosphate (50:100) 100 grammes, fluid extract of cola. 10.0 grammes, and saccharated oxide of iron, 15.0 grammes. 4 drops of oil of orange peel are added to each 240 grammes of the mixture, the whole thoroughly shaken and finally filtered.

Detection of Malonic Acid.

J. Bougoult, in Journ. Pharm. et Chim., makes use of the property possessed by malonic acid of forming definite compounds with aromatic aldehydes. He also calls attention to the fact that during the oxidation of many organic bodies, malonic acid is formed. The method is as follows: to 0.10 gramme of malonic acid is added 15 drops of cinnamic aldehyde and 1 mil of acetic acid. The mixture is heated in a sealed glass tube, in a water-bath containing boiling water, for a period of 10 hours. To the hot solution are then added 15 mils of water and enough sodium carbonate to The solution at once assumes saturate. a yellow color, and upon cooling a yellow precipitate is noted. This precipitate is collected in a tared Gooch crucible and dried at 100° C. 0.10 gramme of malonic acid will yield about 0.110 gramme of cinnamyl-malonic acid. The latter has a melting point of 208° C. The presence of alkaline salts, mineral or organic acids, as well as oxalic or succinic acid does not influence the result.

Tyrosin Crystals in Urine Sediments.

P. Inge, in *Jour. de Phar. et de Chim.*, comments on the frequency with which investigators report the presence of tyrosin crystals in urinary sediments. The author during his connection with the Vichy baths from 1882 until 1913 had occasion to examine upwards of 31,-000 samples of urine, and states that

only in one instance did he find crystals of this substance in the samples examined. There were numerous instances where deposits simulated in appearance tyrosin. Further examination, however, proved the fallacy of this diagnosis. In the one undoubted case the urine of the patient, upon arrival of the baths, was brown-vellow in color, and contained trakes of both albumin and sugar, Microscopically crystals of uric acid and calcium oxalate were shown to be present, as were likewise epithelial cells, leucocytes, and hvaline and granular casts. After 10 days of treatment, all normal constituents of the urine were eliminated in increased quantity, excepting urea. Of the latter 1.81 grammes per liter was found. The sediment was abundant and heavy, and contained a considerable quantity of tyrosin crystals, besides numerous crystals of calcium oxalate. Epithelial cells were scant, and the casts had disappeared. The tyrosin crystals occurred in the form of long, vellow-white, silky needles, some of which were grouped in bundles, while others were single. The crystals dissolved readily in alkalies and in mineral acids, and responded to the reaction of Piria.

Paralan.

Paralan is the name given by C. Schnabel, to a substitute for lard, which is claimed can be used with success as a vehicle in the manufacture of zine oxide and potassium iodide ointments. Its composition is as follows: anhydrous wool-fat, 20 parts, solid paraffin, 20 parts, and liquid paraffin, 60 parts. The fused mixture is stirred until cold. Slight variations from these quantities will furnish a vehicle of firmer or softer consistence.

Detection of Veronal in Cases of Poisoning.

W. Maradie succeeded in detecting the presence of veronal in the stomach and urine of a patient who was removed to a hospital in an unconscious condition. The stomach washings were acidified with hydrochloric acid and shaken out with ether. The residue was then treated with cold absolute alcohol, and after vaporization of the alcohol, treated with solution of sodium hydroxide. The treatment with ether and alcohol was repeated. The alcoholic solution treated with alcoholic potash developed the odor Treated with sulphuric of ammonia. acid, the odor of acetic and butyric acids developed: Another portion of the alcoholic solution vaporized to dryness, upon addition of Millon's reagent and nitric acid yielded a gelatinous precipitate, soluble in nitric acid, but insoluble in Millon's reagent. The color of the urine was orange-vellow, and contained neither albumin nor glucose. After acidulating, the urates were precipitated by addition of calcium chloride, and the urine then treated with ether and absolute alcohol as before. The detection of veronal is accomplished as above described.

Adulterated Oil of Lemon.

A gross adulteration of oil of lemon is made known by Lauffs, in Ztschr. f. oeffentl. Chem. 18,438. The sample was found to contain about 50% of liquid paraffin and considerable quantities of oil of turpentine. It was sold for 7.95 M. per kilo, with the statement that the market price of this oil was continually advancing.

Detection of Picric Acid in Urine.

100 mils of urine are decomposed by addition of 10 mils of a neutral solution Urobolin, uroerythrin, of lead acetate. urochrome, and other biliary coloring matters are precipitated, while picric acid and picraminic acid remain in solution. After filtration the excess of lead is removed by treatment with sulphuretted hydrogen, and the liquid again filtered. The vellow filtrate is shaken with onefifth of its own volume of ether, and the vellow liquid thus obtained when brought into contact with woolen fabrics will color these vellow or orange, depending upon the quantity of picric acid present. Upon complete vaporization of the ether an orange-vellow residue is obtained which should be completely soluble in distilled water.

Color Reaction for Plant Oils.

P. Sixley and Frehse, in Chem. Rev. u. d. Fett-u. Harzindustrie, 1915, report on a color reaction for plant oils, which the authors claim to be based on the presence of phenol-like bodies. 5 mils of 20" solution of sodium acetate together with several drops of solution of deazotized paranitro-anilin, are added to 10 mils of the oil to be examined. All plant oils, with exception of olive and sunflower oils show a red or brown-red color. The solution of para-nitro-anilin is prepared as follows: 1.4 grammes of para-nitro-anilin and 2.8 mils of hydrochloric acid, S/G. 1,180 are mixed with 10 mils of hot water, and solution effected. 30 mils of cold water are then added and the mixture cooled to 10° C. 8 mils of 10% sodium nitrite solution are then added, and the whole diluted with water to 100 mils.

NEW REMEDIES AND SPECIALTIES.

Resicol is an alcoholic solution of resins, balsant of Peru and chlorine derivatives of ethane. It is said to be of service as a dressing for wounds, cuts, butns and other minor injuries, in place of collodion. It is flexible and non-irritant.

Bipheron is a sleep-producing preparation, each 15 mils of which contain the following: Medinal 0.6 gramme, chloral hydrate 2.0 grammes, caffein sodium benzoate 0.05 gramme and extract of piscidium 1.50 grammes.

Amocithin is highly recommended as a nerve tonic. It is said to contain all the nutritive constituents of yolk of egg and of milk, in a highly concentrated and readily digestible form. An analysis has shown it to contain II per cent. of lecithin, haemoglobin, saccharate of iron, protein bodies, nutritive salts, and phosphates of calcium and potassium.

Diatrone is a laxative. Each capsule contains the following: phenolphthalein, 0.4 gramme, powdered fennel seed, 0.03 gramme, powdered chamomile flowers, 0.03 gramme and powdered peppermint leaves, 0.04 gramme.

Menostaticum consists of ergopan and extracts of senega, viburnum and chamomile. It is said to be of service in the treatment of uterine disorders.

Chlorival. This, according to the formula as furnished by the manufacturer, consists of the following: beta trichlor butyl aldehyde, ether, menthol, wool-far and olive oil. It is used in the form of an inunction in the treatment of rheumatism, gout, and other kindred diseases.





Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

> H. V. ARNY, Librarian. Adelaide Rudolph, Bibliography. JEANNOT HOSTMANN, Queries.

ANSWERS TO QUERIER.

Extractum Thymi Saccharatum.— G. R. P., New Jersey.—Pertussin, the well-known whooping cough remedy, is said to be a preparation of thyme and in a number of druggists recipe books, we find formulas for products similar to the specialty just named. Thus Hager's "Handbuch" gives the following:

Compound fluidextract of thyme 15.0 Potassium bromide 0.5 Syrup (made from fruit sugar) 85.0

The compound fluidextract of thyme is prepared from equal parts of thyme and serphyllum, of course making the finished products represent the typical fluidextract strength.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted.

Compound Powder of Boric Acid.— F. K. L., New York.—In the fourteenth edition of Martindale's "Extra Pharmacopoeia" the following recipe is given for compound powder of boric acid:

Boric acid1	part
Zinc oxide	parts
Starch	parts

Starch in Dextrin.—J. E. E., New York, wishes to know whether the presence of starch in dextrin is objectionable from a legal standpoint.

We note that dextrin is to be included in Part II of the forthcoming edition of the National Formulary and when that work appears, dextrin, so labelled without qualifications, will have to comply with the standards set by that work. We notice that the monograph of the Formulary permits the presence of unconverted starch. If, however, the starch present is not that from which dextrin is ordinarily prepared (say arrowroot starch) the presence of such starch granules would be strong presumptive evidence of "adulteration" of dextrin in question.

And here comes a very curious point. In making library paste and similar adhesives a dextrin containing added starch yields a better product than does a pure sample: so we are confronted by the condition that an "adulterated" dextrin is better for this purpose than is a strictly legal product. Of course the difficulty is obviated by labelling such starchy dextrin "White dextrin, technical," or by the use of similar wording.

"Alizarin-fixer."—M. M. G., New York.—We presume that the title just given is intended for Turkey red oil which is used largely as a mordant in alizarin dyeing. This is an oil prepared by the treatment of castor oil with sulphuric acid; the resulting sulphoricinolic acid being used in the alizarin process in the form of its ammonium salts. For details, our querist is referred to Sadtler's "Industrial Organic Chemistry." **Spiritus Balsamicus.**—Dr. Joseph Weinstein kindly calls our attention to the fact that the recipe we gave for "spiritus balsamicus" on page 14 of the JOURNAL for January is not the recipe for that preparation as it is used in Russia and he is good enough to furnish the Russian recipe, as follows:

- Oil of lemon Oil of bergamot Oil of cloves Oil of rosemary Oil of orange flowers
- Oil of thyme of each i part Balsam of Peru 4 parts
- Alcohol 240 parts

In furnishing the recipe we intentionally picked out the simplest recipe available, the one found in Graa's "Manual of International Pharmacy." since we knew that there were several recipes for this preparation and that when we were selecting, the simplest would be the most practical for American needs. The situation is similar to that obtaining with Friar's Balsam in this country, for which most druggists dispense compound tineture of benzoin, U. S. P.; while the National Formulary gives a more complex recipe for the preparation; and while the original Friar's balsam was still more complex than the preparation obtained by the Formulary recipe. Similar confusion exists concerning Hoffmann red drops.

Most timely, therefore, is Dr. Weinstein's friendly criticism and in order to bring out the full facts we reprint on next page, from Hirsch's "Universal Pharmakopöe" the following summary of the recipes for "spiritus balsamicus" found in six pharmacopoeias. It will be noted that in each case the mixture is to be macerated from one to six days after which it is to be distilled.

	С. 1	J. C. P. A	ALUMNI .	JOURNAL	·····	{
	Belgian	FRENCH	Swiss	Spanish	Dutch	Italian
Aloe		5	-4			10
Caryophylli	10	5	2	9	1	5
Cort. Cinnamom. Chin.,			2			5
Cort Cinnamom. Zeyl.,	10	5		9	1	
Elemi		10	4	17		10
Fruct. Lauri	27	10			3	10
Fruct. Lauri recent				23	,	
Galbanum	18	10	4	17	2	10
Herb. Origan. Dictam		5		6		5
My r rha	18	10	4	17	2	10
Rad. Angelicae			2			
Rhiz. Calami			2			
Rhiz. Galangae		5	2	9		5
Rhiz. Zedoariae		5	.)	. 9		5
Rhiz. Zingiberis	10	5	2	9	1	5
Sem. Myristicae	10	5		9	1	5
Styrax liquidus	18	10	-4	17	2	10
Succinum		10		17		10
Tacamahaca		10		17		
Terebinth. commun				92	· · · · · · · · · · · · · · · · · · ·	
Terebinth. laricina	36	50	20	1	4	50
Spiritus	100 0 v. 80° ₀	300 v. 80%	95 v. 95° ₀	552 v. 80%	100 v. 90%	300 v. 95%
— Aqua	500		20		350	
Time of Maceration	1 day	4-6 days	4 days	6 days	1 day	4-6 days
Amount of Distillate	1000 v. 75%	250	160	414	q. s. to make Sp. gr. of mixed distillate 0.850-0.900	250

We are much gratified to hear from Dr. Weinstein and we hope that other friends will freely criticize the information we furnish, thus adding further knowledge concerning the topics discussed. We want to make this department of great value to our readers and to do so we wish our readers to add their quota of information to that furnished by us.

We are "Stumped." During the past month three queries have come in concerning with diligent search in our library has failed to elicit information. We therefore turn to our readers in hope that they may be able to enlighten us.

Jamun Seed.—This is printed on the label of a proprietary medicine as one of the constituents of the preparation. It sounds suspiciously like the "jenubebin" and "blodgetti" which figured in the proprietary remedy advertising of a score of years ago, but perhaps our readers can inform us differently.

Gregory's Plaster.—We found a number of recipes bearing the name of Gregory, the most prominent of course being Gregory's powder. Thus in Soresina's Recittario there are no less than thirty recipes attributed to Gregory but not one of them was for a plaster. Who will help us out?

Liquor Hecturi.—This was an ingredient called for in a prescription in which 10 grammes of benzoic acid was to be dissolved in 1,000 cc. of the "liquor." It was claimed that it was a preparation of the Swedish Pharmacopoeia. Our search of all the Scandinavian pharmacopoeias failed to show anything bearing a name similar to the one given above; so we appeal to our readers. Rhubarb and Soda Mixture without Glycerin.—Since the publication of a recipe for this preparation on page 15 of the JOURNAL for January, R. Hageman, (N. Y. C. P. 1915) of Flushing has called our attention to the fact that when physicians in his vicinity prescribe "mistura rhei et sodae sine glycerino" they desire the rhubarb and soda mixture of the Pharmacopoeia of 1880, which reads as follows:

Bicarbonate of sodium	30 parts
Fluidextract of rhubarb	30 parts
Spirit of peppermint	30 parts
Water a sufficient quan-	

tity to make..... 1000 parts

Dissolve the bicarbonate of sodium in 500 parts of water. Add the fluidextract of rhubarb and the spirit of peppermint, and lastly, enough water to make the mixture weigh 1000 parts.

We are very grateful to Mr. Hageman for this information, which applies to prescriptions of American practitioners. In the case we cited, a German prescription was under consideration and the information given was based upon this fact.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Thompson's Emulsion of Linseed Oil.—R. K. G., New York, will find a recipe for this preparation on page 38 of the C. U. P. ALUMNI JONRNAL for February. Our readers had better keep their copies of the JOURNAL for future reference.

Emplastrum Quartro Fundentes.— A. H. M., New York.—According to Hager, this is a mixture of equal parts of soap plaster, compound lead plaster, mercury plaster and conium plaster.

The Composition of Proprietary Preparations .--- A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association. "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Fluid Extract of Cinchona and the Greek Pharmacopoeia.—R. F. B., Pennsylvania.—While our library does not possess the Greek Pharmacopoeia of 1899, we find in Hirsch's Pharmacopoeia Universalis that the Greek standard does not recognize a fluid extract of cinchona.

Salophen.—A. H. T. wishes to know what acetyl-para-amido-phenol salicylate is. This is the chemical marketed as salophen, an excellent description of which can be found in New and Non-Official Remedies. The pharmacist should be sure to remember that salophen is not the same as saliphene, which is the trade name for salicyl-phenetidin, and which is therefore similar to phenacetin. **Compound Infusion of Cinchona.**— K. M. S., New York.—We had quite a hunt before we found a recipe for this preparation in Griffith's Formulary, a book published in 1874. It reads:

Cinchona
Juniper berries, of each. 1 drachm
Orange peel
Cinnamon, of each2 drachms
Canella 12 drachm
Ipecae 15 grains
Boiling water 7 onnees
Infuse, strain and then add extract of

Infuse, strain and then add extract of juniper berries $1\frac{1}{2}$ drachms.

Quinine Chocolate Syrup.—-F. E. B., New York.—In answering your query concerning a chocolate syrup of quinine, it might be well to state at the beginning that as far back as 1868 this method of dispensing a palatable fluid preparation of quinine was in vogue. In the *American Journal of Pharmacy* for that year, page 517, a recipe of that character was printed. Taking a more modern type, we find in the *Druggists Circular* for 1910, page 171, the following recipe for a basic syrup for this purpose, which reads as follows:

Powdered chocolate 2 ounces
Sugar
Tincture of vanilla I onnce
Aromatic fluid extract of
yerba santa I ounce
Glycerin 4 ounces
Boiling water enough

Mix the chocolate and the sugar with enough boiling water to make two pints of fluid. Let the syrup cool and add the other ingredients. With this basic syrup the quinine salt (either tannate or sulphate) can be triturated, the quantity used depending on the dose of quinine desired.



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1915-1916

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Term expires 1916		HENRY J. BINDER, JR.
	(JOHN H. HECKER
Term expires 1917		Hugo H. Schaefer
Term expires 1917	(Arthur J. Bauer
	(Joseph Weinstein
Term expires 1918		MONROE H. WEIL
Term expires 1918	1	George C. Diekman
* Deceased		

Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING APRIL 10th, 1916.

Meeting called to order at 8.45 P. M. by President Hostmann.

Present: M. Bedrick, '15; H. J. Binder, '98; H. J. Bravin, '15; L. N. Brown, '14; J. E. Ettinger, '13; L. W. Geisler, '94; C. D. Hakes, '11; E. H. Hecker, '08; J. Hostmann, '96; F. A. Leslie, '04; T. F. Main, '71; H. H. Schaefer, '12; J. A. Steffens, '09; E. C. Steinach, '00; E. P. Wendler, '98; E. Windt, '13; L. Roon, '10.

The minutes of the previous meeting were read. Through an error the name of L. N. Brown, '14 appeared on the

minutes and was ordered stricken from them. There being no objection the minutes were adopted as corrected.

The treasurer's report for the month was received and upon motion was ordered placed in the file.

The annual report of the treasurer was then read and upon motion was referred to the auditing committee.

Registrar's Report: Registrar absent.

Junior Class Day Committee reported progress.

Report of the Committee on the Matter of Delinquent Members: In the absence of Dr. Weil, chairman, Mr. Ettinger, '13 made a verbal report to the effect that the committee had carefully looked over delinquent accounts and had seen fit to divide them as follows:

635 men who owe large sums and who have been inactive for many years,

105 men who have been delinquent for some time, but who should receive a special letter giving them a last opportunity to become reinstated,

348 men who are about to receive bills for years 1915 and 1916.

The committee recommended that 635 delinquents mentioned be dropped from the roll without delay.

After considerable discussion, a motion was made, seconded and carried that the recommendations made by the committee be carried out, namely. That the members whose names were submitted be dropped from the roll for non-payment of dues.

Correspondence: A communication was received from Dr. Diekman stating that the auditing committee was prepared to audit the treasurer's books upon receipt of same.

Election of New Members. Application of Mr. P. Guerrieri, '12 was received and duly passed upon.

Election of Officers. The secretary was directed to read the names of the candidates for office submitted by the Nominating Committee at the last meeting.

Drs. Geisler and Brown were appointed tellers.

Upon motion, the secretary was directed to cast one unanimous ballot for each of the candidates.

The tellers reported the unanimous election of the following officers for the year 1916-17:

President.....J. A. Steffens Honorary President..Thos. F. Main First Vice-President...M. H. Weil Second Vice-President...E. Windt Third Vice-President.V. M. Orefice Secretary.....L. Roon Treasurer.....F. A. Leslie Registrar....J. Hostmann Members of the Executive Board : C. W. Ballard, F. N. Pond, E. C. Steinach

Upon motion the tellers were discharged with thanks.

President Hostmann called upon Mr. Thos. F. Main, '71, one of the founders of the Alumni Association, to say a few words to the members. Mr. Main related some very interesting reminiscences of the old college days at Washington Square and at 23rd Street.

The President gave a brief resumé of of what had been accomplished during the year, although he stated that he

would deliver his annual report at the June meeting.

A motion was made and adopted that the President appoint a committee on Alumni prizes and Dr. Diekman and Dr. Ballard were appointed as such a committee.

Dr. Brown, chairman of the Junior Day Committeee, appointed Dr. Schaefer and Mr. Hakes to act with him on that committee.

There being no further business, the meeting was declared adjourned.

LEO ROON, Secretary.

'94 REUNION.

On Thursday evening, May 4th, the class of '94 will celebrate its annual reunion in the form of a dinner at the Campus, 104th Street and Columbus Avenue, New York City. The members have been asked to bring their ladies as the committee thought this would be a pleasing innovation.

Aside from the dinney an enjoyable cabaret will be on tap and of course there will be dancing for those who desire it. The following are members of the committee in charge: Peter J. Ehrgott, Phillip Eichler, John D. Case, Harry W. Crooks, Fred Schaefer, Nelson S. Kirk, Henry Kreuder, Frank N. Pond, Joseph J. Kussy and H. A. Herold.

During the past month Professor Diekman received a card from Italy, "Verificato per Censura." where Anthony Pipino, N. Y. C. P., '12, and Louis P. Costa, N. Y. C. P., '11, are serving as pharmacists in the army of their mother country. Professor Mansfield entertained the members of the Biological Society of the College of the City of New York on March 23rd with a very interesting lecture entitled "Medicinal Plants of the Eastern United States," illustrating his talk with many handsome slides. Preceding the lecture the speaker was entertained at an informal lunch.

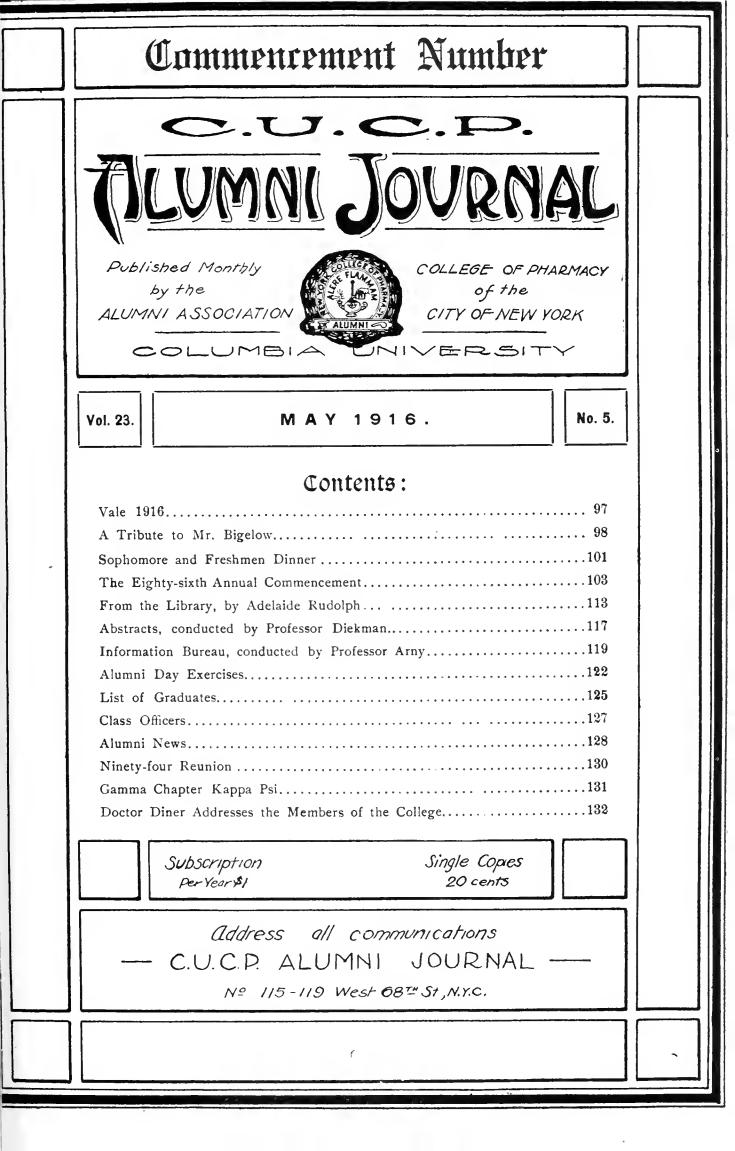
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Professor Coblentz delivered a lecture on "Nitrocellulose and its Compounds" at the College on March 29th. Aside from the usual interesting facts, Profesaor Coblentz entertained his audience with much interesting data concerning the effects of the European war upon the many industries dependent upon the above mentioned compounds.

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On April 6th the members of the Chemical Club of the College of the City of New York were favored by Professor Wimmer who briefly reviewed the chemistry of the alkaloids. Immediately after, a luncheon was served, followed by a general good time.

Junior Day Exercises May 10th, 1916 ATTEND AND MEET OUR PROSPECTIVE MEMBERS



The New York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College, Open to Men and Momen,

will begin on Monday, September 18, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

As a department of Columbia University, the College offers courses of three, four and six years, of three and a half days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board.

The Isaac Plaut Fellowship provides five hundred dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis and Microscopic Pharmacognosy are offered in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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Number 5.



VALE 1916.

Commencement over, the thoughts of those who have had the members of the class in their care for the past two and three years, preparing them for the ever present battle for existence that is to come, perforce turn to the future of their recent charges.

To the graduates, commencement is a time of joy and exultation. The minds of the young people happily are engaged only with the present. The days of lectures, "labs," quizzes and "cramming" are over and therefor they rejoice.

To their instructors, graduation coming as it does year after year, always brings to mind the query—"What will they accomplish? Will they 'make good'?"

As the years roll by, one by one, at some time or other, the former recruits and apprentices, now full fledged warriors, come and renew old acquaintance with tales of things accomplished and ambitions yet to be fulfilled. It is then that we realize that the seeds sown while at school have taken root, and nourished by the fundamentals obtained during student days have become sturdy trees well able to withstand and overcome any and all obverse situations.

With knowledge of this, we feel in bidding adieu to the class of '16 that, in extending to you our best wishes for future success and happiness, a large majority of you will succeed into whatever field of endeavor your inclinations or chances may lead you.

Ever keep in mind your responsibilities; do not forget your Alma Mater; remember the Alumni Association so you can do your part of the work for those who come after you just as those who came before you did their share for you.

In short. "Make Good"! 1916, Vale.

J. H.

A TRIBUTE TO MR. BIGELOW.

On the evening of May third, at the Drug and Chemical Club, one hundred and sixty-three friends and admirers of Clarence O. Bigelow, treasurer of the College of Pharmacy of Columbia Uni-

versity, gathered to do him honor and to celebrate with him the fiftieth anniversary of his entrance into the calling which he has so enriched and adorned.

After enjoying a delightfully prepared meal of eight courses, the toastmaster Dr. William J. Schieffelin, opened the postprandial exercises with a witty speech in which he emphasized the fact that it seemed impossible that so young a looking man as Mr. Bigelow could be celebrating any-



CLARENCE O. BIGELOW.

thing suggesting a semi-centennial. He expressed the feelings of regret experienced by all present over the fact that a slight indisposition kept from the dinner Dr. Charles F. Chandler, who had hoped to respond to the toast "Bigelow, the Pupil."

Dr. Schieffelin then called on Mr. Samuel W. Fairchild, former president of the College, who spoke on "Bigelow the New Treasurer" and told of the days twenty years since, when the College had been moved from Twentythird Street to its present site; when the Trustees selected Mr. Bigelow to

> guide the finances of the Institution. Mr. Bigelow's striking success as treasurer was best shown in the simple statement that since he became the financial officer in 1897 the debt on the College building has been reduced from \$90,000 to \$45,000. Mr. Fairchild predicted that within three years the debt would be extinguished.

Mr. Horatio N. Fraser, former treasurer of the College, was then called on and gave a delightful talk on

"Some Financial Reminiscences. "He recited the difficulties besetting the trustees of 1893 in planning the removal of the College from the old site to Sixtyeighth Street. He spoke of the grave undertaking then confronting the trustees; the erection of a \$230,000 plant on a cash basis of only \$40,000. He then related interestingly how Mr. Frederick K. Bourne of the Singer

Sewing Machine Company was approached with the request that he finance the undertaking; how Mr. Bourne inquired about the aims of the College and about the personnel of its management and how he finally loaned the money largely on the basis of faith in the future of the College. Mr. Fraser stated that high on the list of benefactors of the College the name of Mr. Bourne should appear, for it was largely due to his mingling of sentiment with finance that made possible the erection of the splendid College building.

Dean Rusby then responded to the toast "Bigelow the Friend of the Faculty" in his usual charming style. He spoke of Mr. Bigelow as the friend, the mentor of the faculty; the treasurer whose thoughtfulness even extended to the furnishing of the December salary checks a week before Christmas.

The toast "Bigelow the Pharmacist" had been allotted to Dean Remington of the Philadelphia College of Pharmacy who, finding at the last moment that he could not be present, sent a written tribute to Mr. Bigelow, which was read by Dr. Schieffelin.

President Wardle of the New York State Pharmaceutical Association, who was scheduled to speak on "Bigelow the Association Member" was prevented from being present by the illness of one of his children. His greeting, however, was read by Vice President E. E. Austin of the Association, who supplemented it with some highly interesting impromptu remarks.

"Bigelow the Board Member" was discussed by Professor George C. Diekman in his usual direct and clear-cut manner. Dr. Diekman spoke of the peculiarly valuable services of Mr. Bigelow as chairman of the Violations Committee, pointing out how the judicial qualities of Mr. Bigelow's mind made him the ideal man for that post.

Dean William C. Anderson of the Brooklyn College of Pharmacy made a stirring response to the toast "Bigelow the Conference Worker." He outlined the origin of the New York Pharmaceutical Conference, an organization composed of delegates from the various pharmaceutical associations of Greater New York designed to protect the drug trade from unjust legislative restrictions. He spoke of the work of Mr. Bigelow on the executive board of the Conference, designating him as the balancewheel of the board. In closing, Dr. Anderson spoke thrillingly of the present legislative situation as far as pharmaceutical New York was concerned, pointing out pharmacy's imperative need of the Conference and the Conference's need of such men as Mr. Bigelow.

"Bigelow the Bank President" was the topic assigned Mr. Herbert B. Harding, an associate of the guest of honor, on the directorate of the West Side Savings Bank. Mr. Harding brought out the fact that Mr. Bigelow was as successful a banker as he was a druggist and related how wisely he had directed the destinies of the financial institution of which he was the head.

Frederick K. James, a trustee of the College utilized the topic "Bigelow the Honorary Guest" as the opportunity to present on behalf of those gathered together a beautiful replica in bronze of Remington's "Broncho Buster" to Mr. Bigelow, who responded in a manner that touched all present.

A stenographic report of the talk should have been published, as it was a simple recital of how rich a half century in the service of retail pharmacy could be.

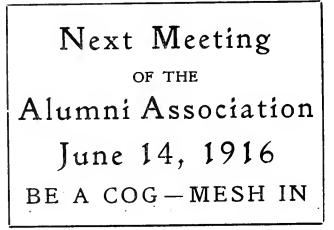
Beginning with that day in February in 1866 when the boy Bigelow started to work in the Hooper Drug Store in Springfield, Mass., the hearers saw the New England store and its dignified proprietor, they saw the youth Bigelow start to seek his fortune in the great metropolis; they saw him first as a clerk in and then as proprietor of the store in the Washington Square neighborhood. Flashes of humor pervaded the entire speech. Pranks of the artist's colony in Washington Mews on the hapless druggist; pen pictures of the great and neargreat who made Washington Square stand as a symbol of Knickerbocker respectibility. Most interesting was Mr. Bigelow's modest account of his activities in organized pharmacy; the broadening out beyond the confines of one's personal business that has to come to every man who truly loves his calling. This began with his membership in the New York College of Pharmacy, which began in 1881; this has been emphasized since 1897 when he was elected treasurer of the College. Interesting anecdotes connected with his services as member of the Board of Pharmacy, of the National Syllabus Committee of the State and pharmaceutical associations National were told by Mr. Bigelow who emphasized the joy he had gotten out of these activities.

The program of toasts ended with one on "Bigelow the Friend" by Caswell A. Mayo, Past-president of the American l'harmaceutical Association, and a trustee of the College. Mr. Mayo, after a few fitting remarks presented to Mr. Bigelow a handsomely bound and engrossed copy of the following resolutions which were signed by all of those who had enjoyed the evening with the guest of honor.

"Clarence Otis Bigelow, efficient and trustworthy treasurer, wise and capable bank president, able and judicious member of the Board of Pharmacy, honorable and successful merchant, skillful and reliable pharmacist, broad-minded and public spirited citizen, far-sighted and unselfish worker for pharmacy, kind and helpful friend:

We, your friends and admirers, whose names are signed below, unite in tendering you a banquet at the Drug and Chemical Club, New York, on Wednesday evening, May 3, 1916, as a public testimonial of the high regard in which you are held by your fellow pharmacists and as evidence of our appreciation of the distinguished services which you have rendered to pharmacy, to education and to the state."

H. V. Arny.



SOPHOMORE AND FRESHMEN DINNER.

The Annual Dinner of the freshmen and sophomore classes was held at the Hotel Marie Antoinette on the evening of May 9th, 1916.

When the coffee and cigars were being enjoyed, Toastmaster Bacon, '17, called upon Dean Rusby as the first speaker of the evening. Our Dean was at his best and in his usual extremely interesting manner related to those present the history of the "University Class," describing the birth thereof, the reasons therefor, its early struggles, and, in closing, called attention to the steady increase in quality and quantity of students and congratulated the members of the two classes upon the very satisfactory progress they were making with their studies. The Toastmaster then presented Professor Wimmer who dwelt at some length upon the hard work carried on by Dean Rusby in the institution of the course and in gradually revising and adding to it until it finally had reached its present state of efficiency.

Jeannot Hostman briefly directed the attention of the students to the benefits obtainable from their instruction and deplored the fact that so many entered the course simply preparatory to the study of medicine — the speaker asserted that a demand for real trained pharmaceutical chemists would soon be at hand and that the instruction being given had been devised to fit the student for the pursuit of this attractive and remunerative profession. Dr. Brown urged his hearers to take the proper interest in student activities at the same time giving a timely warning that study must come first and should not be neglected. In closing, he requested the co-operation of the two classes to help make the Junior Class Day exercises a success.

Roy Lehman, '17 and Joseph Triner, '18, responded for their respective classes and Vilma Kleppner, '17, for the ladies. Regrets were received from Professors Diekman and Arny.

The Faculty was represented by Dean Rusby, Professor Wimmer, Dr. Brown and Mr. Hostmann.

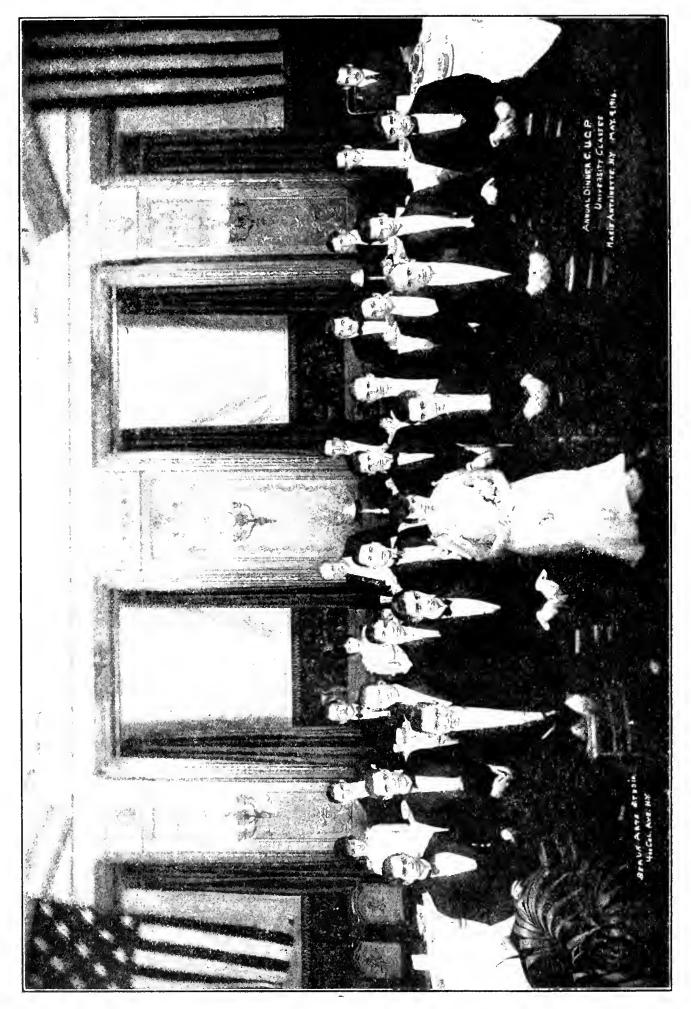
The following students were present: Miss Kleppner and Messrs. Hammond, Lehman, Bacon, German, Corti and Rizzo of the sophomore class, and Misses Argueso and Kish and Messrs. Holtzman, Anopol, Vorsanger, Bailin, Hyman, Palermo, Buttenbaum, Coccola, Wilson, Concialdi and Brieger of the freshmen class.

A

"He who is busy criticising the faults of his friends has no friendship in his heart."

. A.

"By the street of 'By-and-By' one arrives at the house of Never."

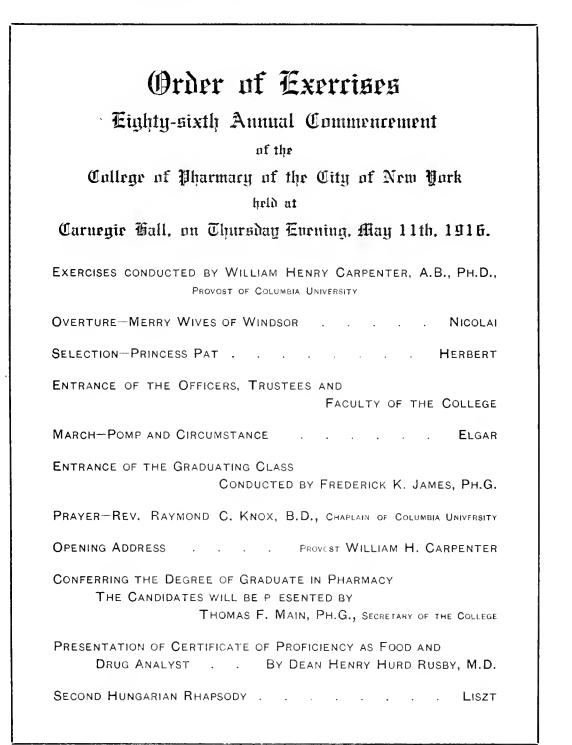


DINNER OF SOPHOMORE AND FRESHMEN CLASSES, MAY 9TH, 1916.

EIGHTY-SIXTH ANNUAL COMMENCEMENT.

The Eighty-sixth Annual Commencement Exercises were held at Carnegie Hall, on Thursday evening, May 11, 1916.

Provost Carpenter presiding. The Order of Exercises is herewith reproduced.



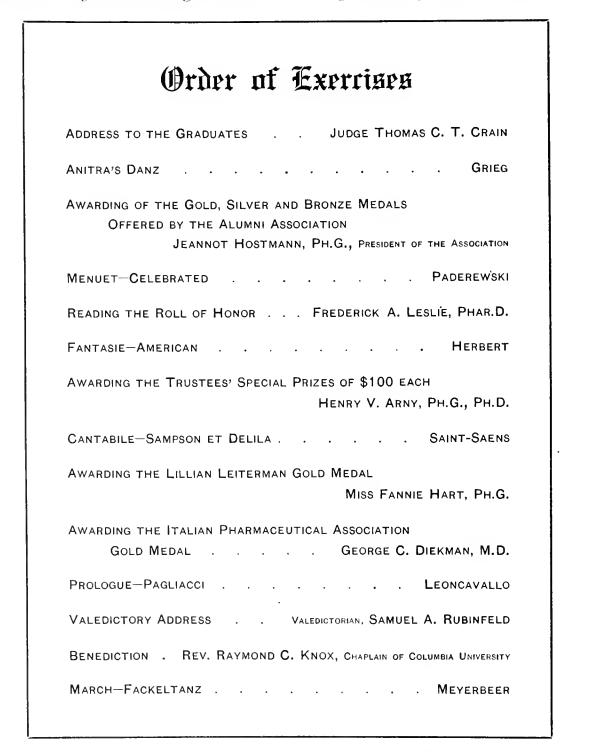
Officers, Trustees and Faculty of the ducted down the main aisle by Chair-

Shortly after the entrance of the College, the graduating class was con-

man Frederick K. James of the Examination Committee and, after prayer by Chaplain Knox, Provost Carpenter spoke as follows:

Eighty-five years ago, in the year of our Lord 1831, the College of Phar-

macy graduated its first class. It was a day of small beginnings. The College at that time occupied a single room in the lower part of the City. There were only two courses of lectures and the first graduating class numbered three



men. It is a long distance from that wonderful development in the institutime to this and there has been a very tion for whose Eighty-sixth Com-

mencement Exercises we are assembled here to-night. In place of that little room in the New York Dispensary, the College now occupies its great and splendid building, equipped with men and laboratories and library and everything that shall contribute to good and the future of the men and women who are to practice this profession. It was a day that saw the beginning of the United States. The whole population of the United States in 1831 was only a little more than twice the population of this great City to-day. Those great cities of the middle west, Chicago, Milwaukee, Minneapolis and St. Paul, let alone those cities on the Pacific Coast, like San Francisco and Seattle were not on the map of the United States. There were only twenty-eight of the fortyeight states that we have to-day.

A great many of the modern things we teach did not exist in 1831. The first railroad in the United States had There was no televet to be built. graph and such things as the electric light and the phonograph and the telephone had not yet been thought of by A recent historian of the hisman. tory of the United States has called attention to these early years of the 30's as the springtime of the nation, when things began to take shape. Ι say these things merely to point out to you what changes have taken place in what is, after all, a short life for an institution. I do it to point out that your institution has developed with the institutions of the country; with the country itself. How much greater are the opportunities to-day as it stands before you men and women of the graduating class than were those of that

time! If the oportunities are greater at this time, so are the responsibilities greater. No opportunity comes to anyone at any time that does not bring with it its special responsibilities.

These are troubled times, and it may be that you will have to bear, as you turn out of your College to the world. responsibilities that have not been thrust upon your forebears. If it comes, as under these circumstances it may well come, let there be no divided alle-This is your country, and giance. whether you have been born here, or it is the land of your adoption, you owe it an undivided allegiance. And let there be, men and women of the graduating class, no divided allegiance in your duty toward your chosen profession. You have chosen as your own particular part, one of the most important of the professions. There is a great trinity of professions to which you belong and of which you are not the least members-Medicine and Surgery and Pharmacy-and pharmacy is the support upon which those other great professions rest, for they begin in the hospitals and clinics what you must finish.

Mr. Thomas F. Main, Secretary of the College, then presented the members of the graduating class and Provost Carpenter conferred upon them the degree of Graduate in Pharmacy. The list of graduates will be found on page 125

Dean Rusby now presented Alfred Pica and Bertram C. Steves, with certificates of proficiency as Food and Drug Analysts.

The following address to the graduates was delivered by Mr. Justice Thomas C. T. Crain. Members of the Graduating Class:

I congratulate you in the name of your assembled friends who have watched with interest and pride the successful pursuit and successful termination of your honorable and arduous course of study. I congratulate you in the name of a public that is interested in the successful pursuit by you of the honorable profession upon which you are now about to actively enter. You have acquired the learning of the books and your success in life will now be particularly dependent upon that preparedness which is a moral preparedness: the preparedness of character. If, coupled with the learning that you have acquired, you measure up to the responsibilities of the calling that you have entered upon, then you may look back upon this night as the opening night of a career of success in the very best sense of the word, because there is no true success that is not based upon a measuring up to the responsibilities of one's position and I am minded tonight that we are all more or less dependent for safety and sometimes even for life upon the intelligent discharge of duty by our fellow men; the care that they bring to their allotted tasks; the training that they have had for its successful discharge. The engineer on the moving train, if the lives of the passengers are to be reasonably safe, must be a trained man. He must look, he must listen, he must be at every turn vigilant. He must hear the bell when it rings, he must see the lights when they shine, he must distinguish between the red and the green, he must understand the mechanism of the en-

gine, he must be at all times prepared to measure up to the responsibilities of his calling.

The lights are lowered in the drug store. It is that quiet hour between midnight and morning. The busy day is over and the clerk who has graduated from the school of pharmacy is alone in the store. He has begun to take the merited and desired sleep after a day of hard and exacting labor and when his slumber is perhaps of the deepest, the night bell rings. He rises in the dimly lighted store, opens the door and finds himself confronted with the agitated foreign maid servant who bears in her hand a prescription, asking him in language hardly to be understood that he shall fill it then and there. A human life depends upon the care in which the very simple act is performed. Drowsiness must be banished, lights must be turned up. The bottle must be carefully seen. The label must be fully read. Nothing must be taken for granted. Every sense must be employed in the distinguishment of the medicines. All intelligence must be given to the making of the compound. If, by any chance, there is something in the prescription that raises a doubt as to whether it was in point of fact intended, he must use the telephone, ring up the prescribing doctor and leave no stone unturned to see that everything is properly done. A few blocks off an anxious father and mother stand at the bedside of a seemingly dving child. They have, at the behest of the trained nurse sent out hurriedly to the pharmacy and the life of the child is primarily dependent not upon the skill of an absent doctor, not

upon the care of a present nurse, not upon the love of adoring parents, but upon the ability with which the lonely man in the drug store deciphers the prescription that the child is expected to take. Yes, the responsibility is a grave one and all the graver because it must be discharged oftentimes without those surroundings which make perhaps for greater care, when we are observed by our fellow men.

A man presents himself at the drug store counter. Only a glance at him and you know that he is a victim of the drug habit. Body emaciated, face disfigured, mind gone almost, soul warped, he stands there claiming that you shall give him something to minister to the disease that grips him, for a profit perchance to you fabulous in its percentage. It is not enough to turn on him your back. It is not enough to say to him that he must go elsewhere. There is an obligation to tell him in as plain words as you know how, the course that he may pursue to shake off the shackles that have unmanned him. so that he may again stand where God intended he should, with a sound body and a sound mind, redeemed from the curse that you may be instrumental in saving him from.

The world is full of these responsibilities—the soldier on the firing line, the student in the office, the thinker or the philosopher in the silence of his own home—but there is no more responsible calling than that which you now enter upon. Are you going to measure up to it? The College expects it, your friends expect it, the world expects it, your God expects it!

President Jeannot Hostmann of the Alumni Association awarded the Association prizes with the following remarks: Mr. Chairman and Friends:

Each year the Alumni Association of the College of Pharmacy offers to the members of the graduating class, three prizes, consisting of a gold, silver and bronze medal respectively.

These prizes are awarded to those students who obtain the highest average in all studies. In this respect they differ from all other awards to be made this evening, each of which is restricted in some way or other.

Our students are examined in twelve branches and the total number of points obtainable is 1200. The gentleman to whom the gold medal is awarded received



TRUMAM A. LINCK WINNER OF ALUMNI GOLD MEDAL TRUSTEE'S CHEMISTRY PRIZE

the unusual rating of 1136 points, which is equivalent to 94.66 per cent. The gentleman who secured this very creditable record is Truman A. Linck. Mr. Linck, in presenting to you this medal, I wish to say that I have been requested by several members of the faculty to express to you their congratulations. We have observed you for two years. You came to us from the west, and we hope and feel that during the time spent with us you have obtained not only a pharmaceutical education, but have profited by your stay in such ways that you may ever be a leader in the future that lies



WILLIAM J. MCBRIDE

before you. Mr. Linck, allow me to congratulate you.

The student winning the silver medal obtained the very creditable total of 1080 points, equal to 90 per cent. It gives me great pleasure to present to you Harold S. Ball, the successful candidate. Mr. Ball, I feel sure that this medal will ever remind you of the success obtained while a student. You have always been earnest, sincere and industrious in all ways and I hope and know that your future career will be as successful as your efforts which have resulted in winning this honor.

The bronze medal has been awarded to a student who obtained 1075 points, equivalent to 89.58 per cent. This represents a difference of less than onehalf of one per cent. between the secand and third honor men. An extremelv close result indeed. William J. Mc-Bride is the winner of this medal. Mr. McBride, I wish to congratulate you. For two years you have studied faithfully and well. May this token ever act as a reminder not to be satisfied with a place in the ranks but to ever and always strive to be among the leaders. Gentlemen, again I congratulate vou in the name of the Alumni Association.

Dr. Frederick A. Leslie, before reading the Roll of Honor, explained that examinations had to be taken in twelve branches, making a total of 1200 obtainable points, and called attention to the exceptional scholarship displayed by the thirteen students comprising the said roll.

ROLL OF HONOR.

1.—Truman A. Linck	1136
2.—Harold S. Ball	1080
3.—William Joseph McBride	1075
4.—Louis Fryer	1054
5.—Mrs. Estella J. Baddour	1053
6.—Herman S. Klein	1046
7.—Milton W. Sakson	1040
8.—Joseph F. Paulonis	1035
9.—Julius Schatz	1033
10.—Achille Granatelli	1028
11.—Isidore Friedman	1016
12.—Conrad P. Klingele	1014
13.—William Ambler McBride	1007



LOUIS FRYER WINNER OF TRUSTEES' MATERIA MEDICA PRIZE

Professor H. V. Arny, in awarding the Trustees' special prizes, said:

Mr. Chairman:

Excellence, the dictionary tells us, is "possessing good qualities in an unusual and eminent degree."

To excel among our fellows; to be singled out of a class as one of unusual ability is highly praiseworthy and when excellence is based on a test as severe as that laid down in the competition for the prizes which the Trustees of our College generously offer each year, the winning of such a prize becomes a marked distinction.

In the first place, the prize winner must be one of the thirteen students making the highest average during the senior year; one of the thirteen whose names appear on the roll of honor just read by Dr. Leslie. In addition, the prize winner must show unusual aptitude in the practical laboratory work in one of the three main sciences taught in the college course.

The prize winner must be a wellbalanced man. Not a mere theorist, whose ability to attain high averages is due to a retentive memory. Not merely a clever manipulator who is able to accomplish certain difficult feats in laboratory technique because of his deft fingers. He must be a thinker, who thoroughly understands the fundamental principles of the science of pharmacy; he must be a doer who is able to turn his brain to the solving of the practical problems of his calling. In short, he must be one of the expert pharmacists of the class who also show more than ordinary ability in the laboratory work in

materia medica or pharmacy or chemistry.

The friendly contest between the honor men of this year's graduating class has resulted as follows:

The Trustees' prize in materia medica is awarded to Louis Fryer; the Trustees' prize in pharmacy is awarded to Milton J. Sakson; the Trustees' prize in chemistry is awarded to Truman A. Linck; and the three gentlemen whose names I have just mentioned will please come forward.

Mr. Linck; Mr. Fryer; Mr. Sakson; it gives me great pleasure to present to you on behalf of the Trustees these



MILTON J. SAKSON WINNER OF TRUSTEES' PHARMACY PRIZE

attractive bank notes, which I fondle so tenderly in my hands. In financial circles there is sometimes used the phrase, "bought for a song." If this be true, then these \$100 bills might be considered as musical notes. I might even suggest that you three have secured more than scholastic honors; I might say that you have attained the musical distinction of reaching "the high C." Be this as it may, the word "song" cannot be applied to your efforts. The prize that each of you now holds within your hands was won by hard, honest and persistent effort. You have shown yourselves "fit;" you have put yourselves into the class with the prize winners of the past; in the same class with Oehler and Diekman and Bastedo and our lamented Vorisek and Leslie and Ballard, to say nothing of the prize winners who have entered commercial. life and who scattered throughout the length and bredth of this great country of ours, as living testimony to the greatness of the College which we all love.

The winning of these prizes carries also a grave responsibility. You have to live up to the standards set by the prize-winners of the past. You have before you great examples; examples that you must emulate. You have before you a life of service, that will redound to the credit of your Alma Mater. She expects as much from you as she has won from your distinguished predecessors. She is confident that you will acquit yourselves as creditably as they have.

In closing, permit me to extend to you the congratulations of the Trustees, the faculty and the student body.

We wish you much prosperity in the active life you are now commencing; we are sure that your future career will be as fruitful and as successful as your student years have been.

Miss Fannie Hart now presented the Lillian Leiterman Medal speaking as follows:

Mr. Chairman, Members of the College and Guests:

In the past few years quite a number of women have been graduated from our school. They have acquitted themselves creditably and scarcely a commencement has passed without one or more of them receiving honorable mention or even higher honors.

The donor of this medal, herself a successful pharmacist, desires that it be restricted to the women students so that they might be encouraged to do more than pass a satisfactory test.

The Lillian Leiterman medal is awarded to the student who has maintained the highest standing throughout the entire College course.

The recipient this year has proven that she is a leader not only among women, but also among men; and it is my pleasant duty to present this gold medal to Mrs. Estella J. Baddour.

Professor George C. Diekman, in awarding the Italian Pharmaceutical Association prize, said:

Provost Carpenter, Members of the Graduating Class, Members of the Board of Trustees, Members of the Faculty and Friends:

For the second time, since the foundation of the Italian Pharmaceutical Association prize, the honor and privilege of awarding it, falls to my lot. My selection for this honor is perhaps quite natural, as I am the only member of our Faculty sufficiently conversant with the Italian language to have made the award in that tongue, and I had prepared an address in choice Italian for such purpose.

The committee in charge of these commencement exercises, however, upon learning of my intention, requested that I refrain from addressing you in Italian, lest there be those in the audience, who would be unable to follow me. It is for this reason that I address you in the English tongue.

The prize of the Italian Pharmaceutical Association is offered for general excellence in practical work. The members of the Association which offers this prize, while proud of their Italian ancestry, are above all, true and loyal Americans. Competition for this prize is therefore open not only to such students as are of Italian ancestry, but to all students, whatever their ancestry may be.

The announcement, concerning this prize, as appears in our Bulletin of Information, reads as follows:

"Italian Pharmaceutical Association Prize.

This association offers annually a gold medal to the member of the graduating class who has obtained the highest general average in practical work during the senior year."

When the tabulation of the results of such work was made, it was found that three students had obtained ex-

actly the same number of marks. Under this circumstance it was deemed proper to also take into account the marks for laboratory work, which these three members of the graduating class, had obtained during their first or junior year.

The total number of marks which a member of the graduating class can obtain as the result of the work of the senior or second year, is 500. As before stated, three students obtained exactly the same number of marks, namely 446, or a general average of 89.2%.

For the same kind of work, performed during the first or junior year, it was possible to obtain 400 marks. The member of the graduating class to whom the award will be made this evening, obtained out of these 400 possible marks 360 or a general average of 90%.

These marks when added to the number obtained during the second or senior year, make a total of 806, out of possible 900, or a general average of practically 90%.

When it is considered that the practical work consists of numerous exercises in the Departments of Chemistry, Materia Medica and Pharmacy, covering a period of over thirty weeks in each year, and constituting practically one-half of the entire curriculum of studies, the record made by the student who is to be honored this evening, is splendid creditable and indeed а achievement. All the more so as the award is being made for work performed during both junior and senior years, and not as heretofore for the work of the senior year alone.

The recipient of this honor is a student in every sense of the word, and it was not a matter of accident or of good fortune, which determined the award of this prize, but earnest and faithful endeavor, and continued application to work and duties.

I feel now that you are tiring of my Italian address, and are anxious to learn the name of the one so fairly entitled to receive this award. It is Mrs. Estella J. Baddour.

And now, Mrs. Baddour, in handing you this award, permit me to finally add my sincere personal congratulations. Your work has shown that women can achieve success in things that are purely practical, and where success can only be had by continued and intelligent application to the work at hand. Your success also again demonstrates that a woman can do things well, and still give proper attention to family ties and duties. That you have continued success is my earnest wish, and also that of the body of men who founded the award of which you are the honored recipient to-night.

After Samuel A. Rubinfeld had delivered the valedictory address and Chaplain Knox had pronounced the benediction the exercises which completed the undergraduate existence of the Class of 1916 were over.

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

The Lloyd Library in Cincinnati has the good fortune to possess a French Codex of 1884, about which inquiry was made in our March notes from this Library, and has kindly advised us, that Theriaque, appearing in the body of the book under Electuaire theriacal. is found in its index, but not Mithridate.

We took our data, in this case, from the introduction to the French edition (Beyrouth, 1903) of Shirazi's pharmaceutical work, which does not mention Mithridatium, indeed; but we took for granted it was there, because Dorvault has it in his index to "L'Officine," 1889.

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From our point of view, the several articles on historical pharmacy in recent pharmaceutical journals have been most entertaining and important. We noticed particularly what Mr. Lawrence Irwell says in his interesting article in the Practical Druggist this month about the "treacle of Andromachus" and "the celebrated Mithridate of Damocratis," and have thought that perhaps a glance at the formula, handed down by Pliny as the very one found by Pompey in the coffers of Mithridates, conquered king of Pontus, together with a reproduction of the original Greek (and its Latin translation), which contains the formula of Damocrates, might be a satisfaction to the natural curiosity of readers:

The Traditional Original Recipe for the Antidote That Suggested to Damocrates the Name Mithridatium.

In sanctuariis Mithridatis, maximi regis devicti, Cn. Pompeius invenit in peculiari commentario ipsius manu compositionem antidoti, e duabus nucibus siccis, item ficis totidem, et rutae foliis viginti simul tritis, addito salis grano: et qui hoc jejunus sumat, nullam venenum nociturum illo die.

C. Plinii Sec. Nat. Hist. xxiii, 77. 3.

In the coffers of Mithridates the Great, after he was vanquished, Cnaeus Pompey found a formula for an antidote against poison, with a commentary in the very great king's own hand writing:

Take two dried nuts, the same number of figs, and twenty leaves of rue powdered, with a pinch of salt.

No harm will come to him that day from poisons, who has taken this before a sparing breakfast.

On the pages which follow is found a fac-simile of pages 115, 116 and 117 of the original Greek (with Latin translation) from the work of Galen (A. D. 130 to 200?). It will be noticed that the recipe for "Mithridatium Damocratis" begins on the fourth line of the Latin translation on page 115, occupies the entire page 116 and ends with the ninth line of the Latin translation on page 117. Ed. Chart. XIII. [900.] Ed. Bul. II. (441.) πάναχος ίσον, χαστορίου ή. μέλειος Αττιχοῦ ξε. β. Αττίδοτος Ζωπύριος. μ Κινναμώμου < γ. σμύρνης σταπτής < έ. νάρδου έ. δίδοται χαρύου Ποντιποῦ μέγεθος σὒν ῦδατι, χυάθοις τρισίν ἐπ. ένιαυτών.

Κεφ. β. [Περὶ τῆς Μιθριδατείου ἀντιδότου, ὡς Δαμοκράτης.] Τωὐτας μέν οὖν τὰς ἀντιδότους τὰς γεγραμμένας πάσας ὁ ᾿Δνδρόμαχος ἔγραψεν. ἐπεὶ δὲ τὰ διὰ μέτρων γεγραμμένα, καὶ πρὸς ἀκρίβειαν τῶν σταθμῶν τῶν φαρμάκων, καὶ πρὸς μνήμην ἐστὶ χρησιμώτατα, διὰ τοῦτο καὶ τὰς ὑπὸ Δαμοκράτους συγγεγραμμένας ἀξιολόγους ἀντιδύτους ἐφεξῆς ὑπέταξα, τὴν ἀρχὴν ἀπὸ τῆς Μιθριδατείου ποιησάμενος.

[Λί ύπο Δαμοκράτους άντίδοτοι γεγραμμέναι.] 'Ανιίδοτος ην λέγουσι Μιθοιδάτειον τινες των σφόδρα έπισημουν, δραστικόν φάρμακον πρός πῶν πάθος πῶσάr τ' άντίδοτον είπον ποιείν.

Σμύρνης Αραβικής Τροηγλοδύτιδος δραχ. ί. Κρόχου ί. άγαριχοῦ ί. ζιγγιβέρεως

mellis Attici fextarios ij. Antidotus Zopyria. 24 Cinnamomi 3 iij, myrrbae stactae 3 v, nardi 3 v. Exhibetur ad nucis avellanae magnitudinem, ex tribus aquae cyathis ad annum.

Cap. II. [De Mithridatica antidoto ex Damocratis traditione.] Has itaque fcriptas antidotos omnes Andromachus prodidit. Quum vero quae carminibus explicatae funt, ad ponderis finceritatem medicamentorumque memoriam maxime conducant, idcirco conferiptas quoque a Damocrate antidotos memoratu dignas fubjunximus, principio rurfus a Mithridatica fumpto.

[Antidoti a Damocrate conferiptae.] Antidotus quam viri quidam infignes admodum Mithridatium vocant, medicamenta ad omnes malas corporis affectionea efficax, quamque omnis antidoti vicem praestare dixerunt.

Myrrhae Arabicae Troglodyticae drachmas decem, Croci decem, agarici decem, zingiberis decem,

ΓΑΛΗΝΟΤ ΠΕΡΙ ΑΝΤΙΔΟΤΩΝ

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Ed. Chart. XIII. [900.] Ed. Baf. II. (441) Γ. Κινναμώμου έ. ναρδόστάχυος 1'. λιβάνου ι'. Ολάσπεως ι'. Καί σεσέλεως, όποβαλσάμου, σχοίνου τε καί Στοιγάδος, χόσιου, χαλβάνης, τερμινθίνης, Μαχρού πεπέρεως, χαστορίου τε Πονιεχοί, 'Υποχυστίδος χυλοῦ τε, χαὶ στύραχος χαλοῦ, Οποπάνακος, και μαλαβάθρου φύλλων νέου, Πάντων έκάστου τος ίσας δίς δ'. Κασίας μελαίνης ζ. πολίου ζ. Λευχου πεπέρεως ταυτό, σχορδίου τ' ίσον, Τοῦ Κρητιχοῦ δαύχου τε ταὐτὸν σπέρματος. Ισας δ' ένι τούτων, βαλσάμου καρπου δραχμάς, Καί χύφεως τόν αυτόν ένίστε τούτων σταθμόν. Τινές δέ και βδελλίου έπι τούτων ίπον, Νάρδου καθαράς δε Κελτικής, και κόμμεως, Καί πετροσελίνου, και όπίου, μηκωνείου, Καί χαρδαμώμου, χαί μαράθρου τοῦ σπέρματος, Καί Γεντιανής, και δύδων αύλλων ίσας,

Cinnamomi decem, spicae nardi decem, Thuris decem, et item thlaspis decem, At sefelis, et succi balsami, et junci odorati, Stoechadis, costi, galbani, terebinihinae, Piperis longi, ac castorii Pontici, Succi hypocystidis, styracis bonae, Opopanacis, et folii malabathri recentis, Pares fingulorum bis quatuor drachmas capit. Casiae vero nigrae septem et polii septem. Piperis albi septem, scordii tantundem; Cretici tamen et seminum dauci tantum. His pendet fructus balfami drachmas pares. Aeguale pondus cyphi praedictis dabit. Sunt qui par velint bdelium adjicere. Hine nardi Celticae repurgatae, et gummi, Et petrofelini, et opii, meconium quod vocant, Et cardamomi, et seminum foeniculi, Et gentianae, et foliorum rofae,

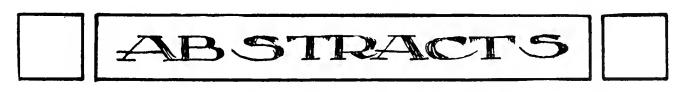
BIBAION B.

Ed. Chart. XIII. [900.] Ed. Baf. II. (441.) Ανα έ, δραχμας μικρύν έπιββεπέστερον. Τοῦ Κρητικοῦ τε ταὐτὸ δικτάμνου μέρος, Ανίσου τε και ασάρου τε γ. δραχ. · Αχύρου τε καί φοῦ, καὶ σαγαπηνοῦ τὰς ἴσας, 'Αθαμαντικοῦ μήου τε καὶ τῆς ἀκακίας, Σκίγκου τε γαστρός, υπερικού τε σπέρματος. Τούτων ίσα πάντων άνα β' S". Ολχάδας, οίνου το μέτριον, χαι μέλιτος Τὸ σύμμετρον, ὡς τάσδ' ὑμοίως οῦτως σκεύασον. Έπει ούν κύφεως έμνημόνευσεν ο Δαμοκράτης, ο και αυτός κατασχευάζεται, δια τουτο καλώς εποίησε, προσγράψας αυτου την κατασκευήν, έφεξης γεγραμμένην. Το χυφι δ ούδέν έστιν ούδε μίγμα απλούν, Ούδ αυτό γη φέρει τις, ούδ ιπίζεται. Αίγύπτιοι δέ τουτο των θεών τισιν Επιθυμιώσι σκευάσαντες, ως φράσοι. Λευχήν λαβόντες σταφίδα την λιπαρωτάτην, Αίρουσι τών αλοιών τε καί το σπέρμ απαν.

Cujusque drachmas quinque, paululo Amplius. Sit Cretici dictamni aequalis portio. Anifi et afari pariter tres drachmae Acorique, phuque, fagapenique tres. Meique Athamantici, et acaciae, Et ventris fcinci, et feminum hyperici, Singula drachmas haec pendant duas femis. Vini et mellis adde quantum eft fatis. Satis eft quantum haec apte jungas fimul.

Quoniam vero Damocrates cypheos mentionem facit, quod etiam ipfe componit, recte ideo illius unoque compositionem adscripsit, quam deinceps subjiciam.

Cyphi vero nec mixtum quicquam est, nec simplex Ipsum fert tellus ulla, non pressus herbae succus. Aegyptus quosdam hoc cum placat deos, Incendit, et quo dicam parat modo. Passam et albam sumunt et pinguissiman,



Conducted by Prof. George C. Diekman.

SPECIALTIES.

Neurinase is a solution of veronal in a liquid containing the active constituents of valerian. It is also marketed in the tablet form.

Calcium-Comprettes contain in each tablet 0.10 gramme of crystalline calcium chloride. Peperhowe claims these tablets are of considerable value in the treatment of night sweats of phthisical patients.

Cignolin is stated to be an excellent substitute for chrysarobin. Chemically it is 1-8 di-oxy anthranol. It is a yellow powder, which unites readily with fatty vehicles. It is soluble in 100 parts of traumaticin. Aceton, alcohol and benzol dissolve it in the ratio of 1.50 parts in 100. In ointment form it is best combined with white vaselin. Before combining it with any ointment vehicle it is best to first triturate it to a smooth paste by means of olive oil.

Technau's Eucalyptol-Injection is made by mixing together 10 grammes of menthol, 10 grammes of eucalyptol albissim (Schimmel), and 50 grammes of oleum dericini. It is injected into muscular tissue in doses of 1 mil.

Acetonal Vaginal-Suppositories contain 5% of alsol and 5% of tertiary trichlorbutylsalicylic acid ester, combined with a non-fatty vehicle. *Eucupin* is the name given to isoamylhydrocuprein. It is marketed in the form of a solution in oil, in the form of an ointment, and in suppository form. It is claimed to relieve pain and to act as a disinfectant. Eucupin bihydrochloricum may be employed in aqueous solutions.

Purgofig is a syrup of figs combined with 20% of extract of senna.

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Hexophan.

This is stated to be oxy-phenyl-chinolin di-carboxylic acid, and is obtained by interaction between warm alcoholic solutions of aceto-salicylic acid and isatin. It is purified by converting it either into a methyl ester or a sodium salt, and subsequent decomposition of these.

It is a yellow powder, devoid of odor, and is practically insoluble in water, alcohol or ether. Warm hydrochloric acid dissolves it with difficulty. It is, however, very soluble in alkali hydroxide solutions and in ammonia water, forming a yellow liquid with these solvents.

A solution of hexophan, 0.1 gramme in 7 mils of decinormal KOH, v. s., diluted with an equal volume of water, upon addition of one drop of a very dilute solution of ferric chloride (1+99), develops a blood-red color. Treated in like solution with a drop of alkaline cupric tartrate solution, it develops an olive-green color.

The clear filtrate obtained after shaking 0.5 gramme of hexophan with 10

mils of ether should not leave a weighable residue after evaporation. A solution of 1 gramme of hexophan in 10 mils of ammonia water should be perfectly clear and transparent, nor should this solution react with sulphuretted hydrogen, either before or after addition of diluted acetic acid. The filtrate obtained after saturating a like ammoniacal solution with diluted nitric acid, should not become turbid upon addition of silver nitrate or barium nitrate solution. Upon complete ignition, 0.5 gramme of hexophan should not leave a weighable residue.

If 0.5 gramme of hexophan is dissolved in 40 mils of decinormal KOH, v. s., and the excess of alkali titrated with decinormal HCl, v. s, it should require from 9.50 to 9.45 mils of the latter to restore neutrality, using phenolphthalein as indicator.

It is claimed to possess value in the treatment of acute muscular and articular rhenmatism, lumbago, spinal myosis, sciatica and other pains of nerve origin. It is also used as a prophylactic in these ailments. It is administered in gramme doses, four times a day, later reduced to three times a day. Hypodermically it is given in doses of one-half gramme. For the latter purpose, the sodium salt of hexophan is preferred. This is soluble in six parts of water, and for each gramme of hexophan, 1.63 grammes of the sodium combination is given.

Eau d'Alibour.

The original formula for this water is in possession of the family Jaussin, to whom it was handed down by the heirs of Dr. Alibour, a physician practicing at the court of Henry the Fourth. In Schweiz. Apoth.-Ztg, 1915, 638, the following formula for this water is given: Exsiccated ferrous sulphate, 61.18 sulphate. grammes. copper 15.20 grammes, saffron, 3.82 grammes, camphor, 3.82 grammes, and water 2 kilogrammes.

Preparation of Acetum Sabadillae.

×

Joltze, in *Pharm. Ztg.* 1915, 823 calls attention to the difficulties experienced in filtering this preparation when made in the customary manner. He suggests that the plant part be macerated in diluted acetic acid for a period of from 8 to 10 days, and not with the customary mixture of diluted acetic acid and alcohol. After filtration and expression 2 and 3 grammes of dried albumen for each 5 liters of liquid are added, and the liquid heated. The albumen acts as a clarifying agent, and after subsequent filtration, the alcohol is added.

×

Aurocantan

It is stated that this compound has proven to be of considerable value in the treatment of tuberculosis. Chemically it is cantharidyl-aethylen-diamino-aurocyanide. It is obtained by interaction between gold cyanide, cantharidin and ethylene-di-amine. Spiess and Feldt, in Aerztl. Rundschau, 1915, No. 37, give a detailed account of the action of this compound. They claim that its action upon the kidneys is 600 times less toxic than that of cantharidin. The compound is marketed in the ampulle form, containing from 1 to 2 mils of a 2.50% solution. The best results were obtained by injection directly into the yeins.



- BUREAU

Conducted by Prof. H V. Arny.

GENERAL INFORMATION.

I. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Sulphur Hair Wash.—F. P. V., New York, asks us for a recipe for a hair wash containing sulphur and potassium acetate. We have never run across such a recipe and perhaps our querist meant sulphur and lead acetate. However, we venture the following suggestion for one containing potassium acetate, if that was really what he wants. Suppose he starts with a recipe for sulphur-sage wash like the following, which we copy from the Era Formulary.

Sage .		•		•	•		•	•			•	I	ounce
Boiling	water		•	•	•	•	•	•	•	•	•	Ι	pint

Macerate one hour, strain and then add to the strained liquid:

Glycerin	2 ounces
Borax	1/4 ounce
Precipitated sulphur	1/4 ounce
Tincture of Cantharides	1/4 ounce
Oil of Bergamot	enough

If F. P. V. really wants to put potassium acetate into his preparation, suppose he replaces the borax in the foregoing recipe by $\frac{1}{4}$ to 1 ounce of the acetate.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted.

Metol Manufacture.—M. W. S., New York.-According to Paul (Jl. Soc. Ch. Ind. 16-1897-463) metol can be made by placing 250 grammes of para nitrophenol, 45 grammes of hydrochloric acid (20° B.) and 500 mils of water in an iron vessel, adding to the liquid in small portions, 400 grammes of iron filings and then boiling the mixture for one half Then extract, with 25 grammes hour. of sodium carbonate, dissolve in 2 liters of water, the para-amido-phenol that is This product is then conproduced. verted into metol (methyl-para-amidophenol) by heating the hydrochloride with methyl alcohol in an autoclave to 150°-160° C.

This sounds very easy; but at this time the problem is where to get the paranitro-phenol. We would not advise the manufacture of it by any one unless he has a large accident and life insurance.

"Some Prescription."—B. R. S., New York, asks us what we would do with the following prescription:

Calomel 1/6th grain Heroin 1/16th grain Ammonium carbonate.2 1/2 grains Caffeine citrate 2 grains Sparteine sulphate.... 1/4 grain Make eight such powders.

We hate to imagine what the ammonium carbonate will do to the calonel as well as to the sparteine sulphate. The only chance is the freed liquid alkaloid will be absorbed by the other powders and that the reduction of the calonel to an attenuated black wash will work no injury upon the patient. Our querist says it is a bad mess; with which statement we heartily agree. Sizing Paper.—A. H. S., New York. —While your query is scarcely pharmaceutical we gladly give the following information gleaned from our library.

"Casein is generally dissolved in ammonia or in borax solution and is used with or without formaldehyde. A very superior paper glaze is thus made which is used on glazed cardboard." (Sadtler's Industrial Inorganic Chemistry, page 293.)

"Use a solution of gelatin to which alum has been added. Occasionally soap is added to the gelatin. When alum is added to a solution of soap and gelatin, the soap is decomposed and an infinitely fine precipitate is produced which forms with gelatin a kind of emulsion." (Thorpe's Dictionary of Chemistry, page 85.)

"Sponnagel and Jacobson used boiled linseed oil triturating it with 5 to 10 per cent. of borax until an emulsion forms. This is saturated with freshly precipitated casein (frischen Kase) to a mass, which is thinned out with water. The fluid dried quickly giving a water-proof coating." (Hager's Fabrikation des Papiers, page 428.)

Soy Bean Oil.—J. K. A., New York. —This is the fixed oil expressed from the seed of Dolechos soja, a plant that is cultivated extensively in Manchuria and Japan, where the beans are an important article of food. The oil is used in the Orient as a food and as an illuminant. The physical and chemical factors for the oil are: solidifying point; 8 to 15°; saponification value about 192; and iodine number 121 to 124. For further details, the querist is referred to Lewkowitsch's book on oils, which is found in our library.

Aqua Bototi.—S. S. F., New York.— By the title just given there was evidently meant the well-known dentifrice, *eau de Botot*, for which a number of recipes may be found. Two of these given below, we take from Fenner's Formulary.

Anise	1 ounce
Ceylon Cinnamon	$2\frac{1}{4}$ ounces
Clove	75 grains
Cochineal	¹ / ₂ ounce
Oil of Peppermint	1⁄2 ounce
Alcohol, enough to mak	e 20 ounces

Reduce the solids to powder and percolate with alcohol until $19\frac{1}{2}$ ounces of percolate are obtained. In this dissolve the oil.

Π

Oil of Anise	¼ ounce
Oil of Cinnamon	1 drachm
Oil of Peppermint	¼ ounce
Oil of Clove	10 minims
Cochineal	¹ ∕₂ ounce
Alcohol enough to make	20 ounces

Dissolve the oil in 19 ounces of alcohol; macerate the cochineal in the fluid until sufficient color is produced; filter and add through the paper enough alcohol to make the filtrate measure 20 ounces.

A Question of Investment.—L. L. C., New York, desires our opinion upon the investment of money in a project to make cellulose for nitrating from cotton stalks. The only opinion on such proposition that would be of value would have to be deduced from a careful personal investigation of the process, which would mean the outlay of time on the part of the investigator and of money on the part of the querist. Speaking only from the standpoint of generalities it might be said that the utilization of plant stalks for paper pulp has been worked on for many years. Thus we recall one corporation which sunk many thousands of dollars on a project to make paper from bagasse (the fibrous residue from sugar cane). It is easy enough to make paper from such fibers, but the question is whether one can make money out of it too.

Of course, in the present scarcity of cellulose for nitrating, the proposition offered may be one with great possibilities of profit; but the particular case to which our querist refers must be ultimately decided by the investor; and we, on our part, must decline to give snap judgment.

Composition of Proprietary The Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

ALUMNI JUNIOR EXERCISES.

Junior Day was celebrated as usual on the night preceding commencement.

The Lecture Hall was well filled by the juniors and their friends when the orchestra rendered the first selection.

Dr. Lewis N. Brown, Chairman of the Committee, then introduced Mr. Thos. F. Main, N. Y. C. P., '71, Honorary President of the Alumni Association and Secretary of the College, who congradulated the members of the Class of 1917 upon their choice of this College as the place in which to pursue their studies. He spoke briefly of the inception and founding of the College in 1829 by a group of New York apothecaries for the better education of their apprentices; of its obtaining a charter in 1831 and if its gradual growth up to 1872, in which year the graduates of the College met and formed the Alumni Association, the members of which since that time had worked steadily with the members of the College to increase and extend its educational equipment.

He spoke also of the high reputation of the College as an educational institution, which is such, that when a demand was made upon Columbia University for the establishment of a school of pharmacy, it choose to avail itself of the educational facilities of this old school of ours, rather than to establish one of its own.

He spoke of graduates of the College who had become prominent in business and in educational work, and hoped that at the end if another College year he might have the pleasure of welcoming every member of the Class as a Ph. G. and also as a member of the Alumni Association, by means of which alone every graduate can keep in constant touch with his Alma Mater.

Professor Arny had promised to give the class a talk, but a sudden attack of tonsilitis prevented his being present. Dr. Brown read the following letter of regret:

"Dear Dr. Brown:

And so I take this means of extending my most cordial greetings to the Juniors in whose honor I hoped to gather with you to-night. Tell them for me that they "did me proud" in the examinations. Tell them that the Faculty expects as good work out of them next year. Tell them that a year hence, we hope to see all of them marching up the main aisle of Carnegie Hall in cap and gown.

Cordially yours,

H V. Arny."

The following program was thoroughly enjoyed by the large and appreciative audience.

Mr. Murphy was in splendid voice and had to respond to an encore. J. J. Coronel '17 made quite a hit with his reading of Tennyson's Revenge. Miss Rosie Anopol, a little miss of 12 years, was awarded the honors of the evening. Her recitation of "Modern Remedies" was such as to give promise for her

Program	
PART ONE	
1 Overture ORCHEST Mortar and Pestle, March	RA
2—Address THOMAS F. MAIN, C. U. C. P. and Alumni Association	'71
3—Song "The River of Love" . MR. JAMES A. MURP Accompanied by H. N. COOL	ΗY
4—Recitation J. J. CORON	EL
5—Address PROFESSOR AR	ΝY
6-Song "My Mother's Rosary" . MR. CHAS. BROCKMEY	ER
7—Poem MISS ROSIE ANOP	OL
8-Violin Solo from "Faust" MR. J. E. D'URGO	LO
9-Minstrels UNIVERSITY CLASS	'18

future success. Following upon J. E. D'Urgolo '17, the "College Minstrels," Messrs. Hyman, Buttenbaum, Mac-Adams, Holtzman, Concialdi and Bailin, with Mr. Brieger as interlocutor, kept the crowd in laughter with their local quibs. President Hostman, before presenting the Alumni Junior prizes, appealed to the students to take the proper interest in College affairs and to join the Alumni Association as soon as they were eligible so as to do their share toward assisting their Alma Mater in the great work she was accomplishing.

	Program
	PART TWO
1—Overt	ure ORCHESTRA
2—Colleş	ge Songs
3—Song	"What a Wonderful Mother You Would Be" MR. CHAS. GILBERT Courtesy of MR. OFRIAS
4—Awarc	ling Junior Prizes, PRES. J. HOSTMANN, Of the Alumni Association
5—Recita	ations
6—Violin	Solo JOSEPH B. SOLLITTO
7— T rio	MR. SMALLS MR. WM. FLEISCHER MR. A. GRASS
8—Junio	r Honor Roll DR. MONROE H. WEIL, '10
9—Song	"If I Was a Rose" MISS HANDLEMAN Accompanied by MISS ELKAN

The first prize, a Torsion Balance, was awarded to Mr. Ira Isaac Schwarz; the second prize, a copy of Arny's Principles of Pharmacy, went to John

Varga and Saul Goldfarb was the winner of the third prize, a copy of Culbreth's Materia Medica.

Dr. Monroe H. Weil '10 briefly related how difficult it was to have one's name appear upon the Honor Roll and after explaining that there were thirteen subjects, making the total number of possible points 1300, proceeded to read the same as follows:

JUNIOR HONOR ROLL.

1—Ira Isaac Schwarz	1176 points
2—John Varga	1155 points
3—Saul Goldfarb	1152 points
4-Anthony Chirico	1148 points
5—David E. Kadushin	1147 points
6—Louis Tulchin	1147 points
7—Solomon Bartner	1145 points
8—Ignatius Allo	1142 points
9—Leonard Steiger	1141 points
10—John F. Streit	1138 points
11-Charles M. Russell	1136 points
1 <i>2</i> —James G. Blaso	1136 points
13—Mrs. Beatrice I. Raggie	1046 points
	out of 1200

Mrs. Raggie, being a member of the 2nd year University Class, did not take pharmaceutical accounting last term.

The class of 1916 was very much in evidence and many were the cheers led by cheer-leader Rampulla. The B Club also was much in evidence and their yell was heard whenever any occasion therefore arose.

The arrangements were in charge of a committee composed of Dr. L. N. Brown '14, Chairman, Dr. H. H. Schaefer '12 and C. D. Hakes '11.

H

- "He who waits to have his task marked out
- Shall die and leave his errand unfinished."

-Lowell.

1916 Ph. G's.

Ackerman, S. W.,

143 Main St., Poughkeepsie, N. Y. Aronovie, A. .350 Highland Ave., Arlington, N. J. Aronstamm, C. G., 1297 Lexington Ave., N. Y. C. Axelbank, P....324 E. 9th St., Brooklyn, N. Y Baddour, Mrs. E. J.... 176 E. 78th St., N. Y. C. Ball, H. S..... Monroe, N. Y. Becker, M.....819 McLean Ave., Yonkers, N. Y. Begg, S.....Bronxville, N. Y. Berger, K....2001 Douglass St., Brooklyn, N. Y. Berger, M.,114 N. Main St., Portchester, N. Y. Berkowitz, S.......606 East 5th St., N. Y. C. Bower, C. W., 560 Gregory Ave., W. Orange, N. J. Brennan, B. D. 24 E. Main St., Mohawk, N. Y. Brunzwig, L., 552 Palisade Ave., Jersey City, N. J. Buccanning, L. H.....Pt. Jervis, N. Y. Capeci, E.....28 Willow St., Portchester, N. Y. Chalian, V. F.... 1006 Main St., Priceburg, Pa. Cumming, J. H. .678 Fulton St., Brooklyn, N. Y. Davidson, Miss F.855 Huntspoint Ave., N. Y. C. Dispenza, Miss R. L. B., 822 E. 215th St., N. Y. C. Dragotta, B......2339 Prospect Ave., N. Y. C. Esperson, G. E. .11 Montague Ter., B'klyn, N. Y. Frank, R. A....408 Main St., Union Hill, N. J. Friedlander, A. W. 14 E. 116th St., N. Y., N. Y. Friedman, A. S....232 E. 5th St., N. Y., N. Y. Friedman, 1.....290 Second St., N. Y., N. Y. Fritz, J...... 110 Henry St., N. Y., N. Y. Galgano, L. Dobbs Ferry Rd., White Plains, N. Y. Giaquinto, E....143 Wallace St., N. H., Conn. Goldberg, E. f..... 103 W. 80th St., N. Y. N. Y. Goulko, M...... 507 W. 142nd St., N. Y., N. Y. Granatelli, A....467 E. 169th St., N. Y., N. Y. Green, J.....1-3 Willett St., N. Y., N. Y. Grossman, J.....1801 Victor St., N. Y., N. Y. Guck, O. M...1472 President St., B'klyn, N. Y. Gutowski, A. T., 420 E. 153rd St., N. Y., N. Y. Hatch, S. C.....25 Kellogg St., Portland, Me. Heller, J. A.....881 E. 178th St., N. Y., N. Y. Heller, M. J......3 Sheriff St., N. Y., N. Y. Horwitz, A.....113 E. 96th St., N. Y., N. Y. Iglitzin, J..... 301 Hooper St., B'klyn, N. Y. Insinga, S.....102 E. 7th St., N. Y., N. Y. Johnson, V.....171 Carroll St., B'klyn, N. Y. Jonas, B. G......455 E. 179th St., N. Y., N. Y. Kaesmann, H. C.,

462 E. Main St.Bridgeport, Conn. Kahn, P......840 Whitlock Ave., N. Y., N. Y. Kaplan, H.......712 E. 6th St., N. Y., N. Y. Klein, H. S......1322 So. Boulevard, N. Y. C. Klingele, C. P......9 Young St., Stapleton, S. I. Kniasewich, A.....215 Berry St., N. Y., N. Y. Kohout, O.......449 E. 78th St., N. Y., N. Y. Kopp, J.......336 E. 18th St., N. Y., N. Y. Kozakevitz, L.,

2323 Westchester Ave., N. Y., N. Y. Kramer, J. L...566 Prospect Ave., N. Y., N. Y. Landsman, S. M....25 Henry St., N. Y., N. Y. Larson, C. G. 207 Chestnut St., Elmira, N. Y. Lattman, M. 1493 Madison Ave., N. Y., N. Y. Lein, Miss P.,

552 Palisade Ave., J. C. Hgts., N. J. Lent, F. S.......911 Elm St., Peekskill, N. Y. Lerner, A......34 Osborne St., B'klyn, N. Y. Linck, T. A..904 Grand St., Kansas City, Mo. Litt, H. W......279 E. 3rd St., N. Y., N. Y. Loscalzo, H......21 Lee Ave., Winfield, L. I. Lubman, H......993 Union Ave., N. Y., N. Y. McBride, W. A.,

36 Van Buren St., Kingston, N. Y. McBride, W. J. 73 W. 101st St., N. Y., N. Y. Madden, J. B.Saranac Lake, N. Y. Maggio, M. A. ... 566 E. 187th St., N. Y., N. Y. Maislish, M. ... 506 W. 134th St., N. Y., N. Y. Markowitz, J. ... 64 W. 118th St., N. Y., N. Y. Masini, A. L.,

612 Hague St., W. Hoboken, N. J. Maslon, J......71 Second St., N. Y., N. Y. Matera, Jr., A. A....151 42nd St., Corona, L. I. Meier, Miss M. E.....Butler, N. J. Miller, S. A.,

63 No. Bath Ave., Long Branch, N. J. Mintzis, H. L...740 Trinity Ave., N. Y., N. Y. Mistretta, J.....229 E. 14th St., N. Y., N. Y. Mossowitz, C.....978 Aldus St., N. Y., N. Y. Nadel, Miss R.....632 E. 9th St., N. Y., N. Y. Navid, S......53 E. 112th St., N. Y., N. Y. Nicastro, E. E....46 W. 64th St., N. Y., N. Y. O'Hagan, C.,

8 Abendroth Pl., Portchester, N. Y. Pascal, S........211 E. 11th St., N. Y., N. Y. Paulonis, J. F....454 Grand St., B'klyn, N. Y. Perkins, G. W......Glen Cove, L. I. Perla, Mrs. F. N.,

1626 Madison Ave., N. Y., N. Y. Prote, J. C., Jr...195 Main St., Astoria, L. I. Rampulla, J. J..1422 Bergen St., B'klyn, N. Y. Resnick, J......236 Madison St., N. Y., N. Y. Robins, J.......683 Wales Ave., N. Y., N. Y. Rogoff, S.........1145 Fox St., N. Y., N. Y. Rosati, V....680 Vernon Ave., L. J. C., N. Y. Rosenberg, J. H.,

Schwetz, A.....124 W. 99th St., N. Y., N. Y. Sesta, J. A......388 First St., J. C., N. J. Shank, J. 1.....993 Union Ave., N. Y., N. Y. Simon, J.....1502 Bryant Ave., N. Y., N. Y. Slavin, H.....1535 Minford Pl., N. Y., N. Y. Smith, H. A.....Castleton, Vt. Smith, M......153 Norfolk St., N. Y., N. Y. Steinhardt, A.....645 Fox St., N. Y., N. Y. Strasser, W. W..861 Union Ave., N. Y., N. Y. Strongin, H. F.,

177 W. Main St., Norwich, Conn. Tassinari, C. A. 499 W. 133rd St., N. Y., N. Y. Tesiero, T. R. 39 Reid St., Amsterdam, N. Y. Tetelman, H....525 E. 146th St., N. Y., N. Y. Van Voorhis, A. J.....Highland Falls, N. Y. Warfman, S. 1201 Bleecker St., Utica, N. Y. Wasserman, M. S.,

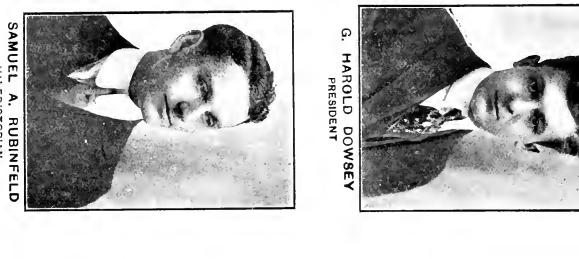
1311 Clinton Ave., N. Y., N. Y. Weisberg, D. M.111 Woolsey St., Astoria, N. Y. Weiss, F......79 Jamaica Ave., Astoria, L. I. Weissman, S....335 E. 100th St., N. Y., N. Y. Wilensky, W....514 E. 81st St., N. Y., N. Y.

Clarge Officers President G. HAROLD DOWSEY Price-President ESTELLA J. BADDOUR Secretary CONRAD P. KLINGELE Treasurer VICTOR JOHNSON Faledictorian

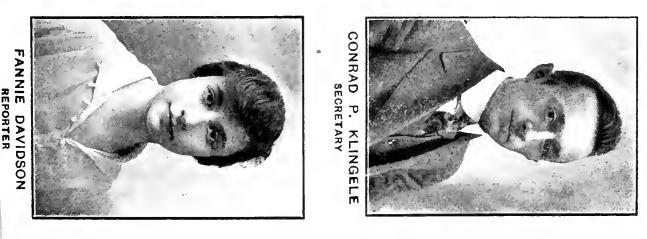
SAMUEL A. RUBINFELD

Historian MARY E. MEIER

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Class Officers of 1916



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1915-1916

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Honorary President THOMAS F. MAIN

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Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING MAY 10th, 1916.

Meeting called to order by President Hostmann at 8:15 P. M.

Present: Thos. F. Main, '71; Adolph Henning, '76; J. Hostmann, '96; E. C. Steinach, '00; J. H. Hecker, '08; J. A. Steffens, '09; M. H. Weil, '10; L. Roon, '10; C. D. Hakes, '11; H. H. Schaefer, '12; J. A. Miraglia, '13; S. A. Fasano,
'13; L. N. Brown, '14; E. J. Kodet, '14;
M. Bedrick, '15; R. S. Hagaman, '15;
V. M. Orefice, '15; N. A. Smedira, '15;
G. D. Virden, '15; S. Feigin, '15; S. Levine, '15, and Miss Argentineau, '15.

The minutes of the April meeting were adopted as printed in the C. U. C. P. ALUMNI JOURNAL.

The treasurer and registrar were absent and no reports were received.

The following reports were received from Dr. Diekman as chairman of the committees on audit and honor roll.

New York, May 10th, 1916.

Jeannot Hostmann, President,

115 West 68th Street, New York City.

My dear Hostmann:

The committee on audit of books of the Treasurer of the Alumni Association was unable, because of multiplicity of added duties, occasioned chiefly by the recent examinations, to complete its report for presentation on occasion of the May meeting of the Association.

A report will however will be ready for presentation on occasion of the June meeting. On such occasion the Committee on "Honor Roll," will also make its report. This report could of course readily be made to the May meeting. Circumstances however render this inadvisable.

> Very truly yours, Geo. C. Diekman.

Chairman Henning, of the Committee on prizes, reported that he had delivered the gold, silver and bronze medals and the Torsion balance, Arny's Principles of Pharmacy and Culbreth's Materia Medica to the President. On motion the report was ordered placed on file and the committee was discharged with thanks. Chairman Brown, of the Junion Day Committee reported that the committee was ready to open the exercises.

The following letter was read:

New York, May 9th, 1916.

Jeannot Hostmann, President 115 West 68th Street, New York City.

My dear Hostmann:

I am taking this method of bringing to your attention, what seems to me to be an oversight in according the senior Honor Roll students, proper recognition.

It is quite true that the medal students receive from the Alumni Association a certificate setting forth the purpose for which it is issued. It is likewise true that the recipients of the Trustees' prizes are given a certificate in recognition of their work, besides the prize itself.

This would leave however at least seven, and possibly more, of such students who at present receive no further recognition than that of having their names read on occasion of the commencement and having their names appear in the corresponding Bulletin of Information.

Would it not be possible to have a statement to the effect that the recipient of the diploma "Graduated with Honors," appear on the face of the diploma itself I cannot see a single objection to this plan. I realize however that there may be such objections, and if so will be glad to have them pointed out. I would suggest that you, if you think well of the proposition, appoint a committee to take up the matter with the college authorities.

While this may not be strictly an alumni matter, I feel that coming from the Alumni Association, it will earry

more weight, than if advocated by individuals. If such action can be brought about, I am sure that it will be appreciated by the student body, and that the Alumni Association will again have shown its interest in matters pertaining to students.

Very truly yours, Geo. C. Diekman.

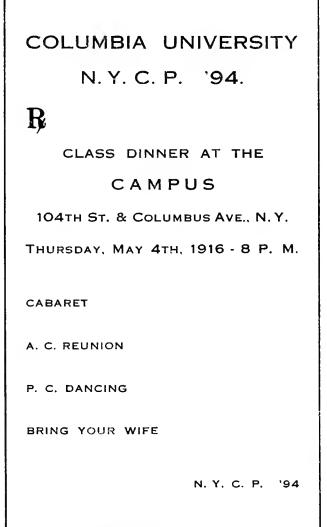
The president was ordered to appoint a committee to take up this matter with the Board of Trustees and appointed Messrs. Diekman, Henning and Main.

The secretary was ordered to send a letter of thanks to Professor Arny for his donation of a copy of "Principles of Pharmacy" as well as to Haggerty Bros. for etching name on plate of Torsion balance and to Snyder and Black for embossing names of prize winners on books.

The following were elected members: Chas. H. Knevitt, '15 and Jacob Fritz, Jos. Rampulla, Samuel Great, Harry Lubman, Bernard Brennan, A. W. Friedlander, Herman Litt, Ernest Capeci, Truman A. Linck, A. S. Friedman, Mrss Fannie Davidson, Miss Dorothy Weisberg, Mrs, Estella J. Baddour, Alfred Samuel Warfman. Masini. Stephen Hatch, H. P. Loscalzo, Samuel Miller, H. S. Klein, A. Granatelli, Mary E. Meier, Julius Shank, Michael Maggio, A. J. Van Voorhis, Carl G. Larson, Victor Johnson, Martin Goulko.

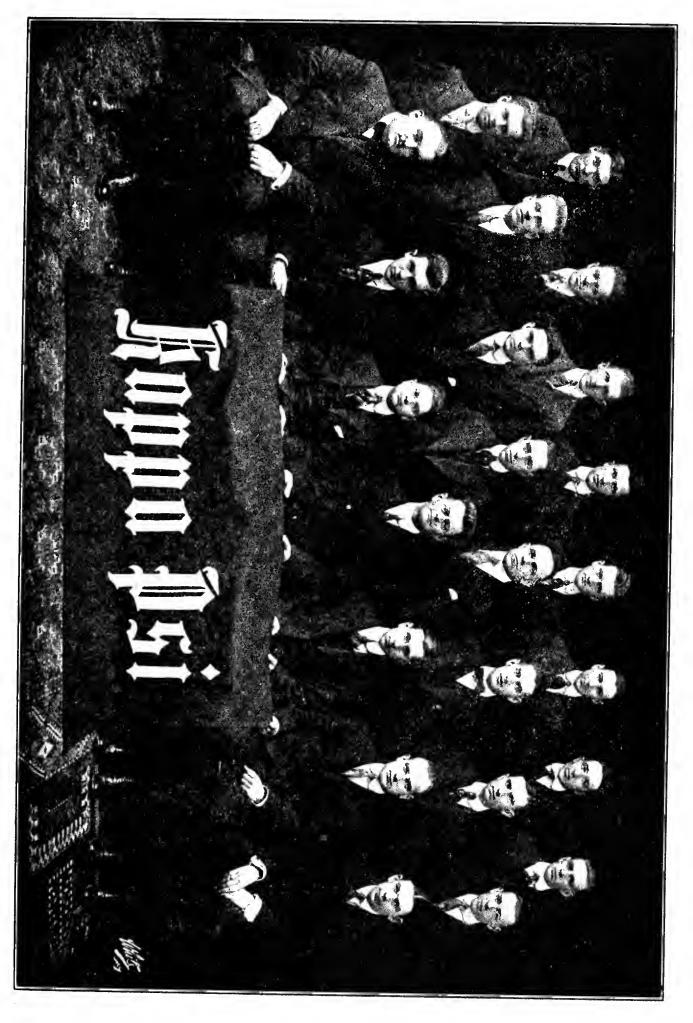
After ordering the following bills paid, the meeting adjourned to the Lecture Room to enjoy the entertainment provided by the Junior Day Committee: Lea and Febiger, \$4.04; Torsion Balance Co., \$15; C. G. Braxmar Co., \$33.50.

> LEO ROON, Secretary.



TICKETS \$2.00 PER COVER

The N. Y. C. P. '94 Class Dinner was held May 4th at the Campus. Among those present were John D. Case, Jacob J. Lauffer, Leo W. Geisler, Philip Eichler, M. D., William Girard, Henry J. Kirchner, Charles R. Seiman, Bruno R. Dauscha, Harry Terhune, William E. Schneider, Robert M. Ullrich, M. D., Gustave Abbenheusen, John Keterley, M. D., William Kirkpatrick, Nelson S. Kirk, Gustave A. Ankerson, Hieronimus A. Herold, Frank N. Pond, Joseph Kussy and Peter J. Ehrgott. Most of those present were accompanied by the wives.



OIL WELLS WILL LAST ONLY ONE GENERATION.

Petroleum has a useful history of little over half a century. In that time it has grown to a world's yearly production of about 300,000,000 barrels, with a sickening history of waste through burning oil wells, unstored surplus poured upon the ground, and insufficient provision against premature water logging of producing One cannot say that petroleum wells. production, even in the United States. has reached its maximum. Nevertheless it has been pointed out that in the early days of the industry the average depth of a well was 150 feet, ten years later it was 400 feet. At the beginning of this century it was 1,100 feet, and to-day the average depth of oil may be placed at 2,000 feet, a very considerable proportion of the earth's workable crust. M. L. Requa puts the probable life of the flowing California wells at twenty-nine years. That is, our children will face the necessity of all this territory being replaced. -The Engineering Magazine.

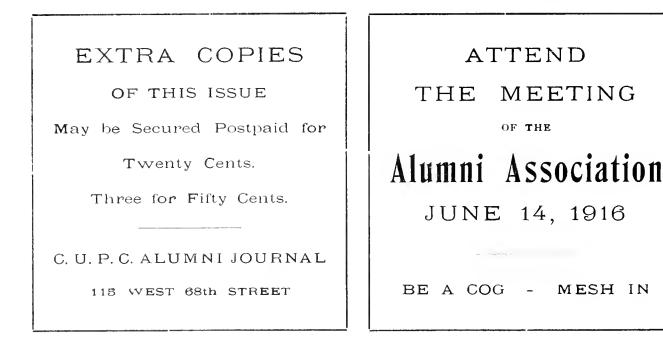
DOCTOR DINER ADDRESSES MEMBERS OF THE COLLEGE.

Doctor Jacob Diner, Dean of the Department of Pharmacy, Fordham University, entertained the members of the College at the meeting held May 16th with a very interesting talk on "The Systematization of the Drug Store."

He exhibited many kinds of cards being used by successful pharmacists in their business and in his usual direct and characteristics way explained how great an air they were in aiding to become commercially successful.

Dr. Diner laid particular stress upon the importance of selecting a system that was flexible; one that would best meet the needs of the one particular store, closing with these remarks:

"Select a good system, a system that will best meet your requirements, and after you have selected it, see that you keep it going. If you do this, it will keep your business going and the cash will come in in such a way that the system will repay you many times over."



Contents: Editorial. 133 Paper and Papermaking, by Thomas J. Keenan. 134 Regulations for German Physicians. 137 Nineteen-sixteen University Class. 138 College Affairs, conducted by Professor Rusby. 139 Front the Library, by Adelaide Rudolph. 142 Abstracts, conducted by Professor Diekman. 143 Information Bureau, conducted by Professor Arny. 144 Alumni News. 150 Alpha Chapter, Tau Epsilon Fraternity. 152 Subscription Subscription Single Copes Per Year \$I So cents Contents 20 cents	Contents : Editorial.	Contents: Editorial.	Published M by the ALUMINI ASS	MAN J	COLLEGE OF PHA of the CITY OF NEW YO	RMACY
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The new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Momen,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B. — Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

Address all communications to the C. U. C. P. ALUMNI JOURNAL, 115-119 West 68th Street, New York.

Subscription Rates: \$1.00 per Year.-Single Copy 20 cents.

Vol. XXIII.

JUNE 1916.

Number 6.



THE ALUMNI ASSOCIATION.

Once again we wish to appeal to the recent graduates to become members of the Alumni Association. Twenty-six members of the graduating class were elected to membership at the May meeting. Our treasurer, Dr. Leslie, sent a personal letter to every other member of the class and this resulted in the receipt of twenty-one applications, which were acted upon at the June meeting. This makes a total of forty-seven members elected. We hope that there are many of the one hundred and thirty-four members of the Class of 1916 who have decided to join the Association and who have simply put off sending in their applications. To these we would say, "do it now." We feel that the self-evident reasons for becoming active members of the Alumni Association have been explained to them so often that repetition is needless. The Alumni Association needs them, they need the Alumni Association; they must become regular readers of the JOURNAL so as to keep in touch with college activities. Therefore, in the words of our genial secretary, "Become a Cog—Mesh In."

A

STRINGENCY OR CONSER-VATION.

On page 137 we publish some regulations established for its members by the Munich Medical Society. They are rather interesting. Whether these regulations were put in force owing to an actual shortage of medicinal agents or whether simply in connection with the well known policy of conservation and efficiency followed by the Germans we are unable to say. They furnish another striking example of the far-reaching effects of the terrible conflict.

PAPER AND PAPERMAKING PROCESSES.

By THOMAS J. KEENAN.

In this, the second of two papers based upon a lecture delivered by the authorto the University Class of the College of Pharmacy, the chemistry of paper-making is discussed, more particularly as applies to the use of wood for paper pulp. The first paper appeared in the April number.

For more than a century succeeding the establishment of the first paper mill in America, progress in the art of papermaking was not marked by any great mechanical improvement or industrial advance. The primitive methods of manufacture, characteristic of the art since its introduction to the western world, persisted, and the transition from a simple craft to a highly technical industry which marks the recent history of papermaking, did not begin until long after the invention by Fourdrinier of the continuous paper machine.

With the spread of education, so pronounced about the middle of the nineteenth century, the supply of rags for papermaking purposes failed to meet the increasing necessity for paper, which, at the same time, was being produced in larger and larger quantities by the new machinery then coming into use; and the problem of discovering new sources of papermaking material became one that pressed more and more insistently for solution.

In 1840 a German, Friedrich Gottlob Keller, made paper pulp by grinding wood against a stone revolving in water, and in 1845 the Government of Saxony granted him a patent on his invention. The product was not used alone any more then than now, rag pulp being

mixed with it, as chemical pulp is in present day practice. Keller's invention was tried out in the United States at a pulp mill in Curtisville, near Stockbridge, Mass., in 1867, and was applied in that year to the manufacture of paper by the Smith Paper Company of Lee, Mass., who were able for a year or more to keep the details of the process to themselves.

It should be noted that, except for the use of chlorine as a bleaching agent, following the discovery of the element by Scheele in 1774, chemistry found no application in papermaking; it remained a purely mechanical art until Burgess and Watt invented the soda process of reducing wood to pulp in 1852, or to be historically exact, five years earlier, when Montgolfier, a French papermaker, undertook the manufacture of straw pulp by boiling straw in caustic soda.

Although the scarcity of primary material was relieved to some extent by the discoveries of Keller and Burgess, it was not until Benjamin Chew Tilghmann, a Philadelphia engineer, the inventor of the sandblast, had conceived the idea of boiling wood with sulphurous acid to separate the cellulose fibers from incrusting substances, that the raw material problem was in a way of being solved. This was in 1865, and a story

is current that 'Tilghmann discovered the disintegrating action of sulphurous acid on wood by observing its pulping effect on matches which he had used to stir some of the acid contained in a As told in a book entitled beaker. Leading American Inventors (Henry Holt & Co., New York, 1912): "Aimlessly enough he bruised a burnt match stick into a solution of sulphurous acid, and next day noticed that the wood had become mucilaginous, so as to look like paper pulp. At once he asked: Can this solution convert wood into material for paper? He put his surmise to a test, and proved it to be sound." This story may, however, be dismissed as having no established basis in fact.

Since the introduction of chemical woodpulp is properly regarded as the most important epoch in the evolution of papermaking as an industry dependent on chemistry and chemical engineering, and as sulphite pulp is the preponderating product, it may be well to give some particulars of the manufacture of this pulp.

Sulphite pulp is the name given to cellulose produced by boiling a selected wood, usually spruce, in a solution of calcium bisulphite or mixed calcium and magnesium bisulphite, under high pressure, until the fibers of cellulose are disintegrated and set free from the incrusting juices, resins and gums of the tree substance.

The wood is prepared for cooking by first removing the bark, and then chopping it into pieces or chips about onefourth inch to a half inch thick. The chips are afterwards crushed in a disintegrator so as to break them up into small pieces without, however, reducing them to a fineness that would result in breaking the individual fibers; for it is the aim of the pulp maker to preserve the cell walls of the plant unruptured and undivided, as contradistinguished from the aim of the pharmacist in his maceration process for the preparation of a tincture or extract.

After a screening process to remove sawdust, sand and dirt, the chips are elevated to a loft above large steel digesters or boilers capable of holding twenty tons of wood. The digesters are filled with the chips, and cooking liquor is pumped in until the container is nearly filled. The manhole or cover at the top of the digester is then securely fastened and steam turned on gradually. After the liquor reaches the boiling point the steam is kept on until the temperature reaches 130° to 140° Cent.; the duration of boiling extends from ten hours to sixteen hours, depending on the temperature at which the process is carried out and the strength of the cooking liquor.

When the period of cooking is ended the accumulated gas is let off by opening the gas taps at the head of the digester and shutting off the steam. A tap at the bottom of the digester is then opened and the liquor is allowed to run out. In many mills the pulp is blown out of the digesters under full pressure into a large vat, where it is washed and drained, but in other mills the digester is filled up with cold water, the pulp washed once or twice and finally run out into drainers for subsequent treatment.

Tilghmann, who invented the sulphite process, abandoned it owing to mechan-

ical difficulties and it remained for George Fry and his collaborator, Carl Daniel Ekman, a Swede, to perfect and operate the process. The first sulphite woodpulp of any commercial value was made at the Bergvik mill in Sweden in 1874. In the United States the Ekman process was operated in the mills of the Richmond Paper Company at Providence, R. I., in 1885. The liquor originally used for digesting the woodpulp consisted of an acid solution of magnesium sulphite, the magnesia being obtained by burning magnesite imported from Greece.

Mechanical difficulties surrounded the operation from the outset, though the quality of pulp produced was excellent. The digesters in which the wood was cooked were lined with lead, and the heat developed in the acid liquor proved to be exceedingly disturbing, as while the lead expanded during the application of heat, it did not contract again The cost of repairs to diwhen cold. gesters necessitated by the behavior of the lead lining was heavy, amounting to \$10 a ton on the total production. The difficulty was overcome by the invention of a digester lining composed of heavy cement backing faced with brick, the latter being pointed with litharge and glycerin. The invention of a digester lining was one of the important early contributions of the chemical engineer to the development of the industry.

The magnesium bisulphite process, originated by Ekman in Sweden, and developed by Charles S. Wheelwright and his brothers in this country at the Richmond mill in Providence, R. I., has been modified in several particulars, the chemical solvent now employed being bisulphite of lime, as already mentioned. Several different kinds of pulp are obtained according to the system of cooking employed, the concentration of cooking liquor, time of digestion and the pressure employed.

The sulphite process of cooking wood is not applicable to all woods. It works best with spruce and coniferous woods generally. The Mitscherlich system of sulphite cooking yields a product by prolonged digestion in a weak solution of sulphurous acid under low pressure. The resulting pulp is remarkable for strength of fiber. The wood is steamed for a few hours before being boiled with the acid liquor. The Ritter-Kellner quick-cook process is an improvement on the other processes, and is the one generally used in this country.

It will be seen that the process of digesting the wood with a solution of lime or magnesia in sulphurous acid suggests an operation in pharmacy, but the preparation of the wood, its limited comminution, and the final disposition of the exhausted digestion liquor emphasize dissimilitude of the respective the maceration systems of the pulp maker and the pharmacist. By the solvent action of the chemical solution upon the non-fibrous constituents of the wood, the cell walls or cellulose are set free from their enveloping bodies and recovered to the extent of nearly 50 per cent. of the total weight of the wood. The material which is extracted, consisting of all the soluble constituents of the woodthe gums, resins, tannins and active plant principles in which the cell walls or fibers are buried-represent to the pulp maker so much offal or waste, which is usually run off into rivers and

streams, with a total loss of organic extractives and chemicals.

The manufacturer of sulphite pulp is eager to be informed of a means of utilizing the spent liquor that would obviate the present necessity of throwing it into adjacent watercourses. Some manufacturers save the liquor and make alcohol from it by a process of fermentation, but the profitable recovery of the entire organic matter and the sulphur is still an unsolved problem which might be investigated to advantage by a pharmaceutical chemist who would, perhaps, approach it from a different angle than the industrial chemist and succeed in enriching the materia medica by getting out of the liquor some hitherto undiscovered organic compounds.

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REGULATIONS FOR GERMAN PHYSICIANS.

A number of interesting regulations have been established, for its members, by the Munich Medical Society. These regulations became necessary because of the exigencies of the war, and among them are the following: First: only limited quantities of medicinal agents should be prescribed or furnished at one time, thus obviating the usual waste. Second: perfumed soaps, cold cream, hair tonics and hair washes, must not be furnished. An exception is made in the case of spirit of resorcin, which may be used in limited quantity. Third : all fixed oils, such as olive and sesamum oils are intended for internal use exclusively. Their use in liniments, such as soap liniment, chloroform liniment and ammonia liniment, is strictly forbidden. Fourth: a decree issued by the government in

January, 1916, makes the use of lard as an ointment vehicle illegal. If a vehicle of soft consistence is required it is recommended that encerin and water be employed. If a firm consistence is required. anhydrous wool-fat is to be used. Fifth: talcum is to be used in place of starch. Sixth: the use of glycerin for external purposes is forbidden. In its place lanolin creams are recommended, which are claimed to be more efficient and at the same time much cheaper. Seconth: potassium chlorate cannot be obtained for medicinal purposes. In its place, if to be used as a mouth wash or gargle, tincture of myrrh, alum or sodium bicarbonate with a trace of sodium chloride are recommended. Eighth: boric acid and borates may be used medicinally in eye and ear practice only. For other purposes they may be replaced by hydrogen peroxide or by sodium bicarbonate. Ninth: absorbent cotton and like articles must in all cases be replaced by one of the various forms of cellulose of domestic origin. Tenth: the sale of rubber goods in any form is absolutely prohibited. Syringes should be made of glass wherever this is possible. The above represent only a limited number of the articles whose sale and distribution is controlled by law. Pharm. Zentrh. 57, No. 11.

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RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

THE NINETEEN-SIXTEEN UNIVERSITY CLASS.

At the One hundred and sixty-second Commencement of Columbia University held at Morningside Heights on June 7th, the following graduates received the degree of Pharmaceutical Chemist: George C. Aronstamm, Ernest Capeci, Miss Rosalie Dispenza, Basilio Dragotta, Samuel B. Greenwood, Osmond M. Guck, William Ambler McBride, James Bernard Madden, Joseph F. Paulonis, Joseph A. Sesta, Herman F. Strongin, Alfred Van Voorhis.

The results obtained by the members of this, the first three year University Class are extremely gratifying to the Faculty and speak well for the future of this particular course.



JOSEPH F. PAULONIS

Mr. Joseph F. Paulonis was awarded the Max J. Breitenbach Prize for the highest standing in the third year, as well as the Kappa Psi Gold Medal for the highest standing thronghout the entire course.



WILLIAM A. MCBRIDE

William A. McBride is the fortunate winner of the George J. Seabury Scholarship which is awarded this year for the first time.

This scholarship has been founded by Dr. Henry C. Lovis, in memory of his uncle, Mr. George J. Seabury, for many years a member and patron of the College. It provides for the tuition, during the fourth year of the University course, leading to the degree of B. S. in Pharmacy.



Conducted by Prof. H. H. Rusby.

THE HONOR ROLL.

Announcement is here made of an important action affecting the conditions for attaining a place upon the honor roll of the graduating class, taken by the Board of Trustees at its June meeting, in response to a unanimous recommendation by the Faculty. Hereafter, the membership of the honor roll will not be limited to a definite number, but will be open to all students who can secure a general average of 85 per cent. or more at the final examinations. Under the conditions heretofore existing, a certain number of graduates secured this distinction, even though their records might not be such as to justly entitle them to honorable mention provided that they were the class leaders in scholarship. It is true that such a contingency has never yet arisen, but it was nevertheless entirely possible. On the other hand, students justly entitled to such distinction have failed to secure it merely because a certain number of others had excelled them. By the new arrangement, every student exhibiting the appropriate scholarship will secure full credit therefor. All such students, whatever their number, will be entitled to compete for the Trustees' cash prizes.

It is of still greater moment that a special gold seal is to be provided, bearing the inscription "With Honor" in addition to the ordinary College seal, to be affixed to the diplomas of those entitled to this distinction. It is believed that this new arrangement cannot fail to do much to stimulate a more general endeavor to attain a higher position in the graduating records, not only by the individual student, but by the respective classes.

COMMITTEES OF THE

TRUSTEES.

Auditing Committee.

Chairman—Adolph Henning Ernest Stauffen William P. Ritchey

Instruction Committee

Chairman—Henry C. Lovis Clarence O. Bigelow Max J. Breitenbach V. Chapin Daggett Reuben R. Smith

Examination Committee.

Chairman—Frederick K. James Max J. Breitenbach Arthur H. Elliot David Costelo J. Leon Lascoff

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Chairman—Frederick K. James Reuben R. Smith Jacob Weil Robert S. Lehman Charles W. Holzhauer

Library Committee.

Chairman—Caswell A. Mayo V. Chapin Daggett Irving McKesson

Property Committee.

Chairman—Adolph Henning Max J. Breitenbach Clarence O. Bigelow Ernest Stauffen Jacob Weil

DELEGATES TO

Annual Convention of the American Pharmaceutical Association.

Chairman—Henry V. Arny H. H. Rusey George C. Diekman William Mansfield Curt P. Wimmer

Annual Meeting of the New York State Pharmaceutical Association.

Chairman—George C. Diekman H. H. Rusby William Mansfield Clarence O. Bigelow Frederick K. James

Annual Meeting of the New Jersey Pharmaceutical Association.

Chairman—JEANNOT HOSTMANN HENRY V. ARNY CHARLES W. HOLZHAUER LEWIS W. BROWN E. T. N. STEIN

Annual Meeting of the Connecticut Pharmaceutical Association.

Chairman—Charles W. Ballard James P. Leverty Thomas F. Main Professors Rusby, Diekman and Arny, will represent The College at the Annual Meeting of the Conference of American Pharmaceutical Faculties.

*

Professor Mansfield is busily engaged putting the finishing touches to his forthcoming book "Histology of Medical Plants," which will be published August 1st.

Professor Arny has practically completed his work on the revision of "Principles of Pharmacy," the second edition of which will appear this fall.

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Professor Hostmann is collaborating with Doctor Coblentz in preparing the fifth edition of Sadtler and Coblentz. This well known book on Chemistry will come off the press in September.

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The Department of Pharmacy is busily engaged in preparing for the installation of the new "Museum of Official Products." It is planned to have on exhibit a complete line of all galenicals official either in the Pharmacopoeia or National Formulary.

We wish to bring the good news to the many friends of Mr. Frederick K. James and Dr. Arthur H. Elliott, trustees of the College, that both gentlemen are rapidly convalescing from serious but successful operations.

X

Dean Rusby delivered a public lecture at the New York Botanical Gardens on Saturday, June 17, entitled "Floral Features of Tropical America," which was thoroughly enjoyed by a large and highly appreciative audience. Many beautiful lantern slides were shown.

Professor Mansfield Guest of the Evening Class.

The combined evening classes in microscopy honored Professor Mansfield with a dinner which was held at Browne's Chop House on Thursday evening, May 18th, at which Messrs. Frederick K. James and Caswell A. Mayo, Trustees of the College, were present as guests. Edward A. Wickham officiated as toastmaster.

During the evening an association for promoting interest in extension teaching at the College was formed. The following members were elected officers: Adolph Henning, President; George Oberdorfer, Vice-President; John R. Wall, Treasurer; Edward A. Wickham, Secretary. Professor Mansfield and Messrs. Mayo and James were elected honorary members.

All students who have successfully completed any evening course at the College are invited to become members of the organization. In addition to the guests the following were present: William J. Downer, Adolph Henning, George Oberdorfer, George Nieman, Frank Parker, John R. Wall, Edward A. Wickham, R. B. Robbins and Uriah M. Friedman.

×

On Thursday evening, June 8, at a reception to the medical, dental and pharmaceutical graduates of 1916, of the Medico-Chirurgical College of Philadelphia, held at the Adelphia in Philadelphia, addresses were made by prominent members of the allied sciences. Professor Arny was present as the representative of Pharmacy and choosing as his title "The Three Angles of the Medical Triangle," demonstrated to his hearers how closer affiliation among the three would be of untold benefit not only to them, but to the public as well. The 1916-17 College Announcement is in press and will be ready for distribution by July 15th.

¥.

The "Ph. G." diplomas are now ready and may be had by applying at the College Office.

H

Miss Fannie Hart has completed some very fine plates representing the diagnostic elements of Asclepias Tuberosa and several of its common substitutes. The former will be used in illustrating a paper entitled "Asclepias Tuberosa and Its Substitutes," which has been prepared by Miss Hart for the New York State meeting.

×

On Friday, June 9, Professor Arny attended the weekly meeting of the "Mulford Scientific Staff" held at the Mulford Laboratories in Philadelphia and spoke on the "Importance of Accuracy in Colorimetric Determinations" calling attention to the increasing importance of such tests to pharmaceutical interests in view of the fact that the forthcoming pharmacopoeia recognizes colorimetric tests.

.*

Professor Wimmer has accepted a very flattering offer from Messrs. E. R. Squibb & Co. to visit on their behalf the more important universities and colleges of pharmacy of the United States. He will visit Princeton, Harvard, Yale, the University of Kansas, the University of Michigan, the University of Chicago and many others. If time permits, he will extend his travels to the Pacific coast. Needless to say, such a trip will be of great benefit not only to himself, but also to the College. He started on June 15, and expects to be gone about eight weeks.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

Since it has been our custom to acknowledge each month only the latest additions of duplicates for the reading tables, and there has been some question among the donors as to whether their contributions were being duly received, we append a list of the duplicates regularly supplied:

The Bulletin of Pharmacy; C. U. C. P. Alumni Journal; Drug Topics; La Farmacie Española; Journal of the Society of Chemical Industry; The Mask; Merck's Report; Meyer Brothers' Druggist; Journal of the National Association of Retail Druggists; The National Drug Clerk; The Pharmaceutical Era; The Practical Druggist; The Southern Pharmaceutical Journal, and Tile and Till.

A

The following new books have been put on the Library shelves:

PHARMACY.

The art of dispensing; by Peter Mac-Ewan. Ed. 9. Lond., 1915.

Pharmacopoea fennica: Finska farmakopèn. Ed. 5. Helsingfors, 1914.

Secret remedies . . . based on analyses made for the British Medical Association. London, 1909.

More secret remedies . . . based on analyses made for the British Medical Association. Lond., 1912.

CHEMISTRY.

Analytical chemistry; based on the German text of F. P. Treadwell; tr. and rev. by Hall. Ed. 4. V. 1 (Qualitative analysis). N. Y., 1916.

An introduction to the principles of physical chemistry; by E. W. Washburn. N. Y., 1915.

Dana's manual of mineralogy; rev. and rewr. by Ford. N. Y., 1915.

The metallurgists' and chemists' handbook; comp. by D. M. Liddell. N. Y., 1916.

A method for the identification of pure organic compounds; by S. P. Mulliken. V. 2 N. Y., 1916.

Representative procedures in quantitative chemical analysis: F. A. Gooch, N. Y., 1916.

H

Grateful acknowledgment is due to Mr. P. J. Garvin, Secretary and Treasurer of the Connecticut Pharmaceutical Association, for supplying us with back numbers of the Proceedings. It is one of the cherished hopes of this Library to have, eventually, complete sets on its shelves of the Proceedings of the various pharmaceutical associations.

H

What is the best thing to do in a hurry? Nothing.—Punch.



Conducted by Prof. George C. Diekman.

Theacylon.

Theacylon is a copyrighted name given to a new theobromin preparation, marketed by the firm of E. Merck, Darmstadt. Chemically it is acetyl-salicylotheobromin. The compound is claimed to be a definite chemical combination, and not merely a mechanical mixture, as are most of the other theobromin preparations. It is prepared in accordance with a patented process and possesses the following formula: C₁₆H₁₄O₅N₄. Theacylon is a white, crystalline, odorless powder, sparingly soluble in water, alcohol. ether and diluted acids. Chloroform dissolves it readily.

Heating I gramme of theacylon with 5 mils of water and 1 mil of sodium hydroxide solution, for a prolonged period, causes the liquor to become yellow, with the formation of a white precipitate. A portion of this solution, after neutralizing with diluted sulphuric acid, and adding solution of ferric chloride, will assume a violet color (salicylic acid). If to another portion of the solution, diluted sulphuric acid is added until the liquid reacts acid, further precipitation will be noted, the precipitate appearing white. After filtering, and adding a few drops of sulphuric acid to the filtrate, to make sure that precipitation is complete, the liquid is shaken out with several portion of ether. After the liquids have separated, the aqueous liquid is exactly neutralized with normal potassium hydroxide, v. s. (litmus paper). Diluted solu-

tion of ferric chloride is then added, and after warming, a red-brown coloration is noted, and upon further heating (boiling), a red-brown precipitate is formed, (basic ferric acetate). The white precipitate resulting from boiling theacylon with sodium hydroxide solution, and subsequently neutralization with diluted sulphuric acid, is freed from admixed salicylic acid, by shaking out with ether. The ether insoluble matter, treated with chlorine water, and heated to dryness, upon addition of ammonia, produces a violet coloration (nurexid reaction).

Theacylon melts at 195° C., after preliminary softening. No weighable residue should be found after ignition, 0,1 gramme dissolved in 1 mil of concentrated sulphuric acid, should yield a clear and colorless solution (absence of readily carbonizable substances). If I gramme of theacylon is dissolved in 10 mils of water, with aid of I mil of potassium hydroxide solution, and the solution shaken out with 10 mils of chloroform. the residue obtained after vaporization of the chloroform by means of a waterbath, should not weigh more than 0,022 gramme and should be odorless (absence of caffeine and phenol). If 2 grammes of theacylon be shaken with 20 mils of water, and the mixture filtered, the filtrate must possess a neutral reaction, and must not be colored violet upon addition of ferric chloride (absence of free acids). The addition of hydrochloric acid, of silver nitrate, of barium nitrate, or of ammonium sulphide must not show any reaction. If I gramme of theacylon be mixed with 3 mils of solution of stannous chloride, no reduction should take place within one hour.

Quantitative Determination: 0,5 gramme of theacylon is decomposed in a Kjeldahl flask with 50 mils of concentrated sulphuric acid, containing 10 per of phosphoric anhydride, 0,5 cent. gramme of copper oxide and several crystals of potassium permanganate. Upon cooling the mixture is diluted with water, and after addition of solution of sodium hydroxide, is subjected to distillation. The distillate is collected in 50 mils of 1/5 normal hydrochloric acid, methyl orange being used as indicator. mil of 1/5 normal hydrochloric acid is the equivalent of 0,00005 gramme of the-Theacylon theoretically conobromin. tains 52,60 per cent. of theobromin.

Theacylon is practically tasteless, thus possessing an important advantage over theobromin sodium salicylate, whose saline taste is offensive to many patients. While the latter compound is readily decomposed by action of the gastric juice, theacylon is not acted upon at all. The alkaline intestinal secretions saponify it at once, breaking it up into salicylic acid and theobromin. It does not produce digestive disturbances, as do most of the other theobromin preparations, and can therefore be used almost under any conditions. In the very rare cases where it seems to produce nausea and vomiting, this is no doubt caused by a much diminished secretion of hydrochloric acid. most of such cases the administration of small quantities of hydrochloric acid obviates the difficulty. It may be given in 0,5 gramme doses from 3 to 5 times daily, in form of powder or tablets.

Liquids for Etching on Metals.

The following recipes were published in a recent number of the Bayr. Ind. u. For soft steel: I part of Gerv. Bl. nitric acid and 4 parts of water. For hard steel: 2 parts of nitric acid and I part of acetic acid. For deep etching of both: 10 parts of hydrochloric acid, 2 parts of potassium chlorate and 88 parts of water. For bronze: 100 parts of nitric acid and 5 parts of hydrochloric acid For brass: 16 parts of nitric acid, diluted with 160 parts of water. 6 parts of potassium ehlorate are then dissolved in 100 parts of water, and the solution added to the diluted To protect the parts of metal acid. which are not to be subjected to the etching process, the use of liquid asphalt is recommended.

NEW REMEDIES.

Aivosan. Under this name tablets are marketed, which, according to the maker, contain the following named medicinal substances: Aetherospermin (alkaloid obtained from aetherosperma moschatum), viscum album, natrium formicum, kalium jodatum and acidum lacticum. They are said to be efficient <u>in arterial</u> sclerosis.

Wetol is a remedy said to be efficient in the treatment of minor wounds, cuts, bruises, etc. It contains oil of cloves, oil of eucalyptus, oil of myrrh, oil of turpentine, menthol, thymol, camphor, balsam of peru, linseed oil and cod-liver oil.

Lustosargin is the name given to a colloidal preparation of iodide of mercury. It is a feebly opalescent, pale yellow solution, which is readily decomposed upon addition of acids, while it is

permanent toward alkalies. It also occurs in the form of a powder, which is amorphous, heavy, and faintly yellow in color. It dissolves freely in water, but only slowly. It must be protected from light, and undue changes in temperature. It is used in certain forms of syphilis, in doses of 1 mil, gradually increased to 2 mils, administered 2 or three times weekly, by injection into the gluteal muscles.

Oleum ferricum colloidale, Carlson is the name given to a solution containing 5 per cent. of colloidal iron oxide in oleic acid, containing a small quantity of iron oleate. It is furnished in the form of a reddish-brown, clear oily liquid, which is miscible in all proportions with cod-liver oil, and other fixed oils, forming clear solutions, which are permanent The oleic acid used in its in nature. manufacture is obtained from expressed oil of almond. The preparation is very useful in the extemporaneous manufacture of an iron containing cod liver oil. As the preparation contains a definite quantity of iron, the iron content of oils is readily controlled.

Kratalgin. This is the name given to a preparation used in place of algoeratin which is a mixture of caffein, phenacetin and pyramidon together with phenylamido-xanthin. The latter however does not form one of the constitutes of kratalgin.

Anti-Diarrhocin. This is the name given to tablets containing salicylate and tannate of bismuth.

Polygalysat, formerly known as senegalysat, is a dialysate or diffusate of senega root. It is given in doses of 10 to 12 drops, every two or three hours, in place of the infusion. *Ergopan* is a preparation containing amino bodies and a number of the active constituents of ergot.

Anti-Influenzol is the name given to tablets, each of which contains 0.5 gramme of acetyl-salicylic acid.

APPLIED SCIENCE.

A

It does not seem unwarrantable to suspect that Mr. Stephen Leacock, who contributed the following to the London *Ourlook*, has learned in suffering what he teaches in boarding-house geometry. Here are some of Mr. Leacock's definitions and axioms :

1. All boarding-houses are the same boarding-houses.

2. Boarders in the same boarding-house and on the same flat are equal to one another.

3. A single room is that which has no parts and no magnitude.

4. The landlady of a boarding-house is a parallelogram; an oblong, angular figure which cannot be described, but is equal to anything.

5. All the other rooms being taken, a single room is said to be a double room.

Among postulates and propositions the following are worthy of consideration:

1. A pie may be produced any number of times.

2. The landlady may be reduced to her lowest terms by a series of propositions.

3. A bee-line may be made from one boarding-house to another.

4. The clothes of a boarding-house bed, although produced ever so far both ways, will not meet.

5. Any two meals at a boarding-house are together less than one square meal.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian. Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Iron Balls.—I. G., New York, had a call for this product and states that the customer brought a sample, which consisted of a little black "bolus" to which is attached a loop of string. This is undoubtedly *boule de mars*, a form of iron and potassium tartrate formarly enjoying great vogue in France as a tonic. The lump was suspended in a glass of wine and each time it was so immersed a small amount of the iron salt dissolved in the wine.

"Hiperchloruro de Hierro."—I. G., New York, has had a call for this substance from a Spanish customer who uses it in nose bleed. While the Spanish Pharmacopoeia calls ferric chloride "perchloruro de hierro" we believe that was what was wanted. "Hipochlorito de hierro" would be a hypochlorite or iron, which, of course, is out of the question.

Cnicin.—T. R. B., New York. According to the Real-Enzyklopædie der Gesamten Pharmazie (4-1905-28) Cnicin is a bitter principle extracted from the blessed thistle (Cnicus Benedictus) by Scribe. This investigator ascribed to it the formula $C_{42}H_{56}O_{15}$. Later investigators claim that it is a glucoside hydrolyzing to sugar, a phenol-like substance and a volatile aldehyde.

Queen of the Meadow.—R. F., New York, this is a well-known synonym for stillingia.

Wright's Reagent.—L. F., New York. According to Merck's Reagenzien Verzeichniss, this diagnostic fluid is made as follows:

Solution A.

Methylene blue2 grammesWater200 milsTenth normal sodium10 mils

Boil the mixture for 15 minutes making up the water lost by evaporation. Then cool and add

Tenth normal		
Sulphuric Acid	IO	mils
Solution B.		
Eosin	Ι	gramme
Water	1000	mils

Make a solution.

To make Wright's solution, mix I mil of Solution A with 6 mils of Solution B.

Composition of Proprietary The Preparations .- A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

A Batch of Prescription Queries.—J. G., New York. Evidently appreciates our information bureau, for he has forwarded to us for criticism a batch of prescriptions that fairly swamp us. We shall, however, dispose of them to the best of our ability.

Antipyrine	,	I ½	grains
Citrated c	affeine	$\frac{I}{2}$	grain
Make a powde	er. Of	such d	loses, 6.

Ι.

He reports that a moist mass resulted, but that he remedied the situation by using caffeine alkaloid, both with and without sugar of milk. He wishes to know whether the addition of sugar of

milk is advisable.

The incompatibility of antipyrine with citrated caffeine is mentioned in Ruddiman's classic work on incompatibilities and the remedy used by J. G., the employment of one-half the quantity of the alkaloid is correct. We would add an equal amount of sugar of milk to make the powder have the prescribed weight. And, lastly, we would notify the prescriber of the manipulation employed, with reasons for the modification.

II.

B Pulv. Zinci Borat. 5iv Signa: Teaspoonful to a douche.

As the prescriber was not a resident of New York and as J. G. could find no recipe for such a preparation he dispensed boric acid containing 5 per cent. of zinc sulphate.

We likewise fail to find a specific powder under the name mentioned. "Taking a chance," not so much of a chance as did J. G., we suggest that the physician had in mind Soluble Antiseptic Powder, N. F., which contains 86.6 per cent. of boric acid, 12.5 per cent. of zinc sulphate, as well as small amount of salicylic acid, phenol, menthol and thymol.

III.

Ferric valerate

Zinc valerate

Quinine valerate of each 20 grainsPhosphorus2 grains

Mass and divide into 30 pills.

Directions: 1 pill three times a day after meals.

This J. G. dispensed by mixing the valerates with 30 minims of a spirit of phosphorus that was labeled as containing 0.0012 gramme of phosphorus to each mil (cc.).

We fear our friend was a bit wobbly in his arithmetic. If his statements given above are correct, 30 minims (or 2 mils) of his phosphorus solution contained 0.0024 gramme or 2.4 milligrammes of phosphorus. The amount directed in the prescription (2 grains) is about 120 milligrammes; hence he dispensed only one-fiftieth the amount of phosphorus directed. But has he copied the prescription correctly? One-fiftieth of a grain (4 milligrammes) of phosphorus strikes us as a rather stiff dose. In fact the maximum dose is given in the German Pharmacopoeia as I milligramme.

As to the compounding of the prescription, we would proceed as directed in the Pharmacopoeia for making pills of phosphorus. That is, we would mix the valerates with acacia and althaea and would add to the mixed powder a chloroformic solution of phosphorus, massing with glycerin and water. Lastly, the pills should be coated with an ethereal solution of balsam of tolu, as directed in making the official pills of phosphorus.

IV.

Gobbett's Solution 100 cc. Use as directed externally.

This, according to our querist, was a blue fluid containing some corrosive acid used, he states, for venereal ulcers.

Our search of the literature fails to show any preparation bearing the name Gobbett. We wonder if J. G. has not wrongly read the original prescription; whether it does not call for Villate's solution; Astringent and Escharotic Mixture of the National Formulary.

V.

5 grains

Make 50 such pills.

Ichthyol

Our querist tried to mass this chemical by using light magnesium oxide as an absorbent powder, but found that this expedient produced huge pills. This problem can best be answered by citing what The Art of Dispensing has to say on the subject: "Sodium ichthyolate is preferable for pills, as that salt is much thicker than the ammonium one. The best pill of all is made with magnesium ichthyolate. This salt can be made by heating together 120 grams of ammonium ichthyolate and 15 grains of freshly burnt magnesia (made into a paste with 2 drams of water). Use the heat of a water bath. A light chocolate-

colored powdery mass is obtained, which only requires a little water to make into a suitable pill mass. Two grains of magnesium salt equal 3 grains of ammonium ichthyolate.

VI.

Tincture of aconite 8	3	minims
Tincture of ferric chloride 1		drachm
Spirit of nitrous ether 1 ¹ / ₂	,	drachms
Solution of ammonium		
acetate 2	2	drachms
Glycerin 2	2	drachms
Water enough to make a	2	ounces
Make a solution.		

Directions: Teaspoonful every hour.

Despite several methods of manipulation J. G. always obtained an unsightly mixture containing a precipitate of ferric hydroxide. He therefore wishes to know how to obviate the difficulty.

Compounding this prescription ourselves we found that when a strictly U. S. P. solution of ammonium acetate was employed, that is, a solution that was acid in reaction, a handsome red liquor was obtained. In fact the blending of the tincture of iron with the ammonium acetate solution suggests the similar blend occurring in Basham's mixture even though the proportion of the tincture to the solution is different than it is in the official preparation. So our advice is simply: Be sure that your solution of ammonium acetate is distinctly acid.

VII.

Potassium iodide	15.0
Codeine sulphate	0.6
Syrup of orange peel	45.0
Distilled water, enough to	
make _	120.0

Directions: Teaspoonful three times a day, one hour after meals.

In compounding this J. G. dissolved the alkaloidal salt and the potassium iodide in separate portions of water and then mixed the two solutions and finally added the syrup. A flocculent precipitate occurred, which he was advised by an older druggist to filter off. "Nothing but potassium sulphate." J. G., however, doubts the advice just given and turns Experiments show us that the to us. precipitate is codeine hydriodide, this salt of codeine being much less soluble than is the sulphate. The addition of either sulphuric or phosphoric acid failed to redissolve the precipitate, but we found that the addition of 30 mils (c.c) of alcohol in place of the same amount of water resulted in the complete redissolving of the precipitate.

Of course, so radical a change in the character of the prescription, the making of a preparation containing almost 25 per cent. alcohol, should not be done without first consulting the prescriber.

Rongalite.—M. D., New York.—This is a patented compound of formaldehyde with sodium hydrosulphate, $Na_2S_2O_4$. It is supposedly formaldehyde sulphoxylate.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted.



MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING JUNE 14th, 1916.

Meeting called to order at 9.05 P. M., President Hostmann in the chair.

Present: J. Hostmann, '96; A. J. Bauer, '03; George Hohmann, '08; L. N. Brown, '14; M. H. Weil, '10; H. H. Schaefer, '12; V. M. Orifice, '15; N. A. Smedira, '15; H. Lubman, '16; B. G. Jonas, '16.

The Secretary being absent, the President appointed Dr. Hohmann secretary pro-tempore.

The minutes of the May meeting were adopted as printed in the C. U. C. P. ALUMNI JOURNAL.

The Treasurer was not present, but the following report was read:

REPORT OF TREASURER For Month Ending June 14, 1916.

RESERVE Balance on hand, ACCT. April 12, 1916\$1,055.13	GENERAL ACCT. \$31,53
Receipts:From Dues:C. D. Hakes, life member- shipP. GuerrierriLeo RoonFrom 46 members, Class of 1916	$2.00 \\ 4.00 \\ 92.00$
Disbursements:	\$129.53
Lewis N. Brown, Chairman Alumni Day Com	25,00
Balance on hand, June 14, 1916\$1,070.13 W. S. S. B\$1,065.13 E. I. S. B 5.00 \$1,070.13 Lincoln Trust Co.	\$104.53
\$1,174.66 \$1,174.66	

This report was referred to the Auditing Committee. The Registrar being absent, no report was received.

The following reports were received from Dr. Diekman as chairman of the respective committees:

New York, June 13, 1916.

To the Officers and Members of the Alumni Association of the College of Pharmacy of the City of New York.

GENTLEMEN:

The Committee on Senior Honor Roll Diplomas, appointed by the President of the Alumni Association to take up this matter with the Board of Trustees of the College, desires to report as follows:

The matter in question was taken up and fully discussed in all its phases, on occasion of a meeting of the Faculty held on Friday, May 26th. Many plans to accomplish the desired result were submitted and given careful consideration.

It was finally decided to recommend to the Board of Trustees of the College that a minimum of 85 per cent. average of all subjects be made the basis for obtaining a position on the Senior Roll of Honor, and that all students who met this requirement be declared eligible to receive these honors.

All such as are entitled to this distinction shall also have this fact designated on the face of the diploma given them, in some suitable manner, such as the affixing a gold seal, together with the proper inscription.

An exception is recommended to be made in case of the 1916 Senior Honor Roll, which shall remain in force as compiled, without reference to the minimum per cent. requirement.

These recommendations of the Faculty were approved by the Board of Trustees on occasion of a meeting held on Tuesday, June 6, 1916. The action thus taken has accomplished the object for which this committee has been appointed.

Respectfully submitted.

(Signed) GEO. C. DIEKMAN.

New York, June 13, 1916.

To the Officers and Members of the Alumni Association of the College of

Pharmacy of the City of New York. Gentlemen:

The Committee on "Honor Roll" of the Senior and Junior College Classes for 1916, presents its report as follows:

SENIORS.

Posi	tion Name	Medal	Points
1.	Truman A. Linck	Gold	1136
2.	Harold S. Ball	Silver	1080
3.	William J. McBride	Bronze	1075
4.	Louis Fryer		1054
5.	Estella J. Baddour		1053
6.	Harman S. Klein		1046
7.	Milton W. Saxon		1040
8.	Joseph F. Paulonis		1035
9.	Julius Schatz		1033
10.	Achille Granatelli		1028
11.	Isidore Friedman		1016
12.	Conrad P. Klingele		1014
	William A. McBride.		

JUNIORS.

Posi	tion Name	Points
1.	Ira Isaac Schwarz	.1176
2.	John Varga	.1155
3.	Saul Goldfarb	1152
4.	Anthony Chirico	.1148
5.	David E. Kadushin	.1147
6.	Louis Tulchin	.1147
7.	Solomon Bartner	.1145
8.	Ignatius Allo	.1142
9.	Leonard Steiger	.1141
10.	John F. Streit	.1138
11.	Charles M. Russel	.1136
12.	James G. Blaso	.1136
13.	Beatrice I. Raggie	*1046
	(* Out of possible 1200.)	

Awards: 1, Balance; 2, Arny's Principles of Pharmacy; 3, Culbreth's Materia Medica.

Senior points possible, 1200.

Junior points possible, 1300.

Respectfully submitted,

(Signed) GEO. C. DIEKMAN, C. W. BALLARD.

Both reports were ordered placed on file and the committees were discharged with thanks.

Dr. Brown as Chairman of the Junior Day Committee presented the following report:

June 14th, 1916.

New York College of Pharmacy.

Mr. President:

Alumni Association.

The Entertainment Committee for Junior Night, May 10, 1916, begs to report as follows:

Received	from	President Hostmann\$25.00
6 6	""	L. N. Brown 2.20

Expenditures:

Music \$9.00
John Goetz 5.00
Mrs. Goetz 5.00
Engineer 3.00
Post Cards 2.00
Ribbon 1.00
A. Iimmerman (crepe paper, etc.) 2.20
Respectfully submitted,

(Signed) L. N. BROWN, Chairman.

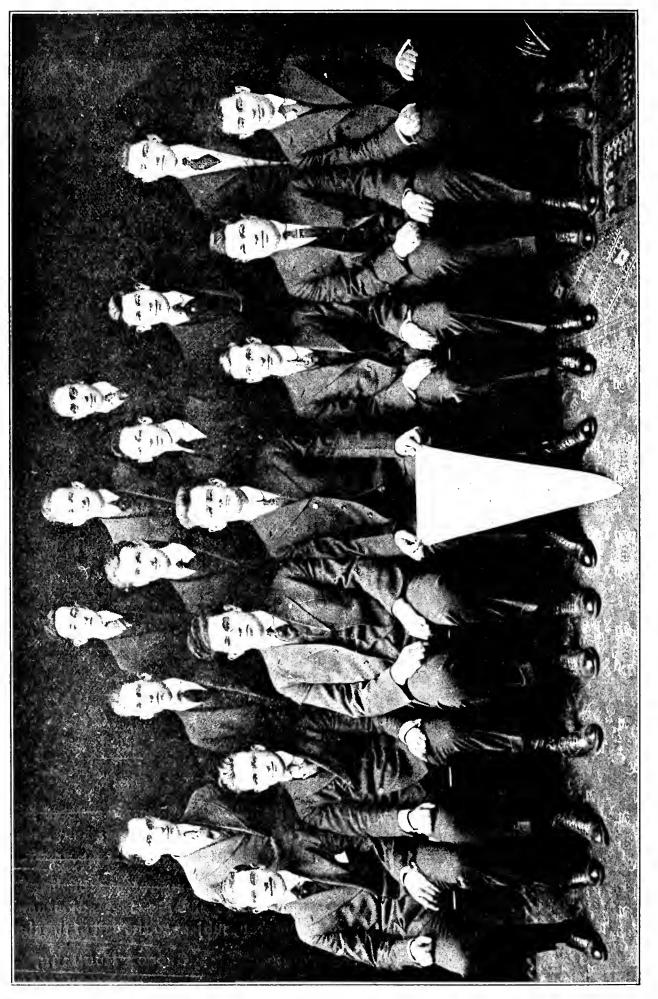
The report was ordered placed on file, the bills were ordered paid and the committee was discharged with thanks.

The following applicants of the Class were elected to membership: P. Axelbank, M. Becker, J. H. Cummings, Miss Rose Dispenza, R. A. Frank, L. Fryer, L. Galgano, S. J. Gerson, J. Iglitzin, B. G. Jonas, J. Kopp, W. J. McBride, M. Maislish, Miss R. Nadel; J. C. Prote, Jr., J. Robins, S. A. Rubinfeld, W. Sarlo, J. Simon, A. Steinhardt.

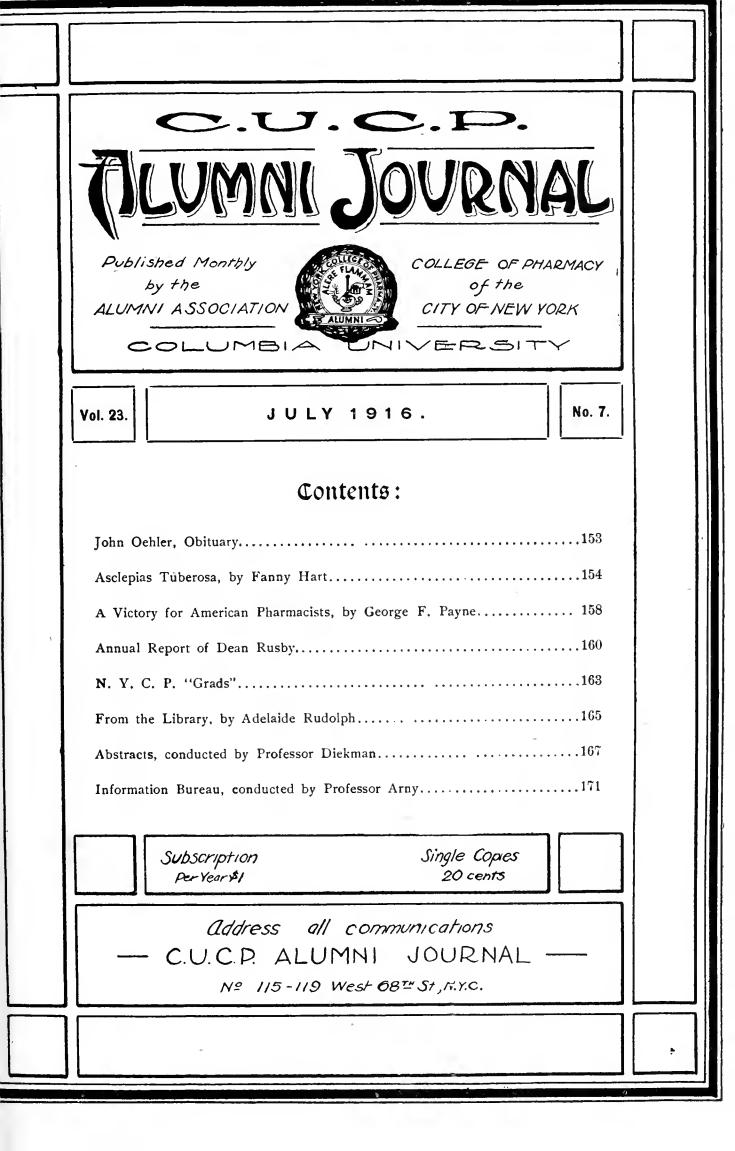
The following bills were ordered paid: Frederick A. Leslie, \$55.33; Schwebke & Knerr, \$5.50; Schwebke & Knerr, \$7.25.

There being no further business to come before the meeting, adjournment was taken, subject to the call of the chair.

> George Hohmann, Secretary, pro tem.



ALPHA CHAPTER, TAU EPSILON FRATERNITY 1916.



Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Women,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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JULY 1916.

Number 7.



JOHN OEHLER

John Oehler is dead! With what regret do these four words come to the thousands of graduates of the College who during the past thirtysix years have been his pupils and friends!

It is difficult to imagine the lecture hall without his kindly presence. The friendly face, the red carnation, the exquisite blackboard demonstrations and, above all, the deliberate, painstaking, lucid explanations of chemical problems will be sadly missed by the students of the coming year and by those of us who had the privilege of daily contact with him.

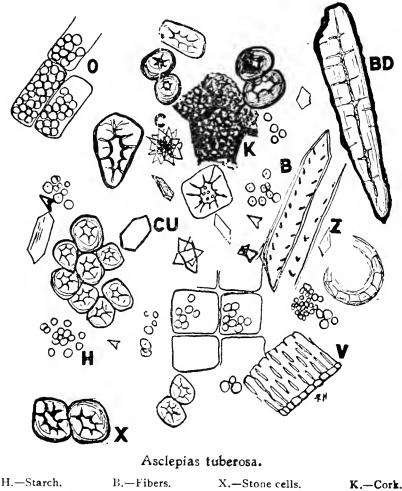
A truly good man has gone to his rest and to his reward and we who remain sorrowing, at least can be glad in the realization of the fact that we are better for having known him.

Peace to you dear friend! And consolation to the family you have left behind!

ASCLEPIAS TUBEROSA AND TWO OF ITS SUBSTITUTES*

FANNY HART, N. Y. C. P.,'10.

Asclepias tuberosa, commonly known as pleurisy root, occurs in large-knotted, transverse and longitudinal pieces 75 to 200 millimeters long and 25 to 50 millimeters thick, with stems and many small, fine rootlets adhering to the root. The color varies from gray to light pink; the younger pieces are yellow. Short,



 H.-Starch,
 B.-Fibers,
 A.-Stone cells,
 K.-Cork,

 C -Rosette Crystal,
 V.-Vessels,
 O.-Parenghyma,

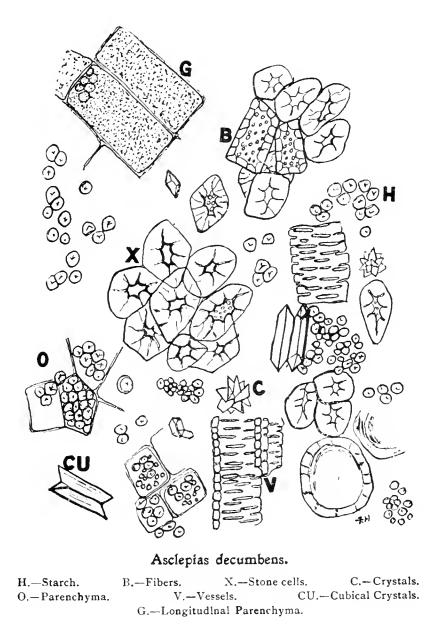
 CU.-Cubical Crystals,
 BD.-Bast Fiber,
 Z.-Fragment of crystal.

longitudinal striae give the older portions a scaly appearance, the younger portions have deeper and longer striae. The transverse striations are fewer, but very marked in the younger roots. Internally, the root is pinkish-white and marked with many longitudinal striae.

The fracture of the dried root is tough and uneven presenting a granular appearance. Asclepias tuberosa is practically odorless, but has a pleasant, bitter taste, similar to licorice. Its most common substitutes are Asclepias syriaca and Asclepias decumbens. Asclepias

^{*}Read at the Annual Meeting of the N. Y. S. P. A., 1916.

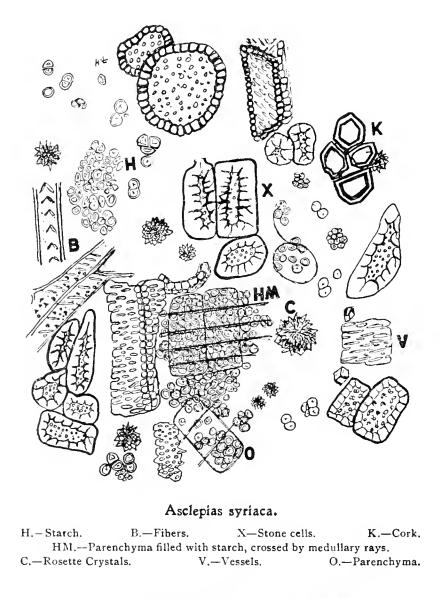
syriaca is known as milkweed or silkweed. Its younger roots occur in small pieces 25 to 40 millimeters long and 7 to 14 millimeters wide. The older roots are cut in transverse pieces 6 to 18 millimeters in thickness. The general appearance is almost smooth; of a light buff to a slightly pinkish color. The older portions are marked with very fine, longitudinal striae, which are less numerous in the younger fragments. The transverse sections are marked with concentric depressed layers and radiating woody tissue. The bark separates



easily from the wood. The root is easily broken, and shows a clean but uneven fracture. Asclepias syriaca has a pleasant odor and sweetish taste.

Asclepias decumbens, or butterflyweed, occurs in large pieces 100 to 175 millimeters in length and 25 to 50 millimeters in width, also seen in transverse sections. The color of Asclepias decumbens is a dirty yellow to brown. The general appearance is shriveled, due to very deep longitudinal striations and

numerous cross striations. The bark splits from the center, exposing the woody tissue which separates radially, leaving pieces of shrunken tissue. The root breaks with a very uneven and ragged fracture. It has no odor, but has a slightly bitter taste.



Most Apparent Historical Differences.

In a microscopical examination of a powdered sample of Asclepias tuberosa, the most numerous elements are the stone cells, varying in size from .o6 to .25 millimeter in length and from .o9 to .12 millimeter in width. They are almost circular, with very thick walls and small empty cavities, circularly striated, of light yellow color, and have small pores. They occur most frequently in pairs, but are also seen in masses.

Next in prominence are the large, yellow bast fibers, as much as 2.40 millimeters in length and .25 millimeter in width, very finely striated and porous, with a small central cavity. The walls are rough and very thick, giving the appearance of a dark outline surrounding

the fiber. Cubical crystals and fragments of the latter are seen in abundance; also reddish-brown fragments of cork tissue and resin masses are distributed throughout the field. Many vessels are present.

The most important differences in Asclepias syriaca are the stone cells which are pale to light yellow in color. They are deeply pitted and non-striated .15 to .48 millimeter in length and .06 to .15 millimeter in width.

Rosette crystals are next in promi-

nence and vary in size from .06 to .20 millimeter. Wood fibers and other elements similar to Asclepias tuberosa are also seen.

The stone cells in Asclepias decumbens are almost triangular. The majority are .25 millimeter long and .25 millimeter wide with much thicker walls than asclepias syriaca with smaller cavities, non-pitted but striated. The starch is larger and more abundant. Many cubical crystals, but few rosettes are present. Other elements are similar to Asclepias tuberosa and Asclepias syriaca.

Comparison of Histological Characters.

	A. TUBEROSA	A. SYRIACA	A. DECUMBENS
Size of Stone Cells	Length .06 to .25 mm. Width .09 to .12 mm.	.15 to .48 mm. .06 to .15 mm.	.25 mm. .25 mm.
Character of Stone Cells	Porous and pitted, few non-striated	Porous and non-pitted Few pitted non-striated	Non-pitted and striated
Size of Starch	.015 to .025 mm.	.025 to .035 mm.	.025 to .06 mm.
Occurrence	Small masses	Small masses 2 to 3 compound	Few 2 to 3 compound and abundant masses
Crystals	Many cubical, few rosettes	Many rosettes and few cubical	Cubical and rosettes Even amount
Fibers	Large, yellow, porous and striated fibers	Many wood fibers	Few fibers

Comparison of Gross Characters.

	A. TUBEROSA	A. SYRIACA	A. DECUMBENS
Occurrence	Large knotted pieces	Small fragment and transverse sections	Large pieces and transverse sections
Color of Surface	Gray-light pink	Light buff to pink	Dirty yellow to brown
Appearence of Outer Surface	Scaly	Smooth	Shriveled
Fracture	Uneven, tough and grenular	Uneven, clean and smooth	Uneven and ragged
Odor	None	Plersant	None
Taste	Pleasant Bitter	Sweetish	Slightly Bitter

A VICTORY FOR AMERICAN PHARMACISTS.

By GEO. F. PAYNE, N. Y. C. P. '76.

Dr. Payne has ever been an earnest and active organization worker. For twenty-six years he has been fighting the fight that has now resulted in greatly improved conditions for pharmacists in the government service.

The pharmacists of the United States and the pharmaceutical press which have worked so faithfully since 1894 for the better recognition of pharmacy in the United States Government Service, along modern lines, are now able to congratulate themselves upon the very signal success of their recent campaign of education in behalf of the pharmacists of the United States Army.

A very large number of pharmacists inevery state in the Union have given much valuable time and have written many letters in behalf of this important work, and every one of them will realize with a thrill that feeling of work well done, when they learn that House Bill No. 12766 has passed both the House and Senate and has been signed by the President and that pharmacists in the three branches of the United States Government Service, the Army, Navy and Public Health Service, who barely outranked the negro cook in 1894 when they began this work, are now warrant officers in the Army and Public Health Service and commissioned officers in the This bill is now a law. It was Navy. submitted to Congress by Representative James Hay of Virginia, Chairman of the House Committee on Military Affairs and to the Senate by Senator George E. Chamberlain of Oregon, Chairman of the Senate Committee on Military Affairs. The act incorporates what we asked in the Hughes-Bacon Bill and which was pushed so energetically by us all at the last session of Congress. Our work has ripened into excellent results.

This Act changes the name of "Hospital Corps" into that of the "Medical Corps of the United States Army." There will be higher rank and better pay. There will be two additional higher grades and rank above the present one of Sergeants First Class. While the act, does not give commission to the pharmacists of the army, it does give to the highest grade practically the rank of warrant officers, which is next to that of commissions.

The act contains the following provisions:

1st. The Hospital Corps will become a part of the Medical Department.

2nd. There will be a new rank of "Master Hospital Sergeants" with \$75.00 a month and the allowances for food and clothes of Master Engineers, Senior Grade. They shall be appointed by the Secretary of War after a satisfactory examination in PHARMACY by a board of one or more medical officers under regulations prescribed by the Secretary of War, and with at least one year's competent service as a Sergeant First Class, and no person shall be designated for such examination except by authority of the Surgeon General.

3rd. There will be a new rank of "Hospital Sergeants" with \$65.00 a month and the allowances for food and clothing of Master Engineers, Junior Grade.

4th. The present Sergeants First Class will have \$50.00 a month and the same allowances as Sergeants First Class Corps of Engineers.

5th. Sergeants \$36.00, Corporals \$24.00 and Cooks \$30.00 will have the pay and allowances of like grades in the Corps of Engineers.

6th. Original enlistments for the Medical Department shall be made in the grade of Privates, \$15.00 and allowances, Private First Class \$18.00 and allowances. They shall be eligible for additional pay as follows: As dispensary assistant, \$2.00 a month; as nurse, \$3.00 a month; as surgical assistant, \$5.00 a month.

7th. The total percentage of all enlisted men in the Medical Department shall not exceed 5 per cent. of the total enlisted army and the grades shall not exceed:

8th. Master Hospital Sergeants, $\frac{1}{2}$ of I per cent. of the above 5%; Hospital Sergeants, $\frac{1}{2}$ of I per cent. of the above 5%; Sergeants First Class, 7 per cent. of the above 5%; Sergeants, II per cent. of the above 5%; Corporals, 5 per cent. of the above 5%; Cooks, 6 per cent. of the above 5%.

The peace basis is 175,000 enlisted men. Not counting certain units, this will be about: 43 Master Hospital Sergeants, 1162 Sergeants, 43 Hospital Sergeants, 437 Corporals, 612 Sergeants First Class, 525 Cooks, in this enlargement of the army to 175,000 there will be 86 of the two new ranks, or more, if the army shall be larger. The present United States Army is now being organized under this act, and if put on a war basis for service in Mexico it will be much larger.

It will give a good proportion of the present Sergeants First Class a substantial advance to the two higher ranks and the present Sergeants will have the Sergeants' First Class positions which are vacated. There will be improvement in every direction.

The conditions which have been a disgrace to pharmacy are now wonderfully bettered all along the line by the earnest work of thousands of American pharmacists in educating Congress and the public. Many of these pharmacists are not members of any pharmaceutical organization. This work shows what pulling together can do. Our Association needs you and we offer you a cordial invitation to become one of us, we need your ability and courage and you need our organization that your brains and energy may be more fully recognized as they deserve in the further work for the advancement of American pharmacy. Those Association members who have worked practically unanimously in behalf of this good cause, and have kept at it so persistently and so undiscouragedly under many adverse circumstances have been a splendid nucleus around which all could rally. Practically every officer down to the quietest member has been ever ready to help in this good work. To them all "we take off our hat."

This is not the work of one man nor of a dozen men, but the work of us all pulling together as men should to win. and our fellow members must feel more strongly united then, as they fully comprehend how much they have accomplished by sticking together and working toward better conditions.



ANNUAL REPORT OF DEAN RUSBY.

Dr. Nicholas Murray Butler, President.

Sir:

I have the honor to submit below my report for the academic year 1915-16.

The most important educational events of the year in pharmacy are the continued discussion of correct and expedient entrance requirements and the entrance of secondary public schools into the field of professional pharmacy edu-The Board of Education of cation. Detroit, Michigan, has established a high school course in pharmacy, to occupy the last two years of their four-year The arguments advanced in course. support of this action are that by the steadily extending requirement of high school graduation as an entrance requirement to American pharmacy schools, the number of matriculants is being so reduced as to result in a very inadequate supply of drug clerks. In other words, it is held that to make pharmacy a University department will defeat its object, and that if it is not to be a University course, the high school is the proper place for it. The conclusive argument against the propriety of such a procedure is that it involves a misappropriation of public funds, in that the object and purpose of such expenditure is the individual, rather than the public wel-This situation is likely to prove fare.

a potent factor in the discussion of entrance requirements that will occur at the annual meeting of the American Conference of Pharmaceutical Faculties, to be held at Philadelphia, in September. In the meantime, the Education Department of this State, acting upon an unanimous recommendation of the State Pharmacy Council, has established an entrance requirement of two years of high school work, in place of the present one year, to take effect in 1918. It is with great satisfaction that we contemplate the policy of our own school, in providing an excellent training for the ordinary pharmacy clerk, in the form of a two-year course based upon moderate entrance requirements, and also a University course, second to no other, for those who aspire to the higher ranks of the profession and who are willing to pay the price in preliminary and professional training. We thus find that, although our attendance of the past year in the former class has exceeded all previous records, yet the ratio of University to College students shows a still greater rate of increase. But a few years since, our University class was inaugurated with two students; now they number more than fifty.

More important than the increase in numbers has been the development of a new spirit among our University students during the past year. A definite and strong organization for mutual en-

couragement and assistance has been formed, combining the membership of all of the classes in that department. The effect upon scholarship has been conspicuous. Taken as a whole, the final averages have been decidedly higher than for any previous year, and they exhibit that superiority over those of the College classes, which should be expected of students so much better prepared, but which heretofore has been somewhat deficient.

With the coming session, a number of students will enter upon the fourth year of study and we shall graduate the first baccalaureates in the history of this The Plaut Fellowship, providschool. ing \$750 for a year's study abroad, is proving no small incentive to membership in this class, as well as to competitive the effort, while Seabury Scholarship is proving similarly stimulating to the members of the third year class.

Beginning with the coming session our College classes are to be known respectively as "First" and "Second" year, while those of the University department will bear the usual college designations.

I have also to report a steady increase in the attendance of women, which has been particularly noticeable during the past year, as has been a general improvement in their scholarship.. The real or supposed evils of co-education, of which we have heard so much, are here conspicuously absent. The general influence of the presence of women in the classes makes for respectful and courteous behavior, in spite of occasional exceptions to the rule.

The gradual increase in requirements for our University students, especially as to admission, that has been in progress for some years, has now culminated in a permanent arrangement. Those seeking only the degree of Ph. Ch. and who do not intend to study medicine, are admitted upon 60 counts, which may be secured at any Regents' examination. Those seeking the baccalaureate degree, or who intend to enter our Medical School, must meet the full entrance requirements of Columbia College. For the last named purpose they must also secure credit for first and second year College English, as well as for courses A and B in French or German. The pharmaceutical knowledge gained through such a course of study is of peculiar advantage to both the student and the practitioner of medicine.

The establishment of a course in Accounting, consisting of full courses of lectures and practical work, is an important event in our development. Peculiar difficulties were encountered in accomplishing this result. Owing to a combination of causes and conditions, the proposition met with strong and energetic opposition from the students, and considerable firmness, as well as tact, was required to meet the situation. The result has proved most satisfactory. The students have come to a just appraisal of the practical value of this training and it is expected that in the future this course will prove highly attractive.

Serious doubts have arisen in the minds of members of our faculty as to the propriety and desirability of having officers of instruction actively engaged in the exercises of student fraternities,

and the question of forbidding such activity has been seriously considered.

An event of far-reaching importance in our educational history is the organization of systematic courses of evening instruction, connected with the University work in Extension Teaching, During the past two years, a single evening has been devoted to such work, that of the different departments proceeding synchronously, so that students were enabled to elect the work of but a single department. Hereafter the work of each department will occupy a different evening, so that it is possible for a very comprehensive course of instruction to be pursued.

Our policy of providing supplementary examinations in September, at which students who have failed at the spring examinations may make a fresh endeavor, after having had the benefit of special summer instruction, is proving increasingly effective. It frequently happens that excellent results are obtained in the fall by those who were markedly deficient in the preceding spring. This method works particularly well in improving the standing of those who are passing from a lower to a higher class.

An important undertaking has been set on foot by the Board of Trustees in an attempt to secure a fund, by subscription, the income to be devoted to the maintenance of an experimental drug farm, in co-operation with the New York Botanical Garden. The objects of such a farm are two-fold: first, to afford instruction to our students; second, to secure trustworthy data as to the methods of successfully producing drugs under

cultivation. The necessity for such a drug supply is steadily increasing. Private attempts, in the absence of experimental data, are certain to lead to much loss and many disappointments, and it is believed to be a public duty on the part of such an institution as ours to determine the necessary facts. Suitable arrangements have been made with the Botanical Garden, and all that is required is a fund of between \$10,000 and \$20,000 to provide the necessary labor for the experimental work. Six thousand dollars has already been secured, and we are not without hope that our object may be attained before the opening of another spring.

A rather important change has been made in the formation of the Honor Roll of the graduating class. Heretofore this roll has consisted of the thirteen students securing the highest marks at their final examination, without regard to their grade of scholarship. Hereafter this roll will contain the names of all students who secure a general average of 85 per cent. or more. Such students will have affixed to their diplomas, in addition to the regular seal of the College, a special gold seal suitably inscribed.

In the still rather new field of pharmacognosy, this school is rapidly attaining a position of recognized authority. Three of our officers of instruction occupy important salaried positions as experts in the examination of drugs and the school is coming to be recognized as a sort of national clearing house for information in this line of work.

The Bureau of Information, established last year in connection with our

Library, is also rapidly assuming a position of authority and usefulness. Through the reorganization of our Alumni Journal, appropriate information from this source is being given to the public, which adds greatly to the usefulness of the Bureau.

Important improvements in the equipment of the institution have been made during the past year or are now in process of inauguration. The most important of these are a large increase in our supply of microscopes, and the installation of first class steel lockers for the property of the students, similar to those in use in other buildings of the University.

It is with a peculiar sense of sorrow that we have to record the death. in December last, of our talented and faithful Professor of Analytical Chemistry, Dr. Anton Vorisek. Dr. Vorisek, like so many of our eminent men, came to this country as a poor immigrant and built up his fortunes by his own unaided efforts. He served the country faithfully and well as a pharmacist in the navy during the Spanish War and was soon after appointed to a subordinate position in our pharmacy department, from which he steadily rose to the position of Professor of Analytical Chemistry and Director of the Chemical Laboratory. His death has necessitated a number of important changes in that department.

June 28, 1916

H. H. RUSBY, Dean.

N Y. C. P. "Grads." Active in Association Work.

Richard A. Austin, N. Y. C. P. '89, of Cairo, was elected 1st vice-president while Joseph Weinstein, N. Y. C. P. 'o6, of New York, and Orrin Bigelow, N. Y, C. P. '13, of Richfield Springs, were elected second and third vice-president respectively at the 1916 meeting of the New York State Pharmaceutical Association.

The following are some of the N. Y. C. P. boys who were elected to office by The New Jersey Pharmaceutical Association at its meeting held at Long Branch. June 20th-24th: Garrett Byrnes, '98, President; John G. Block, '96, Trustee; Jeannot Hostmann, '96, Secretary; Harry W. Crooks, '94, Trustee, and Charles W. Holzhauer, '06, Trustee.

A. B. Hoover, N. Y. C. P., '01, is now representing the E. C. McKallor Drug Co., of Binghampton, N. Y. Mr. Hoover was in attendance upon the recent meeting of the State Pharmaceutical Association, at Richfield Springs, and wishes to be remembered to all of his friends and classmates.

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E. O. Chapman, N. Y. C. P., '94, is conducting a successful business at Richfield Springs, N. Y. He was very active as a member of the local committee in assisting in entertaining the visiting pharmacists on occasion of the recent meeting of the State Association.

I. A. Solomons, Jr., N. Y. C. P., '13 and a member of the firm of Solomons Company, which company is en-

.*

gaged both in the retail and wholesale business in the City of Savannah, Ga., has been elected first vice president of the Georgia Pharmaceutical Association.

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Charles B. Sears, N. Y. C. P., '88, of Auburn, has been appointed a member of the New York State Board of Pharmacy, succeeding the late President Wayne B. Bissell.

William M. Jaffe, N. Y. C. P., '15, has purchased from Joseph I. Kassel the pharmacy situated at 35 Hamburgh Ave., Paterson, N. J.

J.

We wish to extend to J. J. Rampulla, N. Y. C. P., '16, our deepest condolences. We are informed that he recently was bereaved by the death of his mother.

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We were recently honored with a visit by Albert A. Muench N. Y. C. P., '12, Phar. D., '13, accompanied by Mrs'. Muench, nee Nancy Martinez Guilfoil of Syracuse. The happy couple were on their honeymoon. The wedding took place June 14th, 1916.

H

A. J. Beck, N. Y. C. P., '05, accompanied by Mrs. Beck, paid a visit to the College recently. Mr. Beck is the proprietor of a thoroughly modern pharmacy at Fort Lauderdale, Fla. He will be glad to hear from any of his classmates who may see this note.

A

Doctor Rusby is to lecture on August seventh before the Lenox Gardeners' Club at Lenox, Mass., on the cultivation of medicinal plants in America.

Professor Diekman Reappointed.

Doctor Diekman recently received the following letter:---

THE UNIVERSITY OF THE STATE OF NEW YORK

The State Department of Education ALBANY

July 3rd, 1916.

Augustus S. Downing, Assistant Commissioner For Higher Education.

Mr. George C. Diekman, 115 W. 68th Street, New York, N. Y.

Dear Mr. Diekman:

I have pleasure in advising you that the Board of Regents, at its meeting held July 1st, reappointed you as examiner in pharmaceutical chemistry on the State Board of Pharmacy for a term of three years from July 31, 1916.

Yours sincerely,

Augustus S. Downing.

(Signed.)

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

During the past month a dozen or more books have been added by gift, from Dean Rusby and the Columbia University Library-notably, from Dean Rusby, a "Pharmacopeia officinalis and extemporanea; or, A compleat English dispensatory; by John Quincy." (Ed. 12. Lond., 1749) and "Notes on materia medica & therapeutics; taken from lectures delivered by Professor William H. Thomson, M. D., Medical Department of the University of New York; issued by Egbert LeFevre." (1882). The latter is a hectograph copy of LeFevre's original manuscript note-book, which was evidently sold, by authority, to the students attending Professor Thomson's lectures on materia medica. It will be especially treasured by the Library on account of its connection with Dean Rusby's student davs.

A

Professor Edward Kremers, of the University of Wisconsin, has very kindly presented the Library with his new "Bibliographic guide for students of the history of pharmacy." 55 pp. Madison, 1916. It is a most welcome contribution to a subject that has hitherto received too little attention among pharmacists.

H

In response to the following inquiry: "The C. U. C. P. Alumni Journal for 1916 is marked volume 23, yet it is the first volume of the new publication. Will you not be good enough to give me an account of the precursors that are regarded as constituting volumes I to 22 inclusive?" we subjoin two historical passages, which we find by consulting the file of the Journal itself:

I

"During the early part of 1894 the Alumni Association decided to issue a publication which would serve as a means of communication between its members and the College. With this object in view a board of editors was chosen, and in February the Alumni Journal made its first appearance, under the editorial management of Dr. O. G. Harrison. Dr. Harrison served in this capacity for only one issue,¹ when the services of Dr. Henry Kraemer, now editor of the American Journal of Pharmacy, were secured. Under this guidance the Journal prospered until May, 1895, when added duties compelled Dr. Kraemer to resign. Since that time changing conditions have placed several different men at the head of the editorial staff. From June to December, 1895, the chair was filled by B. Frank Hays; from January to April, 1896, by Fred. Holienthal; from May to November, 1896, by Alfred H. Mason. December, 1896, found Mr. Adolph Henning in charge. In January, 1897, the publication became known as the Journal of Pharmacology, Dr. Smith Ely Jelliffe

acting as editor until January, 1899, when excessive duties compelled him to resign in favor of Chas. W. Bjorkwall, who guided the *Journal* until January, 1900. From this time until April, 1901, the management devolved upon Harry B. Ferguson. He was then relieved by Dr. Jelliffe, who again took up the management until April, 1903, when the present editor² was placed in charge." *Alumni Journal*, τ . 12, 1904, *pp*. 6-7.

2.

"In 1852 the New York College of Pharmacy Association authorized the publication of *The N. Y. Journal of Pharmacy* as its official organ. This was issued monthly for two³ years, but failing of support it was discontinued.

"In 1894 the Alumni Association of the College began the publication of *The Alumni Journal*. In 1897 the name was changed to *The Journal of Pharmacology*, and it was published under this latter name until May 8, 1904, when publication was suspended until the following December, ⁴ when it again appeared under its original name, *The Alumni Journal*. But three subsequent numbers were issued in January, February and July, 1905, ⁵ when the attempt to issue it was abandoned by the editor." *Alumni Journal*, v. 13, 1906, *pp*. 153-4.

From this time (1906) the history should continue as follows:

1906 to 1911 (vols. 13-18) the official organ of the C. of P. alumni was edited under the title of *The Alumni Journal* by Chas. A. Lotz and various associate editors. In 1912 (vol. 19) Dr. Curt P.

Wimmer became editor-in-chief with Mr. Lotz as business manager. In 1914 (vol. 21) Dr. Wimmer assumed the editorship alone (Mr. Lotz, on account of other interests, being obliged to drop out). The name was changed to The New York Journal of Pharmacy, and a new series of volume numbers was instituted. From lack of support on the part of the alumni, which is revealed to one reading through the files of their official organ as a chronic state of affairs, Dr. Wimmer felt obliged to give it up with the eleventh number of his second volumes, so that the December number was never published. Jeannot Hostmann was appointed editor for 1916. The name was then changed to C. U. C. P. Alumni Journal, and the volume numbering of the first series was resumed.

¹Dr. Harrison's death occurred before this issue was returned from press.—Ed.

²Chas. A. Lotz.-Ed.

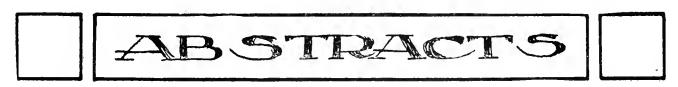
³ Three years-1852-54.-Ed.

¹This is evidently a mistake. The Library has the number for June of Vol. 11, 1904, and the numbers of Vol. 12 from July, 1904, to January, 1905 (Nos. 1-7).

⁵Payment will gladly be made for the February and July numbers, 1905, if any of our readers can furnish them.

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During the summer months the hours for the Library and Information Bureau are from 10 a.m. to 4 p.m. excepting Saturdays, when they are from 10 a.m. to 12 m.



Conducted by Prof. George C. Diekman.

Colloidal Sodium Urate in Urine.

It has long been an accepted fact that sodium urate exists in urine in the colloidal form under certain conditions. Shade and Boden have shown the possibility of this some time ago. More recently Prof. Bechgold succeeded in proving conclusively that sodium urate, in the colloidal form, is present in urine. He likewise succeeded in isolating this substance, and with the aid of ultrafilters succeeded in making a quantitative determination. The average of a number of determinations shows that 25 per cent. of all urates are present in the colloidal form. Bechgold points out the importance of this from a biological viewpoint. The uric acid of the body, so long as it is not in excess, is partly destroyed by the urinary ferments, while the rest is eliminated by the kidneys. When the uric acid is in excess, and remains in the crystalline form, it is readily soluble, and its elimination may be brought about by various means. This is said not to be the case when the acid appears in the colloidal form.

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Disinfectants.

Schuelke and Mayr and Flemming call attention to the high disinfecting value of bodies consisting of mixtures of chlorcresols, or their complex alkali salts, with chlor-xylenes. The chlor-cresols possessing the highest values are chlor o-cresol (m. p. 48-49° C.) and chlor-*m* cresol (m. p. 60° C.). The chlor-xylenes correspond to the following formula: $CH_2 CH_3 CH_3 CH_3 OH Cl I, 3, 4, 5$, or I, 3, 5, 2. Solutions of these mixtures may be made with the aid of soaps. Alcoholic solutions or solutions made with the aid of alcoholic solutions ot alkalies are also employed. The chlorxylenes are obtained by action of chlorine or sulfuryl-chloride upon xylols.

Incompatibility of Mercury Benzoate and Cocaine Hydrochloride.

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L. Reutter shows that this is caused by the partial decomposition of the mercury salt when drying, a mercurous salt being formed, as follows:

 $_2(C_6H_5COO)_2Hg + H_2O =$

 $_{2C_{6}H_{3}COOH} + (C_{6}H_{5}COO)_{2}Hg_{2}$

Mercuric benzoate is employed hypodermically, as it is said to be less irritant, and to cause less pain than other similar salts. In order to facilitate its solution in water it is customary to add sodium chloride. The addition of this at once caused an abundant separation of mercurous chloride. A similar reaction will of course take place when cocaine hydrochloride is used.

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Cestrum Parqui.

This is a shrub, found widely distributed in the countries of South America, more especially in the central provinces of Chili. The natives employ an extract of this plant as a remedy against tropical fevers, and as a diaphoretic. J.

Mercier and J. Chevalier have investigated this plant along botanical, chemical and physiological lines, using the plant as obtained from its natural source and specimens obtained from the Museum of Paris and report the presence of an alkaloid, which they have named parquine, and a glucoside, concerning which the chemical examination is not vet complete. They give the following formula for parquine: $C_{21}H_{32}NO_8$. The taste of the alkaloid is exceedingly bitter, resembling that of strychnine. It is insoluble in water, petroleum ether and benzene, sparingly soluble in ether, but readily soluble in alcohol and chloroform. Its melting point lies between 180 and 181° C. The aqueous solutions of the salts of parquine are unstable, becoming colored deeply yellow in a short time.

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Determination of Water Content by Means of Calcium Carbide.

Roberts and Fraser and others have employed calcium carbide for the determination of the water content of such substances as wool, wood-pulp, tobacco, cotton, soil, guano, coal, paper and many others. The determination is based on the well known property of calcium carbide to react with water, forming acetylene and calcium hydroxide, as follows: $CaC_2 + 2H_2O = C_2H_2 + Ca(OH)_2$

The substance whose water content is to be determined is placed in a properly fitted tube, and weighed. It is then covered with a layer of sand, and finally with a layer of the carbide. Upon the application of heat the water is removed and reacts with the carbide. The acetylene thus formed is collected and its volume determined. The experimentors found that for each 18.0 milligrammes of water, 10.5 mils of gas were obtained at 0° C., and 760 mm. of pressure. According to theory 11.2 mils of gas would be obtained. Substances of a fatty nature are first dissolved in benzine to facilitate the action of the carbide.

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Assay of Opium for Morphine.

G. Guerin, in *Journ. Pharm. Chim*, suggests the following procedure: 7.5 grammes of opium, dried at 60° C., are triturated, carefully and thoroughly, with 3 grammes of slaked lime, after which 30 mils of distilled water are added to the mixture. This is then transferred to a glass-stoppered flask, having a capacity of about 125 mils. The mortar and pestle are washed with 45 mils of distilled water, and the washings added to the contents of the flask.

The mixture is allowed to stand for a period of about two hours, and shaken frequently during this time. It is then filtered, and 52 mils of the filtrate collected in a wide-mouth Erlenmeyer flask, having a capacity of from 110 to 120 mils. I gramme of ammonium chloride and 5 mils of acetone are next added to the filtrate, the whole thoroughly admixed and set aside for twenty-four hours to crystallize. The crystals are collected on a tared filter, and washed carefully with distilled water, until the last trace of chlorides has been removed. The crystals are further washed with four portions of 15 mils each, of anhydrous acetone, which has been previously saturated with morphine, then dried at 100° C., and weighed. The quantity of morphine obtained will represent that which was contained in 5 grammes of opium. Extract of opium

and tincture of opium may be valued in the same manner, using about 3 grammes of the extract and about 75 mils of the tincture.

H

Valuation of Mustard.

For this purpose Penau, Rep. Pharm, suggests the following method of procedure : 5 grammes of the mustard to be valued are placed in a retort, 100 mils of distilled water added, and the whole allowed to stand for a period of about six hours, at room temperature. Then add 26 mils of alcohol, and 26 mils of olive oil. The mixture is then subjected to distillation on a glycerin-bath, and 90 mils of distillate collected in an Erlenmeyer flask, containing 10 grammes of 5 per cent. ammonia. Care must be taken that the delivery tube extends well into the ammoniacal liquid. 20 mils of tenth-normal silver nitrate V. S. are added to the distillate and the whole set aside for twenty-four hours in a dark The mixture is then passed place. through a Joulie filter, washing with distilled water and adding, drop by drop. nitric acid until the liquid shows a decided acid reaction. The excess of silver nitrate is precipitated by addition of 10 per cent. hydrochloric acid, and after a period of rest extending over twentyfour hours the precipitate is collected on a double-tared filter. After drying and weighing the proper calculations are made.

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Resins of Pinus Brutia and Pistacia Terebinthus.

The resins from both plants, as they appear in commerce have been subjected to a critical examination by L. Reutter. The resin obtained from Pinus Brutia appears in the form of brownish-yellow, brittle masses, possessing a turpentinelike odor. It is very soluble in acetone, alcohol, ether and chloroform, and less soluble in oil of turpentine, benzene, toluol, carbon disulphide and petroleum benzine. Upon distillation it yields an oil containing borneol. 26.55 grammes of the resin consisted of 3.5 grammes of resin acids, soluble in ammonium carbonate: 8.5 grammes of resin acids, soluble in sodium carbonate; 4.2 grammes of volatile oil, 3.90 grammes of resin and 6.45 grammes of woody fiber.

The resin obtained from Pistacis Terebinthus appears in the form of masses possessing a balsamic, turpentine-like odor, the exterior being hard, and the interior of the masses much softer in consistence. When viewed under the microscope numerous needleshaped crystals are seen, which are very soluble in ether. About 75 per cent. of the masses is soluble in either alcohol or oil of turpentine, but they are almost entirely dissolved by chloroform, ammonia water, solution of potassium or sodium hydroxide and earbon disulphide. Ether or petroleum ether are poor solvents. 172 grammes of the resin contained 17.6 grammes of volatile oil, 3.6 grammes of resin acids soluble in ammonium carbonate, 63.5 grammes of resin acids soluble in sodium carbonate, 25 grammes of acids soluble in solution of potassium hydroxide, 45.9 grammes substance readily saponified, of 3.6 grammes of ether soluble substance and 12.8 grammes of woody and mineral matter.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issne of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian. Adelaide Rudolh, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

Manufacture of Maltose.—G. R. J., New York, desires information as to the manufacture of maltose. After making the general statement that when any starch paste is treated with diastase or with malt extract, the starch hydrolyses, not to glucose, but to maltose, we refer our querist for details to a paper by Baker and Day (*The Analyst*, 33-1908-393), and to the method given in Bowne's Handbook of Sugar Analysis.

We do not quote these methods, since we have personal knowledge of the fact that malt-sugar making, like many other industrial enterprises, while feasible on a small scale, has scarcely as yet been put upon a satisfactory commercial basis.

Antipyrine and Sweet Spirit of Nitre.-F. C. W., New York, asks our opinion of a prescription for a child calling, in each dose, for antipyrine I grain, spirit of nitrous ether 15 minims. and water enough to make I fluid drachm. As to dosage, the question is "How old is the child"? An adult dose of antipyrine is about 4 grains; so one grain should be fairly safely administered to a child four or five years old. On the other hand, the amount of spirit of nitrous ether is one-half of the adult dose and would be indicated for a child ten years old. As to the green precipitate occurring it is due to the formation of isonitroso-antipyrine and is largely prevented if the spirit of nitrous ether

is free from acidity. Moreover, Wood and Marshall have shown that it is not poisonous to adults even in 15 grain doses. For details concerning this compound, our querist is referred to Ruddiman's Incompatibilities in Prescriptions.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters, a lawyer should be consulted.

Direct Dyes.—B. S. L., New York.— This phrase is used to designate those aniline dyes which stain the fabric without the intervention of a mordant. They are also called substantive dyes.

The Composition of Proprietary Preparations.-A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer onr readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connectict, Ohio, Indiana and North Dakota, all of which we have in the library.

"Pulv. Zinci Borat."—Mr. A. J. Reeder, Class of 1890, N. Y. C. P., has kindly written us concerning the prescription published in the June issue of the JOURNAL calling for the above-named substance. He cites Hager, the United States Dispensatory and Merck's Index on Zinc Borate, $ZnB_4O_7+H_2O$, an amorphous insoluble powder prepared by adding a borax solution to a zinc sulphate solution and then collecting, washing and drying the resulting precipitate.

The only question in our mind is whether such an insoluble powder could well be used as a douche. This idea we had in mind when in the June number we were guilty of "taking a chance" in suggesting that the physician had in mind Soluble Antiseptic Powder N. F.

Heilkraft Red Salve.—P. G., New York.—According to New and Non-Official Remedies, the Heilkraft's Medical Company prepare a salve, containing 8 parts of medicinal Biebrich scarlet red, 2 parts of eucalyptol and 90 parts of petrolatum.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Stainless Silver Nitrate Solution.— B. R. K., New York, wishes to know if we have ever heard of a silver nitrate solution that did not stain.the skin when applied. We have not, but perhaps some of our readers know something on the subject and will let us know.

In passing we might point out that while protargol solutions are brown and so tinge the skin and fabrics, the stain is easily removed with soap and water.

Compound Syrup of Glycerophosphates.—B. P. E., New York.—The following recipe for the above-named preparation is taken from the British Pharmaceutical Codex:

Calcium Glycerophos-

phate 2.28	200 grains
Potassium Glycero-	200 81
•	
phosphate 1.14	100 grains
Sodium Glycerophos-	
phate 1.14	100 grains
Magnesium Glycero-	
phosphate 1.14	100 grains
Iron Glycerophos-	
phate, in scales 0.57	50 grains
Glycerophosphoric	
Acid (20%) 2.08	200 minims
Caffeine 0.57	50 grains
Strychnine 0.02	2 grains
Refined Sugar40.00	8 ounces
Glycerin	4 fl. oz.
Tincture of Cudbear 3.12	300 minims
Chloroform 0.20	20 minims
Alcohol 0.40	40 minims
Distilled Waterto 100.00 t	:0 20 fl. oz.

Triturate the calcium, potassium, sodium, iron and magnesium glycerophosphates with the glycerin, previously mixed with 20 (4 fluid ounces) of the water; then dissolve the caffeine and strychnine in the glycerophosphoric acid, using gentle heat if necessary, and mix the two solutions; dissolve the sugar in the mixture with the aid of heat, add the chloroform, previously dissolved in the alcohol, and the tincture of cudbear, and make up to the required volume with distilled water. This preparation contains the equivalent of I-80 grain of strychnine in I fluid drachm.

Dr. Robin's original formula for the syrup specified 6 of calcium glycerophosphate, 2 each of potassium sodium and magnesium glycerophosphates, I of iron glycerophosphate, 2 by weight of tincture of ignatia, 3 of pepsin, I of diastase, IO by weight of tincture of kola, and sufficient syrup of cherries to produce IOO by weight. Syrup of glycerophosphates and nux vomica (Syrupus Glycerophosphatum et Nucis Vomicae). differs in containing 8 of tincture of nux vomica instead of the strychnine hydrochloride, while the chloroform and alcohol are replaced by 8 of spirit of chloroform. Dose.—4 to 8 mils (I to 2 fluid drachurs).

Gabbet's Solution Intended?-Our good friend, Dr. Joseph Weinstein, raises the question whether the prescriber of "Gobbett's Salution" mentioned on page 148 of the JOURNAL for June did not mean the diagnostic reagent devised by Gabbet. This is prepared by dissolving 2 grammes of methylene blue in a mixture of 35 grammes of concentrated sulphuric acid and 65 mils of water. Such a solution would cover the requirement of a "blue fluid containing some corrosive acid" as well as would Villate's solution. While we find no mention of its use as an application to venereal ulcers, it might so be used. Have any of our readers had experience with a prescription of this character?

Zincum Chloratum, P. G.—L. A. K., New York, desired the specifications of the latest German Pharmacopeia for Zinc Chloride and the information was gladly furnished over the telephone. It is hardly necessary for us to print these specifications in full on these pages, but we mention the fact to say that we stand ready to furnish similar service as far as our linguistic ability goes.

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Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Women,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

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CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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Number 8.



CO-OPERATION.

Beginning on the page 173 will be found an article that is of such importance to all true friends of the pharmaceutical profession, that they should read it with more than usual care.

The ever present strain of commercialism has pushed the manufacture of many of the galenicals into the hands of the large manufacturer and therefore the demand for trained pharmaceutical workers will steadily be on the increase.

The real colleges are endeavoring to properly equip their matriculants for their future. If the industries will properly consider and support co-operation with the colleges, then those students who are taking the advanced courses, now open to them will form a body of practical, technically trained workers, whose value to pharmacy cannot be overestimated.

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A CORRECTION.—We would ask our readers to kindly make a correction on page 156 of the July issue. The subhead in Miss Hart's article should read "Most Apparent *Histological* Differences" instead of "Most Apparent Historical Differences."

CO-OPERATION OF THE COLLEGE AND THE INDUSTRIES

By H. V. Arny.

In this article Doctor Arny discusses in his usual direct and forceful manner a question which will continually become of greater importance. Pharmaceutic progress demands that the colleges and manufacturing industries unite to supply those particularly trained workers nccessary for the future success of both professional and commercial pharmacy.

During the past winter, the New York section of the American Chemical Society has held an exceedingly interesting series of meetings at which was discussed the burning question of chemical preparedness and particularly that phase of the subject concerning the possibility of a closer co-operation between the universities and those industries based upon chemical reactions. Much of value was deduced from this discussion, not the least of which was the appointment of a permanent committee primarily designed to bring into being an actual co-operation of the character desired.

The object of this paper is not however the presentation of a résumé of the discussions just mentioned. What interests us far more is the question of co-operation of pharmaceutical manufacturers and pharmaceutical colleges; notably our own institution.

That co-operation of this character is desirable; that it would be advantageous to both parties is scarcely debatable. In the Chemical Society discussion, there was not one voice raised in dissent to the proposition that both industry and education would be tremendously benefited by friendly and virile co-operation. Such a co-operation exists, in fact, in many of our institutions of pharmaceutical instruction, whose instructors act as consultants in manufacturing con-

But the problem is a broader one cerns. than the utilization of the theoretical knowledge of the teacher by the manufacturing plant, satisfactory though this arrangement frequently is to both parties to the arrangement. It goes beyond the narrow question as to an individual instructor augmenting his income by being of service to a certain manufacturer. The real problem is, how can our pharmacy colleges co-operate with those manufacturing concerns allied to pharmacy, so that the alliance will be beneficial not merely to the colleges and to the industries, but chiefly to those who are preparing themselves for a manufacturing career. The sole excuse for the existence of any college is that it fits men to follow a certain calling and that in logical sequence provides the public with men armed in that particular line of work. Industry's interest in the college is primarily based upon the fact that in these days of specialization few employees have the opportunity of learning all parts of a particular industry by working in the plant. Here is where the college steps in and tries to train the prospective industrial in the fundamental principles of that particular calling as well as presenting to him a general survey of the practical aspects of manufacturing processes employed in that indus-In short, the technical college is try.

supposed to supply the demand for new trained workers in a certain industry, as the old workers pass away, and industry is now instinctively turning to the college for recruits with which to fill vacancies as they occur.

The phrase "supposed to supply the demand" is used advisedly since it is frequently asserted by manufacturers that colleges do not properly supply such a demand. This is the crux of the situation. Do the colleges supply the demand? Can the colleges train men acceptably for industrial pursuits?

The answer to this query is an emphatic "yes" provided the course offered fulfills two requirements: (1) Is its scope broad enough as to time devoted to it and as to curriculum followed? (2) Is it a course designed to fit practical men to practical work? As to the first requirements, the four year course leading to the Bachelor of Science in Pharmacy offered by our college and by some of her sister institutions comes up to the suggested norm. As to the practicability of these courses, that is the problem underlying the entire subject of co-operation of the colleges and the industries, for if the course is to meet with the approval of the industries, it behooves the industries to co-operate in making the course just what they would have it

The industries and the technical men connected therewith can help the colleges immensely in making the four-year course a practical one. In the first place there should be in such a course aside from the fundamental lectures by regular members of the faculty, a series of lectures on strictly technical subjects given by men who are actively connected with the industries. This series should be as carefully planned as to the proper sequence of subjects as are the other lectures of the course and each expert should deal with that particular subject which constitutes his daily work.

Then the individual manufacturing concern should invite students of the four-year course to visit those parts of the works where secrecy of manipulation is not a factor. There are of course in each plant certain phases of manufacture that should be respected as of private character, but there is much more that could be shown freely to students with no loss to the manufacturer and with great gain to those who are about to embark in industrial lines.

It may be immediately said that the two ideas suggested above are already in vogue, that lectures on industrial subjects already obtain, that industrial excursions are a part of the regular curriculum of many colleges. This is largely true in chemistry courses, but as yet not so true as far as pharmaceutical manufacturing lines are concerned. Furthermore, what is required is a true cooperation between such concerns and the pharmaceutical colleges in recognition by the industries that the work of the colleges is primarily a service for the industry in providing future employees and in this spirit, the industries should not merely permit such co-operation as is suggested above, but should enthusiastically assist the colleges in training these young people for industry's future use.

Assuming all this is done, will the product of the four-year course be so trained that it will be of real service to industry? The instant answer is, that the product will be as well prepared to meet the acid test of industrial activity as the graduate of a four-year medical

course is to grapple with the problems of the healing art. If this answer meets with the comment that young M. D. is so green that actual experience in hospital work is now deemed almost essential before the young doctor goes into general practice, the writer will be more than satisfied, since such a rejoinder brings squarely before us that phase of cooperation between the industries and the colleges which is still in the experimental but which if properly handled will prove of as great value to the public and to the embryo industrial chemist as the now well-established custom of hospital interneship is to the embryo physician.

The phase I have in mind is the system of industrial fellowships instituted by the late Robert Kennedy Duncan, developed to the largest extent so far at the Mellon Institute of Industrial Research at Pittsburgh and now gradually becoming a factor in a number of colleges.

The general subject of industrial fellowships is beyond the limits of this article, but how the plan can be employed in pharmacy colleges to bring about a real co-operation between these institutions and pharmaceutical industries is the raison d'etre of this paper.

The situation is something like this: Industry makes use of the colleges in two ways. First, it turns to the college for trained employees; second, it frequently calls the teachers of the colleges in consultation on some knotty manufacturing problem. Such problems usually require careful, patient investigation; requires months of work that may or may not lead to satisfactory results. Such problems therefore do not belong to the ordinary factory laboratory and if the concern does not possess a research la-

boratory, it usually turns to some college instructor for aid. Again, the modern teacher is keenly desirous of doing research work but is hampered by two facts (a) the scramble for a living takes most of the time of a man of family; (b) the interruptions that come in the daily routine of a successful teacher is scarcely conducive to the patient, painstaking, steady application so essential to the success of an investigation. Examples could be cited of teachers, who, desirous of investigations, conducting important have paid private research workers out of their non-too-large income in order that their ideas of routine teaching might be developed. The two needs of industry just outlined and the research instinct of the teacher can be blended to the great advantage of the student, by the ideal co-operation between industry and colleges in the shape of industrial fellowships.

The industrial concern needs a young man of college training but wants one with some manufacturing experience. "We have no time to break in green graduates," the works' manager tells the teacher to whom he applies. At the same time that same concern most likely has some problem that should be worked out. Why should not a compact be made between the management of the works, the teacher of the college and the graduate? The industrial concern establishes an industrial fellowship which is awarded to the graduate in question. He becomes nominally an employee of the manufacturing concern although most of his work for the year will be under the teacher of the college. It might prove, however, highly desirable to have part of the work carried out under actual conditions in the works, but that is a mere detail.

The main point is that the industrial concern will have a chance to "try out" the prospective employee before making him an actual part of the organization and that upon the very line of work that will prove his efficiency and that will furnish much needed information. If the fellow proves unsatisfactory the industrial concern becomes aware of it before it has definitely committed itself to him and there is always strong chance that the information obtained through the research will be worth while. Under ideal conditions, on the other hand, the concern will at the end of the year have a worker trained to meet the exigencies of the factory as well as a lot of valuable information and that at a price but little higher than would have been paid for an ordinary helper.

But where would the teacher come in? In all such fellowships a certain pro rata should go to the college and to the teacher supervising the research. The college should get enough to cover the expenses of having the fellow at work while the teacher should obtain an bonorarium at least sufficient to cover a comsultant's fee. Again some provision should be made making the teacher and the fellow co-beneficiaries with the industrial concern if anything patentable came out of the research.

But even with these added fees, the fellowship in the long run would prove scarcely less expensive to the concern than would a flat salary to a laboratory worker.

In conclusion let it be stated that the plan of industrial fellows has been in operation at the University of Nebraska and at the University of Pittsburgh for almost ten years and that their success at these institutions led to the creation of the

Mellon Institute mentioned above. This would seem to indicate that the correction of the weak spots in the plan is merely a matter of detail. The first of the possible objections is the question whether the institution of a fellowship by an industrial concern costing say \$1,200 per annum will prove a good investment to the beneficiary. There is of course an element of chance even as there is in every research, but assuming at the worst that it turns out unsatisfactorily as a financial venture, it will, despite all hindrances, be a good investment in the cause of education. Financiers have little hesitation in contributing outright large sums of money to educational institutions. The industrial fellowship idea serves the purpose of education almost as well as an outright gift and has attached to it the possibility of marked financial returns.

The other criticism is whether there can be found teachers willing to act in the capacity of supervisor of the research-as the intermediary between the works and the fellow. Such work is a part of the routine of every enthusiastic teacher and it is a well known fact a man trained in research can supervise the work of a dozen different fellows. even as the commanding officer can direct the operations of his subalterns. There is therefore little doubt that men can be found willing to do this service for industry and for education, particularly if there is held before them the possibility of obtaining ultimate financial gain by participating in the patent rights which may result from the investigation. As said above, the fact that the industrial fellowships of the past have proven satisfactory alike to the capitalist, the supervisor and the fellow, is the best proof that the adjustment of minor defects is merely a matter of detail.



JOHN OEHLER

John Oehler, one of the best known and most beloved graduates of our college, died suddenly, at his late residence, Carlstadt, New Jersey, in the early morning of July 14th from heart failure, caused by an attack of acute indigestion.

The news of his death came as great shock to his many friends and associates in both professional and commercial spheres. He had apparently been enjoying excellent health and there was nothing to indicate that his demise was so near at hand.

The deceased was born in the City of New York, at No. 326 West 38th Street, and at the time of his sudden demise was 56 years of age.

When ten years of age, his parents removed to Carlstadt, and until the time of his death he was a resident of that community. His early education was obtained in the public schools, and was supplemented by instruction obtained through various other sources. At the age of thirteen he became an apprentice in the South Bergen Pharmacy, then owned and conducted by Otto Frank. After having served an apprenticeship to the entire satisfaction of his employer, young Oehler, desirous of obtaining further knowledge concerning matters connected with the profession he had chosen to enter, became a student at the New York College of Pharmacy, in the fall of 1877, at the age of eighteen years, and graduated with honors in the spring of 1879.

How readily such an item of history is recorded in later years, and yet how much self sacrifice and self denial is often hidden behind the facts as stated. In these later years a college education is taken as a matter of fact, in many states it is even compulsory for one who wishes to practice pharmacy pro-Not so at the time when fessionally. young Oehler launched his fortunes on the broad waters of a professional education. It required much determination and force of will and a considerable financial sacrifice to thrust aside the allurement of the short cut to obtaining a license, namely the passing of a board examination, in those davs none too exact or severe an ordeal. To what degree John Oehler possessed the qualities necessary to become a thorough professional pharmacist, is shown by the record of his college career. During the first or junior year of his studies he became especially interested in the study of botany, and his name appears in the 1877-1878 catalogue as a special student in that subject. He was very successful in mastering the subjects of the junior year and after having passed a very creditable examination, was declared eligible to become a member of the second year or senior class. During his senior year of studies he again found time to do special work, and we find his name recorded in the 1878-1879 catalogue as a special laboratory student. It may here be stated that in these early days all laboratory courses, both chemical and pharmaceutical, were entirely optional. It was only in later years that such courses became an integral part of the curriculum of studies.

How well he succeeded in the work of the senior year is shown by the fact that he was graduated with honors and was awarded "The Prize of a Microscope for the best examination in Botany."

As a prerequisite to graduation it was necessary for many years to present a thesis relating to some subject connected with pharmacy or its allied branches. The subject of John Oehler's thesis was "The Flora of Bergen County, New Jersey, with Herbarium."

The herbarium referred to consisted of a large number of specimens, all well mounted and preserved. It has since been incorporated with the celebrated "Canby" Herbarium of our college. The thesis is a part of the college archives, and as might be expected, is a model of neatness. It bears his well known signature, which in no material way differs from that of later years.

Soon after graduation he entered the employ of the wholesale drug firm of McKesson & Robbins, where he remained for a period of over 25 years, at the same time attending to his college and other duties. He was one of that firm's most valuable employees, and many pharmacists will remember the cordial and genial manner with which they were received by John Oehler when transacting business with that firm. His extensive acquaintance with the pharmacists of New York City and vicinity made it possible for him to assist many of the young graduates to obtain positions and thus obtain a start in their chosen profession. Many of the successful pharmacists of today hold him in grateful remembrance for assistance given at a time when this was most needed.

John Oehler, The "Quiz Master."

In the 1883-1884 catalogue of the college, the name of John Oehler appears for the first time in a teaching capacity. He is there designated as "Quiz Master," without having any subject assigned to him. Before this time he acted in the same capacity for at least one year, and without compensation. In the 1881-1882, and gain in the 1882-1883 catalogue of the college the folowing appears in the matter of conducting quiz exercises:

"Conversational Lectures and Examinatoria."

"One of the most effective auxiliaries in study is quizzing. It shows to the student more clearly the imperfections in his knowledge, and causes him to direct his special efforts to remedy them. It is thought wise to establish special examinatoria or quiz-classes, under quiz masters, appointed by and acting under authority of the college. These quiz masters are alumni of the college who have graduated with the highest honors."

John Oehler was one of the graduates From the year 1884 thus referred to. until the date of his untimely demise, covering a period of 33 years, he was continuously a member of the teaching staff of our college. The statement made to the effect that he severed his connection with the college some years ago, in order to devote all his time to the work of the Carlstadt Bank, is based on error. The subject taught by him was chemistry, in its various branches, and who does not remember his untiring efforts to impart knowledge to the student, his modest, quiet demeanor and the effective way he had of imparting information. His was the service which is paid for in money, but which cannot be repaid by

money. It was with him a labor of love, a part of his every day life, and he was always at hand when the bell sounded at the beginning of his instruction period. Upward of 5,000 graduates of the college have profited in no small degree from his work with them. He was loved by all who came in contact with him, either as a student or otherwise. His genial personality endeared him to all. In 1897 he became Adjunt Professor in Chemistry, which title later was changed to that of Assistant Professor of Chemistry. He was, however, very fond of his earlier title "Ouiz Master."

His relations with other Faculty members were of the most cordial nature at all times. The earnest and able manner in which he performed his duties, stamped him as the teacher. Professor Chandler on occasion of many of the Faculty meetings, and at other times, freely acknowledged the value of the services to the college and the student body rendered by John Oehler. Upon being apprised of the latter's demise, and finding himself unable to attend the funeral exercises, Professor Chandler wrote as follows:

"I am grieved and shocked at the news of the death of Professor Oehler. He always seemed to enjoy the best of health, and I never doubted but that he would live to a ripe old age. I cannot recall the number of years we were associated together, but it was a great many, and I look back to them with great pleasure and satisfaction. We were always the best of friends and I had a great respect for his acquirements and good sense, and devotion to his work. I regret that I was not able to attend the funeral services."

Truly a deserved and generous tribute.

John Oehler, The Citizen.

He was of the type which makes for the betterment of the community, the uplifting of the individual, and which constitutes the back-bone of the country at large. In his own community, Carlstadt, New Jersey, John Ochler early took the rank of "First Citizen," and retained this proud distinction until the time of his death. This was not so much due to the positions of trust he filled and so ably administered, but rather to his own individual personality. He was honored by his fellow citizens in the year 1895, by being made their choice in the first mayoralty election ever held by them. How well and how faithful he administered the trust they placed in him, and how well he merited the confidence reposed in him, is a part of the history of his native city. "Honest John Oehler"! How few the words, vet how deep the significance, when applied to a public officer. And yet he deserved and was fully entitled to receive all honors bestowed upon him during his lifetime.

Little was heard from John Oehler concerning his many acts of charity and philanthropy. He was not prone to speak of these things, nor liked it when others referred to them. Nevertheless it must here be recorded that his acts of charity to those in need of help and assistance were many and numerous. How many and how numerous will never be known, and that is as John Oehler wished it.

At the time of his demise he had held the office of cashier of the Carlstadt National Bank and had been one of its directors for nine years.

He was also interested in the work of the Carlstadt Mutual Loan and Building

Association, acting in the capacity of secretary and director for nine years. Prior to this time, from 1897 to 1907, he filled the office of President of the association. He was a most faithful officer, and the records of the transactions of this association are models of neatness and accuracy. It is reported that he had only completed the work of writing up the minutes of the last meeting of the association, a few days before his untimely end.

Other Activities.

It is not generally known or remembered that John Oehler served the community in the capacity of member of the former Board of Pharmacy of the City of New York, of which Dr. Cyrus Edson was the president and Dr. William Balser, the secretary. He was elected to such membership by the members of the New York College of Pharmacy, which body, under the provisions of the Pharmacy law then in force, was empowered to select, in part, the membership of the Board of Pharmacy. He served in such capacity during the years 1895-1898, after which time, owing to the provisions of the consolidation act, a new Board of Pharmacy was created. The examination subject assigned to him was that of Chemistry, and he rendered valuable service, as an examiner, during his term of He was of material assistance office. in helping to revise and improve the method of examining candidates then in vogue. Pharmacists who were examined during his term of office, will no doubt recall the kind and helpful manner in which he assisted them. Those of his associates who are still living recall the earnest and faithful manner in which he discharged the duties of an examiner. These duties were at times arduous as ten examinations were held each year, and a different question paper had to be prepared for each examination.

The records of the Alumni Association show that John Oehler became a member of that body, upon election, on March 17th, 1879, and that in the year 1891 he became a life member. In former years he was active in furthering the interest and welfare of the association, and of its members. Even in later years he was still deeply interested in alumni matters, though his many other duties did not permit him to take an active part in the work. John Oehler was one of the most widely known members of our association, and every member feels his loss keenly. Our heartfelt sympathy is extended to Mrs. Ochler and to all surviving relatives.

John Oehler became a member of the College of Pharmacy in the year 1886, and, according to the records, a life member in 1897. He was well and favorably known to practically every member of the college. Residence out of town made it impossible for him to at all times attend the college meetings; however, his interest in the progress of the work of the college was deep and genuine.

At the time of his death, he was a member of the Lennehaha Council, Royal Arcanum, among the members of which body he counted numerous friends, who were grieved to learn of his sudden end.

For thirty years he was a member of the Town Club of Carlstadt, a social organization, comprising many of the oldest residents of that town. He enjoyed attending the meetings of this organization because of the recreation afforded through social intercourse with his fellow townsmen and friends. He had attended a meeting of the Town Club on the even-

ing of July 13th, and had returned apparently in good health, only to be stricken the following morning.

In 1901 John Ochler was elected to membership in the German Apothecary Society, retaining this membership until the time of his demise. He had a wide circle of friends among the members of this body, who all were deeply grieved to learn of his death.

Professor Oehler is survived by his wife, Sophia W. Oehler, whose maiden name was Sophia W. Nehler, and whom he married on November 26th, 1890, a daughter, Sophia Flora Oehler, his mother, Flora Erdle Oehler, and a sister, Mathilda Oehler.

Furneral services were held at his late residence, 426 Broad Street, Carlstadt, New Jersey, on the evening of July 16th, and were largely attended by officers, trustees and members of the college, members of the Faculty, and by numerous neighbors and friends. The interment took place on July 17th, in Berry Lawn Cemetery.

Active, honorable and alert in business affairs, a devoted husband and father, the graduates of our college will ever bear in mind his faithful, untiring and disinterested service in the interest of the institution and its student body. His memory will be revered among us, and the history of his straightforward, honest and model life will be an inspiration and a noble example to be followed by future classes of students in our college.

To his mourning widow, and to his fatherless child, as well as to his immediate relatives and friends who are most heart-stricken at the loss we all have sustained, there is but little of this world's consolation to offer. We can only sincerely and most affectionately sympathize with them in their afflictive bereavement. But we can say that He who moulds the destinies of all of us, looks down with infinite compassion upon the widow and the fatherless in the hour of their desolation, and that He will fold the arms of His love and protection around those who trust in Him.

GEORGE C. DIEKMAN.

H

A Question of Anatomy.

As was to be expected the Journal of the American Medical Association has attacked editorially Dr. H. H. Rusby of this city because of the testimony he gave in favor of the plaintiff in a libel suit recently decided against the Association. We are not going to defend Dr. Rusby, who needs no defense, for a lifetime of honorable service in the cause of science speaks for itself. It pains us, however, to find our esteemed contemporary wrong also on an anatomical point. It speaks of "Dr. Rusby's weird conception of the anatomy of the female pelvis," because he referred to "the unstriped muscular fibres of the broad ligament!" (mark of astonishment the Journal editor's), and advises him, when he gets back to Columbia University, to "ask a freshman student in the anatomy class to make a dissection of some of the unstriped muscles in the broad ligament." The funny point here is that the broad ligament does contain unstriped muscular fibres, as Cunningham, Gray, and all anatomists, as well as De Lee and many obstetricians, testify. Whatever the wants of others may be, Dr. Rusby evidently needs no freshman to teach him anatomy.

From the New York Medical Record, July 15, 1916.

FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

A generous gift from Columbia University Library, during the first month of the new fiscal year, has enabled this library to complete its set of "Jahresbericht über die Fortschritte der Chemie und verwandter Teile anderer Wissenschaften," from its establishment, 1847, to 1910 inclusive. We hope this augurs well for completing, during the rest of the year, several more broken sets in the Library.

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The movement, which started last year, for putting into usable shape all the valuable sets of unbound periodicals belonging to the Library, is pushing vigorously forward. Thirty-six volumes of "The Pharmaceutical Era" were sent to the bindery during. July; and the nine, yet unbound, are ready to go when the items, noted in the Book Exchange column, page 185, can be procured. Please notice that we make a call, also, for missing parts of the "Pharmaceutische Centralhalle," or, as it is spelled now, "Pharmazeutische Zentralhalle," which we are getting ready to bind.

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Mrs. Charlotte (Ransford) Gay, of the class of 1898, ran in cheerily one day to look up a point or two in anticipation of the next A. Ph. A. meeting.

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The weather has been uncomfortable and oppressive with heat most of the time; but there has been mitigations—in the shape of remembrances and visits from the Alumni. Dr. R. Schleussner, of the class of 1912, has very kindly contributed a volume to the Library collection of U. S. Pharmacopœias. Mr. E. B. Ackerman, of the same class, inscribed his name on the new "Visitors' Book," taking advantage of the proffered 'courteous attention to those desiring to do their own research work.' See "Information Bureau" of this issue, page 188, item 6.

Mr. Leo Roon, of 1910, came in to tell us about his interesting and busy days with original research work, presenting the Library, at the same time, with a complimentary copy of a reprint of his paper on "The Physical Significance of Emulsions."

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All these afforded welcome diversions, especially Mr. Roon's enthusiasm for original research work, which is, so to speak, infectious. We wish the Alumni, one and all, had been in range of communication at the time.

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By the way, a clipping from The Book Review of the New York Times, of July 30th, lies on the Library desk, which we think deserves the wider (!) circulation of the *C. U. C. P. Alumni Journal*:

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THE ANTISEPTIC BABY.

- The antiseptic baby and the prophylactic pup
- Were playing in the garden when the bunny gamboled up.
- They looked upon the creature with a loathing undisguised,
- It wasn't disinfected, and it wasn't sterilized!
- They said it was a microbe, and a hotbed of disease,
- They steamed it in a vapor of a hundredodd degrees,
- They froze it in a freezer that was cold as banished hope,
- And washed it in permanganate with carbolated soap.
- In sulphureted hydrogen they steeped its wiggley ears,
- They trimmed its frisky whiskers with a pair of hard-boiled shears,
- They donned their rubber mittens, and took it by the hand,
- And 'lected it a member of the fumigated band.
- There's not a micrococcus in the garden where they play,
- They swim in pure iodoform a dozen times a day;
- And each imbibes his rations from a hygienic cup,
- The bunny, and the baby, and the prophylactic pup.

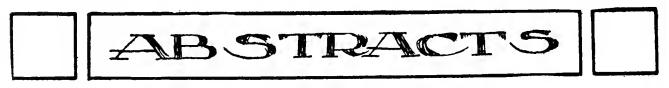
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During the summer months the hours for the Library and Information Bureau are from 10 a. m. to 4 p. m. excepting Saturdays, when they are from 10 a. m. to 12 m.

BOOK EXCHANGE COLUMN.

Wanted.

- Pharmaceutical Era
 - v. 4 (Jan.-June, 1890), index and title page.
 - v. 7 (Jan.-June, 1892), index and title page.
 - v. 16 (July-Dec., 1896), index and title page.
 - v. 18 (July-Dec., 1897), index and title page.
 - v. 22 (July-Dec., 1899), index and title page.
 - v. 23 (Jan.-June, 1900), index and title page.
 - v. 40 (July-Dec., 1908), index and title page.
 - v. 19 (1898), No. 1 (Jan. 6th).
 - v. 38 (1907), No. 19 (Nov. 7th).
- Pharmaceutische Centralhalle
 - v. 5 (1864), No. 7.
 - v. 6 (1865), index.
 - v. 7 (1866).
 - v. 10 (1869), index.
 - v. 11 (1870), Nos. 2-23, 28, 36-39, 42, 44-45.
 - v. 12 (1871), Nos. 6, 8, 24, 35.
 - v. 37 (1896), Nos. 1, 8, 18, 22, 26, 27, 32, 39, 43, 49.
 - v. 53 (1912), Nos. 1-4, 7-11, 13, 16-18, 20-22, 24, 26, 28, 32, 35, 36, 44-46, 52 and index.
 - v. 54 (1913) Nos. 5-6, 9-12, 16, 49-51.



Conducted by Prof. George C. Diekman.

Coloring and Affixing Tinfoil.

Before applying the required color to the tinfoil this must first be freed from This is easily acany adhering fat. complished by treating the sheet tinfoil with a mixture of prepared chalk and alcohol in the form of a smooth paste. Only the best kinds of prepared chalk should be employed, as otherwise the tinfoil will lose its lustre. After such treatment washing and drying are resorted to, after which the selected color, properly prepared, is applied by means of a camel-hair brush. The coloring liquid is prepared as follows: 100 parts of bleached shellac are dissolved in 500 parts of 96% alcohol in the cold. To this solution are added 50 parts of the best grade of elemi resin, and 12 parts of clear Venetian turpentine. The liquid is filtered and a sufficient quantity of an alcoholic solution of the desired coloring matter added. To affix tinfoil to containers or other surfaces, the following may be employed: I. A paste made by treating 10 parts of rye flour with 4 parts of caustic soda, adding a sufficient quantity of distilled water, a small quantity of turpentine and the whole mixed thoroughly. 2. A paste made by mixing 50 to 60 parts of confectioners' sugar with 180 to 200 parts of solution of sodium silicate, avoiding heat. Only alcohol soluble coloring materials are to be employed.

A Sensitive Test for Iodine in Urine.

The following procedure is recommended by J. Schumacher, in Deutsche Mcd. Wochenschr., 532. A given volume of urine is decomposed by addition, of an equal volume of solution of hydrogen dioxide. To this mixture is then added a one per cent. alcoholic solution of benzidin, in volume equal to one-fifth of the volume of urine taken, and the whole thoroughly mixed. If, now, the upper layer of the liquid be heated to boiling by means of a bunsen flame, it will assume a dark-brown or black appearance, either at once or upon standing, depending upon the quantity of iodine present in the sample under observation. If much iodine be present a brown or black precipitate may be If, after cooling the liquid, noted. chloroform be added and the mixture shaken, the color will be taken up almost entirely by this. Under the same treatment a sample of iodine-free urine will not become colored at all, or at most only a straw-yellow coloration will be noted.

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Copaiba and Oil of Sandalwood Capsules.

W. Beckers, in *Apoth, Ztg.*, 12, reports on the results of an examination of these as follows: Of eight samples of copaiba capsules examined, only three were found to contain an article meeting all requirements of the D. A. B. In

case of the other five samples the saponification and acid numbers varied considerably from standard. In several instances the admixture of resin and gurjun balsam could be clearly demonstrated. Of the five commercial samples of capsules containing Sandalwood Oil, one was found to meet requirements as to quality.

A

Incompatibility of Phenazon, Sodium Salicylate and Magnesium Sulphate.

A solution of 0.36 gramme of phenazon, 10.8 gramme of sodium salicylate and 28.8 gramme of magnesium sulphate in 240 mils of water, when set aside for some time deposits a crystalline body, consisting of 55% of phenazon, 40.1% of salicylic acid and 3.5% of magnesium. At 138° C. the crystals liquefied with decomposition. H. Finnemore and J. A. Colverd produced the same crystals by interaction between 2 molecules of phenazon and I molecule of magnesium salicylate. The crystals are white, readily soluble in hot water, but sparingly soluble in cold water. The aqueous solution fluoresces similar to that of a quinine salt, but to a lesser degree.

H

Volatile Oil of Ravensara.

Ravensara aromatica J. F. Gmel, is according to Ferraud and Bonnafous, a member of the Lauraceae family. It is found growing in abundance on the high plateaus of Madagascar. Distillation of the leaves and young branches yields an ethereal oil in abundance. This oil possesses a pleasant, aromatic odor, resembling that of camphor and eucalyptus. The greater part of the oil consists of a hydrocarbon, $C_{11}H_{20}$. It also con-

tains an oxygenated portion, which, however, is only separated with difficulty from the hydrocarbon. The hydrocarbon portion of the oil is a colorless, clear and mobile liquid, specific gravity 0.8809, and boils at 171-172° C.

Norwegian Oil of Turpentine.

H. W. Fosse has published an exhaustive article on this subject, from which the following is taken: The oil obtained by subjecting the comis minuted wood of the cedar and pine to a boiling process under a pressure of from 6 to 8 atmospheres. The operation is carried on in a closed iron vessel, the wood being treated with a sulphite solution, such as is employed in the The vapors manufacture of cellulose. resulting are collected and concentrated, and will, after condensation, form two layers, one of which consists of the impure oil and the other of water. As far as could be determined the terpenes contained in the wood are not altered by the boiling process. Combinations possessing a disagreeable odor, however, are formed, and these impart to the resulting oil a foreign odor. It is possible, however, to remove these by treatment with chlorinated lime and hydrochloric An examination of the crude acid. product showed that this contained, besides terpenes, also sesqui-terpenes and oxygenated products, which seem to belong to the class of mercaptans. These latter are unquestionably the result of the process employed. The terpenes of the crude oil consist in the main of dextro-rotary pinene and small quantities of sylvestrene. The purified oil seems to be entirely free from mercaptans, and does not possess the disagreeable odor of the crude product.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Jeannot Hostmann, Queries.

ANSWERS TO QUERIES.

"Roosevelt R. & S. No. 3."—W. H. B., New York.—Through the courtesy of Mr. George W. Stock, pharmacist at the Roosevelt Hospital, we learn that the above named prescription calls for tablets, each of which represents

Rhubarb	2 grains
Sodium bicarbonate	5 grains
Ipecac	¹⁄₄ grain
Tincture of nux vomic	
U. S. P., 1890	5 minims
Oil of black pepper	'1⁄2' minim

Compound Tincture of Iodine.—A. H., New York.—This is a preparation that was official in the United States Pharmacopœia of 1870. Its receipt is as follows:

Iodine	$\frac{I}{2}$ troy ounce
Potassium iodide	1 troy ounce
Alcohol	1 pint
Make a solution.	

Methyl-para-amido-phenol.—R. F., New York.—This is the chemical name

for metol, which was discussed at some length in the JOURNAL for May, page 120.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters, a lawyer should be consulted. **Prescription Difficulty.**—J. G., Connecticut, submits for criticism, the following prescription:

Chloral hydrate2	drachms
Sodium bromide4	drachms
Resorcin I	drachm
Spirit of anise2	fluidrachms

Chloroform water enough to make 4 fluid ounces.

Attempting the compounding of this prescription in several ways, we found there were two sources of difficulty. First, if chloroform water is used as the solvent for the bromide, a 'salting out' of the chloroform occurs with a resultant cloudy liquid. The second difficulty is the obvious one; the insolubility of the oil of anise (of the spirit) in the aqueous vehicle. We find that if we dissolve the chloral hydrate, the bromide and the resorcin in enough water to make I fluid ounce, and if we then add two fluidrachms of alcohol and enough chloroform water to make 4 fluid ounces a clear solution results, but try as we did, we could not succeed in obtaining a clear fluid if the two fluidrachms of spirit of anise directed by the prescriber was employed.

Our querist states that the customer said that the fluid as obtained elsewhere was yellowish, whereas the one dispensed by our friend was almost colorless. This discrepancy is due to the well-known property of resorcin solutions of darkening in aging. If J. G. keeps the mixture on hand a few weeks, it will be yellow enough to suit the most captious customer.

The Composition of Proprietary Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during

the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda of Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Pills Containing Oxgall.—J. H., New York, wishes to know the best excipient to use in making salol-coated pills of oxgall. He tried various excipients but found that the finished pills softened so much that coating was an impossible task. The first problem was whether by 'oxgall' our querist means purified oxgall of the eighth edition of the Pharmacopœia (a soft solid) or powdered oxgall which is to be recognized in the new U. S. P. under the title of extract of oxgall.

We find that the pilular extract can be solidified into fairly firm pills by adding starch or kieselguhr. Far better, however, we find the employment of the above-mentioned powdered oxgall. On moist, sticky, summer days, such as we are now enjoying, we find vigorous manipulation of the powder in a mortar with a pestle makes a perfect mass. In dry weather, the addition of a few drops water or alcohol is all that is necessary to make the mass. We also tried a mixture of the powdered oxgall with soft soap and starch and obtained an attractive looking pill, but found that the pills so prepared softened sooner than did those made by pounding with a minimum amount of water.

In this case as in the case of many pills containing extractive matter, the secret of the manufacture of a successful pill mass is largely a question of "elbow grease." We knew one druggist a score of years ago who made highly successful compound cathartic pills by substituting for the few drops of water then directed as excipient, vigorous manipulation of the mixed powders in a warm mortar with the pestle.

Saccharin Mouth Washes.—K. M. T., New York.—The recipe you have in mind is evidently that devised by Professor W. D. Miller of Berlin, who, in the early nineties published in *The Dental Cosmos* a classical series of papers on mouth bacteria. In one of his papers (*Dent. Cos.* 33-1891-917) he stated that the most satisfactory oral antiseptic was saccharin and he then gave the following recipe for a saccharin mouth wash.

Saccharin	2.5 gm.
Benzoic Acid	3.0 gm.
Tincture of Krameria	15.0 mils
Absolute Alcohol	100.0 mils
Oil of Peppermint	0.5 mil
Oil of Cinnamon	0.5 mil
Make a solution.	

Curiously enough no mention of this recipe has been found in the pharmaceutical journals of England, Germany or America, although a saccharin mouth wash, antedating that published by Miller is found in the *American Journal of Pharmacy* (62-1890-407). This recipe, taken from a French source, calls for saccharin I gm.; sodium bicarbonate .05 gm.; alcohol 100 gm.; oil of peppermint 2 drops.

In Miller's article, he particularly emphasizes the fact that the sodium compound of saccharin is not as good an antiseptic as saccharin in itself. Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Is Ammonium Nitrite a Liquid?— E. F. W., New York, asks us the question just given, stating that he was surprised to see in a chemical price-list the nitrite cited as a fluid. He could not understand how it should be that other inorganic nitrites are solids while the ammonium compound is listed as a liquid.

Gmelin-Kraut and other authoritative chemical books state that ammonium nitrite occurs in white crystalline, exceedingly deliquescent masses. So deliquescent is it that the manufacture never knows whether even a sealed package of the chemical will reach its destination in the form of a solid or whether it will have liquefied by the absorption of even a minute amount of moisture. Hence the manufacturer in question wisely sends it out in deliquescent condition labelled as a liquid.

And right here comes another complication. Gmelin-Kraut's book states that, even in the solid form, ammonium nitrite decomposes, by the well-known reaction, into nitrogen and water. The book further states that for this reason, the salt cannot be marketed in sealed glass*tubes, since eventually enough nitrogen is evolved to cause the tube to explode.

For this reason, ammonium nitrite is rarely used. For instance, instead of using it in obtaining nitrogen for laboratory purposes a mixture of the stable salts, sodium nitrite and ammonium chloride is employed.

COLUMBIA COLLEGE OF REST	HARMACY
Vol. 23. SEPTEMBER 1916.	No. 9.
Contents :	
Evening Courses. The Kingdom of Light, by Nicholas Murray Butler. David Strauss. David Strauss. Evening Extension Courses. From the Library, by Adelaide Rudolph. An Unusual Explosion, by Floyd E. Rowland. Digest of Pharmacopoeial Changes. Abstracts, conducted by Professor Diekman. Benzoic Acid, Adulterated. Information Bureau, conducted by Professor Arny. Alumni News. Subscription Single Copies	
Per Year \$1 20 cents address all communications	
Per Year \$1 20 cents	

Che new York College of Pharmacy

Columbia Aniversity

The 87th Annual Term of Instruction of this College,

Open to Men and Momen,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

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CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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SEPTEMBER 1916.

Number 9.



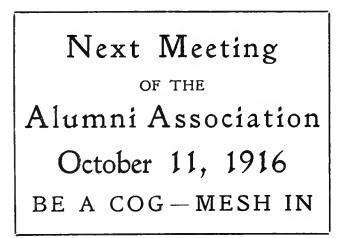
EVENING COURSES.

On pages 197 and 198 will be found the announcement of the various evening courses to be given at the college this winter.

The courses have been rearranged so that any one desiring may attend in more than one department, as they are being given on three different evenings instead of all on the same as obtained last year.

We feel that the method of

instruction should appeal particularly to many of our former graduates who might wish to increase their knowledge in any of the several fields.



THE KINGDOM OF LIGHT.*

It is our good fortune that there are in America men who do not permit the pressure of public service or of private business wholly to separate them from the intellectual life. About a quarter of a century ago, a group of such men made a visit to a farm near Phantom Lake in Wisconsin. The attraction of the lake proved so alluring and the occasion so enjoyable that the visit was repeated year after year. At each of these annual reunions some one of the company read a paper for the inspiration and to the delight of his associates. Some twenty years ago an eloquent and scholarly leader of the American bar, who was weighted heavily with professional responsibilities and who constantly rendered notable public service, took as the subject for one of these Phantom Club papers the Kingdom of Light. The little-known essay which he then read is a priceless contribution to American literature. Like the almost equally unknown essay of John J. Ingalls on the Blue Grass, it makes a sincere, a power ful and a gracious expression of what is best and most natural in the thought of the unspoiled American.

The Kingdom of Light, as the writer of that paper described it, is an invisible commonwealth which outlives the storms of ages. It is a state whose armaments are thoughts, whose weapons are ideas. and whose trophies are the pages of the world's great masters. Toward this kingdom the steps of his associates were directed with subtly guiding thought and with singularly beautiful expression.

Today a company of young men and young women, numbered by hundreds

and almost by thousands, is about to march out from this great fortress of the mind and soul to undertake the invasion and the conquest of life. I beg of you in that march to turn your footsteps constantly and untiringly toward the Kingdom of Light. The world abounds in great cities, in broad plains, in rich. mines, in ample opportunities for what we call personal and professional success; but all these are as Dead Sea fruit, if we have not found our way, each one of us, into the Kingdom of It is doubly hard just now to Light. seek the protection and the seclusion of that kingdom. The world is roaring round about us; the noise and the darkness of the great tempest fill our ears and blind our eyes. It needs patience, it needs courage, it needs real character, at such a time even to remember that there is a Kingdom of Light and that we wish to possess it.

Every possible excuse is always ready to offer itself for leaving undone those things that ought to be done. Lack of time, pressure of practical life, the needs of the moment, are all urged as reasons why we cannot make our way to the Kingdom of Light and enjoy it as we should like to do. After granting all that may be justly claimed for lack of time, after granting all that may be urged on behalf of the practical needs of the moment, it remains true that the man who allows his mental and spiritual nature to stagnate and to decay does not do so from lack of time or from the pressure of other things, but from lack of inclination. To enter into the King-Light, to live with dom of great thoughts, to enjoy the beauty of letters

^{*}The President's address to the graduating classes, Commencement, 1916.

and of art, to absorb the experience and to share the ambitions and the hopes of mankind, all this is primarily a matter of character and of will. The material obstacles that stand in the way of its accomplishment are too often sternlypresent, but they are far from insurmountable. Effort, persistent directed effort, will bring us quickly to the Kingdom of Light and keep us within its kindly governance.

The philosophers rule the world, and they have always ruled it since philosophy began. The man of action may not know what those ruling ideas and Nevertheless they are purposes are. They may there and they are ruling. be the product of a good philosophy, or they may be the product of a bad philosophy; but of some philosophy they are certainly the product. Ideas direct conduct. He who has entered into the Kingdom of Light moves easily and in friendly converse among ideas. He chooses those that he would have guide him in his daily business. At nightfall, perhaps, he retires within the quiet boundaries of this Kingdom to refresh himself anew by pondering, by weighing again those thoughts that console and those thoughts that elevate.

There is no such thing as a common, a humdrum or a sterile life, unless we make it so ourselves. "The rainbow and the rose," says my author, "will give their colors to all alike. The sense of beauty that is born in every soul pleads for permission to remain there." If we will but look for it, there is something ennobling and uplifting in every vocation to which a man can put his hand. Every activity of life has its material aspect and its spiritual aspect. It has its result in visible accomplishments, and it also has its result in invisible mindbuilding, will-building and intellectual enjoyment.

Just now we have been speaking much of a little town on the river Avon, a town which, compared with London. with Manchester, with Liverpool, is negligible in size; but we have been speaking of Stratford because the fortunes and the influence of letters are indissolubly linked with it. It is a capital city of the Kingdom of Light. It is not potent as are the cities of commerce and of capital and the homes of great popu lations: but when the rising tide of time has swept all these into the valley of forgetfulness, the capital cities of the Kingdom of Light will remain safely seated upon their high hills.

It is into this kingdom that I would have each son and daughter of Columbia enter. Its gates are many and various its high places are of different kinds and of different ages; but from them all one looks eastward to tomorrow's rising sun The purpose of performance is to pave the way for new promise; the purpose in looking back is to fix the direction of the line that guides us in moving forward. If we can but learn the lessons that the Kingdom of Light has to teach. if we can but share the enjoyment and the elevation of spirit that the Kingdom of Light has to offer, we shall be made wise and strong for new accomplishment that will bring to man new comfort, new happiness, and new satisfaction

In setting out upon this journey, you carry with you the blessing and the goodwill of the University of your choice.

NICHOLAS MURRAY BUTLER.

DAVID STRAUSS

David Strauss, a well known pharmacist of Newark, N. J., was drowned while bathing at Manasquan Beach, N J., on Saturday, August 19th.

The deceased was a member of the famous "Blizzard Class," otherwise the Class of '88, N. Y. C. P. and was a regular attendant at the annual Class reunion dinners, at the last one of which he acted as toastmaster.

David Strauss was a very active member of The New Jersey Pharmaceutical Association, having served as chairman of the Committee on Membership, Committee on Legislation and as President

He was in his forty-ninth year and conducted a prosperous business at 58 Springfield Avenue, Newark, N. J., and resided at 450 High Street. A widow and two daughters survive him.

The Board of Pharmacy of the Sta' of New Jersey, of which he had been a member for almost fifteen years, at a special meeting, adopted the following resolution:

Whereas—In His infinite wisdom Almighty God has permitted the removal from our midst of our esteemed associate and friend—

DAVID STRAUSS

PRESIDENT of "The Board of Pharmacy" of this State, THEREFORE BE IT RESOLVED, that we, his former associates of the said "Board," while bowing submissively to the will of a Divine Providence in this sad experience, desire to record our sincere appreciation of the faithful services of our worthy friend.

Mr. Strauss was deeply interested in the work of this "Board" and was even ready to render any service demanded of him in the performance of his official duties—both as the President and as a member of said "Board."

In his sudden and unexpected departure from an active career the State is thus deprived of a valued official.

Appreciating the genial quality of his nature we realize that we have lost a warm personal friend whose companionship we valued.

We extend to the bereaved family our sincere sympathy and earnestly trust that they will find much comfort in the knowledge that the efficient services and the noble life of their loved one has endeared him to an extensive circle of pharmaceutical friends who share with them a deep sense of loss.

Signed,

Lewis W. Brown, Ferdinand A. Bongartz, George M. Beringer, Jr., Edgar R. Sparks.

EVENING COURSES COLLEGE OF PHARMACY COLUMBIA UNIVERSITY

As a part of the work of Extension Teaching at Columbia University, the New York College of Pharmacy offers the following evening courses for the year 1917-17, extending from Tuesday, October 3, to Thursday, April 26, exclusive of the the holidays.

> Chemistry, Tuesday evening, 7.30 to 10.30. Pharmacy, Wednesday evening, 7.30 to 10.30. Materia Medica, Thursday evening, 7.30 to 10.30

The demand for evening instruction in all lines of University work has steadily increased for many years past in and about this city, until it now far exceeds the capacity of the several institutions that have been established to meet it. During recent years the pressure upon this College to furnish such instruction has been increasingly great. During the past year an attempt was made to meet this demand by opening laboratories for a single evening weekly, the work of the different departments proceeding synchronously. It was found that many students desired instruction in more than one department, which was not possible under that arrangement, and it was decided to enlarge the provisions of the course by devoting a separate evening to the work of each department. It was also decided to correlate this work with the regular Extension Teaching of the University.

Under this arrangement, no fixed entrance requirements are established, but it will be the duty of the instructor in charge to see that each student is properly qualified to engage in the work selected. The curriculum has been made very elastic, several different courses having been arranged in each department, in order to meet the wants of different classes. Special care has been taken to provide instruction for those whose work has no connection with pharmacy, in addition to that specially applicable to the different departments of pharmaceutical service.

Upon the completion of any course, the successful student will receive a certificate stating the value and amount of the work performed. University credit for such work will be accorded under the rules of the Department of Extension Teaching. For information on this subject, the Bulletin of that department should be consulted.

It must be clearly understood that the rules of the Education Department and of the Board of Pharmacy of this State do not permit the awarding of pharmaceutical degrees for work performed in evening courses of instruction. There are, however, hundreds of pharmacists in and about New York who, although they have passed the Board examination and secured their licenses, recognize their inability to perform many important kinds of work, such as urine analysis, testing and assaying, determining the purity of water, milk and other foods, analyzing the stomach contents, manufacturing in special lines, preparing and dispensing the newer remedies, especially those of the latest editions of the Pharmacopoeia and Formulary, employing the microscope as required in the examination of many articles. Such men, although unable to repeat the regular pharmacy course under modern conditions, can frequently arrange to devote one or more evenings per week to the pursuit of some special line of work. Special care has been taken in the arrangement of the following syllabi to meet the needs and the convenience of this class of students. In addition to the special courses here announced, classes of beginners in the work of the several departments will be organized.

The fee for any one of these courses is \$30.00. A special deposit of \$5.00 must be made in advance to cover breakage. Any

balance remaining unused at the end of the course will be refunded. Should any student exceed this amount of breakage before the close of the course, an additional deposit must be made.

COURSES OF INSTRUCTION

Department of Chemistry

The successful pursuit of any of these three courses requires a knowledge of chemistry, equivalent to that represented in the two-year course of an approved school of pharmacy.

Chemical Urinary Analysis. (Conditional on the enrolment of at least five students.) Lecture and laboratory course. 6 points. Professor Hostmann.

Instruction is given in the determination and quantitative estimation of all constituents of the urine, normal and abnormal.

Gravimetric Analysis. (Conditional on the enrolment of at least five students.) Lecture and laboratory course. 6 points. Professor Hostmann.

Instruction is given in the quantitative estimation of the constituents of mixtures by the determination of their weight.

Food and Drug Analysis. (Conditional on the enrolment of at least five students.) Lecture and laboratory course. 6 points. Professor Hostmann and Dr. Schaefer.

This course is intended to take the place of the chemical instruction in food and drug analysis heretofore given in the regular food and drug course of the College of Pharmacy, which is now discontinued.

Department of Pharmacy

Only graduates in Pharmacy or those having had equivalent experience as practicing pharmacists will be eligible to pursue any of the following three courses:

Pharmacy of the Newer Remedies. (Conditional on the enrolment of at least five students.) Lecture course, I point; laboratory course, 5 points. Professor Wimmer.

Instruction is given in the pharmacal characters and behavior of new drugs and preparations, as they are introduced into medicine, with special reference to those of the preceding year.

Pharmaceutical Manufacturing. (Conditional on the enrolment of at least five students.) Lecture course, I point: laboratory course, 5 points. Professor Wimmer.

Instruction is given in the most modern methods of manufacturing the different classes of medicinal preparations, as well as of cosmetics, insecticides, inks, photographic preparations, etc. Advanced Pharmacy. (Conditional on the enrolment of at least five students.) Lecture course, 1 point: laboratory course, 5 points. Professor Wimmer.

Instruction is given in the unusual and more different classes of problems which from time to time confront the practicing pharmacist.

Department of Materia Medica

Microscopical Analysis of Urine. (Conditional on an enrolment of at least five students.) Lecture and laboratory course, 2 points. Professor Mansfield.

Provided as a companion course to that in the chemical analysis of urine, by Professor Hostmann. Provides instruction in the physical identification of crystals, casts, blood cells and other solid contents of the urine.

In order to pursue this course with success, the student must possess some familiarity with microscopical technique. This requires a previous course in microscopical work equivalent to that of the first year of our regular College course.

Pharmacognosy, Macroscopical. (Conditional on an enrolment of at least ten students.) Lecture and laboratory courses, each 3 points. Professor Mansfield.

Instruction in the identification, valuation and selection of drugs from a study of their gross characters.

Students pursuing this course must previously have studied structural botany to the extent of the first year's work in that subject of our regular College course.

Students pursuing either of the two following courses must possess the qualifications requisite for both of the two preceding.

Pharmacognosy, Microscopical. (Conditional on an enrolment of at least ten students.) Lecture course, 2 points; laboratory course, 4 points. Professor Mansfield.

Instruction in the identification, valuation and selection of drugs, whole or powdered, from a study of their microscopical characters.

Histology of Medicinal Plants. (Conditional on an enrolment of at least ten students.) Lecture course, 2 points; laboratory course, 4 points. Professor Mansfield.

The study of the structure of drug-yielding plants by the aid of the microscope.

For further information, address the Dean of the College, 115 West 68th Street, New York, N. Y.

FROM THE LIBRARY

ADELAIDE RUDOLPH Assistant Librarian

August, being the vacation month, is an "off month" in more senses than one. To this is probably due the printer's slip in setting up "there has been mitigations" for *there have been mitigations*. (See C. U. C. P. ALUMNI JOURNAL, page 184.)

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The bindery mills were grinding, however, all this time, so that we are able to report the accession of the thirtysix newly bound volumes of The Pharmaceutical Era. Also we have received the three already published volumes of the A. Ph. A. Year Book, and last, but not least, a copy of the new U. S. Pharmacopoeia, ninth revision.

H

As our appeals in the Book Exchange Column, and also in the August number of The Pharmaceutical Era, did not meet with any response, we have sent to the bindery those other volumes that lacked only indexes and title-pages; but we are still advertising our wants in regard to the volumes having missing numbers, giving at the same time a list of a few of the duplicates that we have on handfor exchange. The attention of readers is especially directed to the Book Exchange Column this month.

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An addition to the historical material of the Library was made by Mr. Albert A. Merritt of Poughkeepsie, N. Y. It is a list of prices current for druggists' and perfumers' glassware, manufactured by Slane & Burrell's "American Glass Company, No. 8 Platt St., New York." Though undated, Mr. Merritt thinks it belongs to the year 1851, because he found it among some old papers of that date.

The conclusion of Professor Arny's letter of thanks to Mr. Merritt is worth quoting, as a concise expression of the Library's sentiments and ambitions in regard to such material:

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"We are desirous of making a collection of just such historical matter, and hope that if you run across other things of the sort—price lists or old books you will kindly remember us."

H

Library hours, from 10 a. m. to 2 p. m., and from 3 to 5 afternoons, except on Saturdays.

A.

A FACT AS TO EDITORS.

On rainy days, and also on other occasions which are not unconnected with the postman's visits, we find the whole of a truth in this from the Thomasville (Ga.) "Times":

If you see an editor who pleases everybody, there will be a glass plate over his face and he will not be standing up.

BOOK EXCHANGE COLUMN.

Wanted.

Pharmaceutical Era-

v. 19 (1898), No. 1 (Jan. 6th).

v. 38 (1907), No. 19 (Nov. 7th).

Pharmaceutische Centralhalle-

v. 5 (1864), No. 7.

v. 7 (1866).

- v. 11 (1870), Nos. 2-23, 28, 36-39, 42, 44-45.
- v. 12 (1871), Nos. 6, 8, 24, 35.
- v. 37 (1896), Nos. 1, 8, 18, 22, 26, 27, 32, 39, 43, 49.
- v. 53 (1912), Nos. 1-4, 7-11, 13, 16-18, 20-22, 24, 26, 28, 32, 35, 36, 44-46, 52 and index.
- v. 54 (1913), Nos. 5-6, 9-12, 16, 49-51.

Duplicates for Exchange.

Pharmaceutical Journal (Lond.)—

- Ser. 3, v. 4 (1873-74)--v. 10 (1879-80) [7 bd. vols.].
- Ser. 3, v. 21 (1890-91)—v. 23 (1892-93) [7 bd. vols.].
- Ser. 4, v. 1 (July-Dec., 1895)—v. 9 (July-Dec., 1899) [9 bd. vols.].
- Ser. 4, v. 13 (July-Dec., 1901); v. 15 (July-Dec., 1902)—v. 21 (July-Dec., 1905) [8 bd. vols.].
- Ser. 4, v. 23 (July-Dec., 1906); v. 26 (Jan.-June, 1908)—v. 28 (Jan.-June, 1909) [4 bd. vols.].

Other lists of duplicates for exchange will be given in succeeding numbers of the *Journal*.

AN UNUSUAL EXPLOSION IN CONNECTION WITH POTAS-SIUM CHLORATE.*

By FLOYD E. ROWLAND.

There was nothing unusual about the explosion itself, but the manner in which it occurred is well worth mentioning and bringing to the attention of all who have occasion to use pestles which have wooden handles.

Everyone knows that disaster is sure to follow when potassium chlorate and sulphur are ground together: but to have a perfectly clean mortar and pestle suddenly explode with great violence, when one is grinding an inert substance like pumice stone, makes one pause and wonder why.

A pestle and an 8-inch mortar were thoroughly cleaned and about fifteen pounds of potassium chlorate were ground with no disastrous results. The mortar and pestle were washed and dried. A few days later some crushed pumice stone was required in the laboratory and the same mortar and pestle were used. A loud explosion resulted. The mortar and pestle were broken into many pieces and thrown violently about the room. One piece passed through a window scarcely shattering the glass. The room was filled with sulphur dioxide and fine particles of sulphur were scattered over the floor and table.

An examination of the pieces of the mortar showed no traces of sulphur, but quite large quantities of sulphur were found adhering to the fragments of the pestle. The wooden handle of this pestle had been sealed into the ball part with

^{*}Jour. Ind. and Eng. Chem.

sulphur. Evidently a small amount of the potassium chlorate worked into the crevice with the sulphur and caused it to explode when given a sudden jar. An examination of the other pestles of the same type showed them to contain as much as 10 to 20 grammes of sulphur.

This explosion might have been more disastrous had not the mortar been used at this time for grinding the pumice stone, as, in a few days it would have been used again to pulverize more potassium chlorate, and with the excess chlorate the explosion would have been more violent.

It certainly is not generally known that the handles of these pestles are sealed in with sulphur, for if it were they would never be permitted in the laboratory.

The pestle was of German make and whether or not they still employ sulphur for this purpose is difficult to say. If any companies in this country are using sulphur for this purpose they should substitute in its place some inert cement. Laboratories should bar the use of this type of pestle until the sulphur has been replaced by some safe material.

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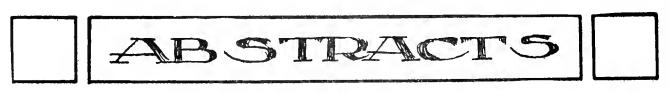
THE MULFORD COMPANY IS-SUES DIGEST OF U. S. P. CHANGES.

In order to show the busy pharmacist at a glance the important changes which have been made in the 9th Revision of the U. S. Pharmacopœia and to have this information on hand for ready reference, the H. K. Mulford Company of Philadelphia has prepared a list of the important pharmaceutical changes on a convenient card which can be posted in a conspicuous place in the prescription laboratory. This list is arranged in four columns and divided into chemicals, drugs and preparations. Each pharmacopoeial substance which has had its standard changed is placed under one of these three headings and in the three adjoining columns the following information is given:

> The 8th Revision Standard, The 9th Revision Standard, Remarks on the Changes.

Thus, for instance, if one desired to know whether there had been any change in the standard for Extract of Nux Vomica it would only be necessary to look under the heading of preparations, the sub-heading extracts, and then look for Nux Vomica in the regular alphabetical order. The information there given is that according to the U.S.P. 8th Revision Extract of Nux Vomica contained 5% strychnine. According to the U. S. P. 9th Revision the same extract contains from 15.2 to 16.8% alkaloids from Nux Vomica. The remarks on the change are "standard now refers to total alkaloids and limits are given."

Of course, this list is for quick reference only and full information must be sought in the Pharmacopoeia itself. However, it is hoped that pharmacists generally will find such a ready reference of important changes 'both time saving and convenient. On the back of this card are printed the pharmacopoeial additions, deletions, and a list of changes of official Latin and English titles. Any one desiring this card can secure the same on application to the Philadelphia Office of the H. K. Mulford Company.



Conducted by Prof. George C. Diekman.

Sterilin.

Under this title Dr. Ad. Silberstein and James Coleman have marketed a preparation said to be a substitute for rubber gloves. The article is fully described in Ztralblt. f. Chirurgia, 1916, 1., and is claimed to fully replace the rubber article, which owing the scant supply of pure rubber, is practically unob-Sterilin is marketed in the tainable. form of a viscid liquid, with which the hands are coated. After vaporization of the solvent, a hard, elastic, transparent coating is left behind, which is not affected by contact with oils, benzine, diluted acids, sublimate solutions, pus or blood. Antiseptic as well as medicinal agents may be incorporated with sterilin without impairment of value. The coating may readily be removed by application of a liquid furnished by the manufacturers or by use of acetone. Experiments conducted in the municipal laboratories of Berlin, have demonstrated the fact that the coating of sterilin is impervious to bacteria.

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Quantitative Estimation of Morphine.

Debourdeaux, in *Journ. Pharm. et Chim.*, calls attention to the fact that the presence of alcohol, starchy and other substances in extracts, powders etc., will materially influence the correctness of the results obtained. He states that in order to completely precipitate morphine by means of the lime method a

larger quantity of this will be required, if the liquid has not been previously freed from alcohol. In a mixture containing starch besides the alkaloid, the former will retard the complete precipitation of the latter by means of an alkali, and for this reason starch should first be removed. He also calls attention that temperature errors are least between 15° and 18° C., and recommends that operations be conducted uniformly at a temperature of 15° C.

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Source of Siam Benzoin.

According to the investigations of E. M. Holmes, in Pharm Journ., its source is Styrax Tonkinense, Craib. The plant is found to grow in the territory between Luang Probang and Hanoi. He further states that Styrax benzoides, found in northwestern Siam, yields an aromatic resin, which is used chiefly by the natives, and is not generally found in commerce. Saigon benzoin, which only recently has found its way to the English market, possesses a vanilla-like odor, similar to that of Siam benzoin, and is free from cinnammic acid. Holmes inclines to the belief that its source is the Styrax Tonkinense. Its rough exterior and its general appearance reminds one of Sumatra benzoin. From Indo-China, only one member of the family yielding benzoin, namely, the Styrax agresta, is contributed. Holmes states that he does not know whether or not benzoin from this source reaches the markets.

Alarm. An insecticide marketed in the form of pencils consisting of a mixture of soap, fats and insecticidal drugs.

Albertol is an artificial resin used as a substitute for mastisol in surgical work It is also marketed in solution.

Antagran is an expensive proprietary remedy recommended in the treatment of gout, lumbago, etc. According to Mannich, Apoteker Zeitung, 1915 517, Antagran I is a 0.24 per cent. solution of salicylic acid in spirit of camphor prepared from synthetic camphor. Antagran II is said to be a 0.036 per cent solution of ammonia in chloroform.

Antipol is an ointment said to contain dichlorbenzol "afga" and is used as a parasiticide.

Benegran, used for dressing wounds, has the appearance of wax. It melts at 40° C and is then applied with a brush It is also marketed in combination with dermatol, resorcinol or hamamelis.

Feldgran is a liquid parasiticide containing anisol, formaldehyde, oil of anise and oil of fennel.

Gelopol. Capsules containing "Gelodurat" and phenylcinchonic acid. One to three capsules after meals in the treatment of gout.

Granugenol. A preparation said to assist granulation when applied to wounds and prevent adhesion of dressings. Said to be a mineral oil.

Kresol-puder is a mixture of tricresol (3 per cent.), talcum, magnesium oxide and kaolin used as a parasiticide.

Nervagenin or Compound Elixir of Valerian is made from fresh valerian root and contains about 0.1 gramme sodium diethylbarbiturate to each tablespoonful. It is recommended as a sedative and hypnotic.

Laktosan is a white, farina-like powder, possessing an agreeable taste. It is claimed to contain various ferments in stable form and is recommended in the treatment of glycosuria, and various disorders of the stomach, intestines and bladder.

Plagin. This parasiticide is a mixture of powdered anise seed, chalk and sodium silico-fluoride. The use thereof having caused many cases of severe irritation, its sale has been forbidden by the authorities of several communities.

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Office of Information, U. S. Dept. of Agriculture.

FIND BENZOIC ACID ADUL-TERATED.

Admittance of Adulterated Chemical Into the United States Refused.

Washington, D. C .- Recent examinations by the chemists engaged in the enforcement of the Food and Drugs Act of shipments of benzoic acid offered for entry into the United States have revealed that much of it is adulterated with boric acid. This adulteration is probably due to the high price which benzoic acid now commands owing to its scarcity. It is quoted at about eleven dollars per pound, while the price of high grade boric acid is only twenty to twenty-five cents per pound. As some of the shipments of benzoic acid have been found to contain as much as thirty per cent. boric acid, the enormous profit in this form of adulteration is apparent.

The officials in charge of the enforcement of the Food and Drugs Act are of the opinion that benzoic acid containing boric acid is adulterated, and that shipments of such a mixture offered for entry into the United States should be denied admission under the Food and Drugs Act.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

I. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. JEANNOT HOSTMANN, Queries.

ANSWERS TO QUERIES.

Dimethyl-para-amido-benzaldehyde —J. H. K., New York. This chemical is described in Beilstein and also in Schultz-Julius-Green's Organic Coloring Matters as one of the "intermediates," that is, an organic chemical not used as a dye itself, but essential in the preparation of other dye-stuffs. Nothing could be found in the literature as to its use as a medicine although it is now employed as a reagent (in hydrochloric acid solution) for the detection of bile pigments and of indican in the urine.

Liquor Quininae Ammoniatus.—K. A. S., New York. The following recipe for this preparation is taken from Squire's Pharmacopoeia of the London Hospitals.

Quinine Sulphate 24 grains Stronger ammonia water 4 drachms Alcohol, enough to make 3 fluid ounces Mix.

Zinnkraut.—J. S., New York.—According to Hager, zinnkraut is the familiar German name for Scouring rush, or *herba equiseti*, which represents the plant, Equisetum himale. It is popular as a diuretic.

Liquor Aluminii Acetici.—J. M. L., New York, wishes the recipe for solution of aluminum acetate of the fifth edition of the German Pharmacopoeia This recipe, which is practically the same as that now given in the fourth edition of the National Formulary, is as follows:

Aluminum sulphate	100 parts
Calcium carbonate	46 parts
Diluted acetic acid (30%)	120 parts
Water	enough

Dissolve the aluminum sulphate in 270 parts of water, without the employment of heat, then filter and dilute filtrate with water until it has the specific gravity To this clear fluid, add calcium 1.152. carbonate rubbed to a paste with 60 Then slowly add the parts of water. acetic acid, let the mixture remain in an open vessel until no more gas is evolved, stirring from time to time. Finally decant the clear fluid from the calcium sulphate precipitate, filter the decanted liquid and dilute with water to the specific gravity, 1.044 to 1.048.

Compound Syrup of Cocillana.--J R. T., Illinois.-The only item we find in the literature concerning this prescription is a statement found in The Extra Pharmacopeia that each fluid drachm contains 5 minims of tincture cocillana, 15 minims of tincture of Euphorbia pilulifera, 15 minims of syrup of wild lettuce. 3 minims of compound syrup of squill, I grain of cascarin, 1-24 grain of herom hydrochloride and 1-100 grain of menthol. In passing it is interesting to note that cocillana is one of the drugs introduced into this country and Europe by our own Dr. Rusby and that its botanical name is Guarea Rusbyi.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters, a lawyer should be consulted.

Syrupus Ferri Phosphatis Compositus.—S. K. G., New York.—The name just given is the title used in the British Pharmaceutical Codex for the wellknown product, chemical food or Parrish's syrup. As the recipe given in the Codex is different from that of the National Formulary, it is abstracted below: Dissolve 0.43 gm. of iron wire in a mixture of 5 mil of concentrated phosphoric acid and 3 mils of distilled water. Cool the solution and add to it a mixture of 1.36 gm. of precipitated calcium carbonate with .5 mils of phosphoric acid and 10 mils of distilled water; then add 0.1 gm. of potassium bicarbonate and 0.1 gm. of sodium phosphate, filter and set aside. Next boil 0.34 gm. of cochineal in 37.5 mils of distilled water, filter and wash until 35 mils of filtrate are obtained. In this filtrate dissolve 70 gm. of sugar by aid of heat, strain and cool; then add the iron solution and 5 mils of stronger orange flower water and lastly enough distilled water to make 100 mils.

For the purpose of comparison, we will summarize the recipes of the third and of the fourth (the new) editions of the National Formulary.

N. F. III directs that 35 gm. of precipitated calcium carbonate be triturated with 4 gm. of potassium bicarbonate and 4 gm. of sodium bicarbonate, with 82 gm. of citric acid, 375 mils of glycerin, 125 mils of orange flower water and with 70 gm. of phosphoric acid (85%); the latter chemical being added gradually and the mixture being stirred until solution is effected. To this solution is added a solution of 17.5 gm. of soluble ferric phosphate and 17.5 gm. of ammonium phosphate in 250 mils of hot water. Sugar is then dissolved in the mixed

liquid, tincture of cudbear is added as color and lastly enough water is added to make one liter of syrup.

N. F. IV directs that the preparation, which is given the official title of compound syrup of phosphates be made by mixing 500 mils of stronger compound solution of phosphates with tincture of cudbear, glycerin and enough syrup to make 1 liter. The stronger compound solution of phosphates is made by triturating together precipitated calcium carbonate, potassium and sodium bicarbonates, citric acid, glycerin, orange flower water and phosphoric acid and mixing the resulting fluid with a solution of ferric phosphate and ammonium phosphate in hot water. Barring the glycerin (375 mils) and the phosphoric acid (140 mils) the quantity of the chemicals mentioned above directed for making one liter of the official stronger compound solution is just twice that directed in making the syrup of N. F. This is to be expected, since 500 III. mils of the stronger compound solution is used in making I liter of the syrup of N. F. IV, and which therefore has approximately the same composition as that of the former edition.

The Composition of Proprietary Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by chemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda of Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Eschbach's Reagent.—E. F. S., New York.—While several modified recipes for this well-known diagnostic fluid are found in the literature, the usual one calls for the dissolving of 10 gm. of picric acid and 20 gm. of citric acid in I liter of water. It should be noted that picric acid sometimes causes irritation of the skin, hence care must be taken in manipulating it during the manufacture of the solution.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

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Totopan is a mixture of the combined alkaloids of opium, in accordance with a formula of Prof. van der Wielen.

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

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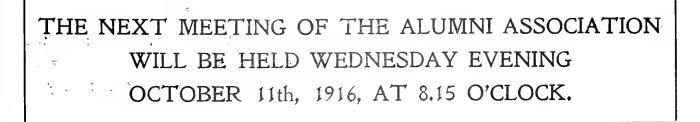
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Term expires 1919	$\begin{cases} C. W \\ EDW \\ F. N \end{cases}$	'. Ballard in C. Steinach . Pond

Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.



We wish to extend our heartiest congratulations to Frank Louis Hunt, Ph C. '11 and Phar. D., '12, chemist for the Norwich Pharmacal Company. He "has gone and done it."

MR. FRANK LOUIS HUNT and MISS FLORENCE BUCHARD announce their marriage on Thursday, the twenty-fourth of August, nineteen hundred and sixteen

at Emmanuel Episcopal Church, Norwich, New York.

Of course, it is needless to add that the same felicitations are extended to Mrs. Hunt by his many friends.

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Quite a few changes, improvements and additions have been made during the "closed season" at the College.

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In the office we find a new Underwood Duplicator with which, from now on, the 'Test' sheets will be "ground out" for the students. We feel certain that they will all appreciate this.

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Five hundred steel lockers have been placed in position and these will prove to be a great convenience to the student body.

The Department of Analytical Chemistry now boasts of a new "Becker Chainomatic Balance," while the Department of Chemistry, in view of the inclusion of electrolytic assay methods in U. S. P. IX, is installing the apparatus needed therefor. In the Library, we find two very pretty jardinieres which will undoubtedly be graced with the necessary plants before the term opens. They rather shame the table reserved for the visitors' book. A little bird whispered to Miss Rudolph "mayhaps, someday, we will have a real desk for that nice book and those nice jardinieres."

Louis Weiss, '13, C. U. C. P., has recently organized a new branch of the Modern Woodmen of America in New York City. A number of his former classmates have already joined, and he calls on all C. U. C. P. boys who are desirous of becoming members of the largest fraternal and beneficial organization in the United States to address him for further information at 2479 7th Avenue, New York City.

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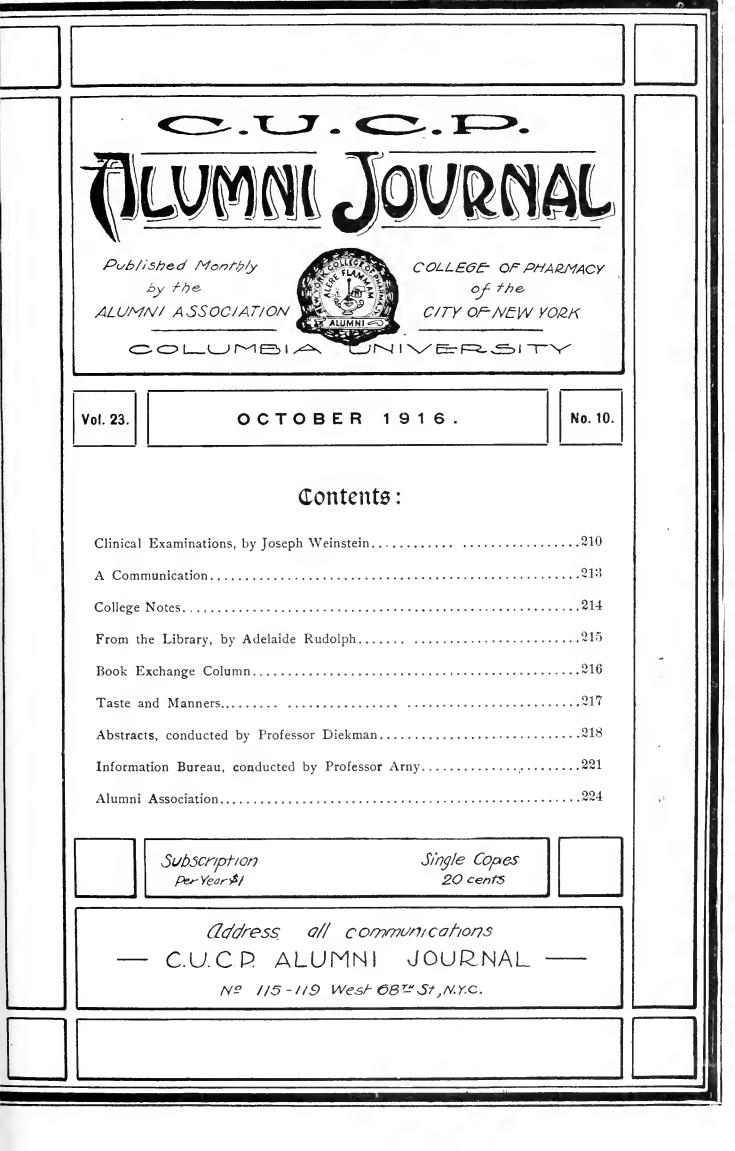
The following C. U. C. P. men have already joined: S. Weinstein, '13; L. Tulchin, '16; M. Bedrick, '12; A. Wagner, '13; S. Chanowitz, '13; A. H. Kramer, '13; E. Windt, '13, and L. Weiss, '13.

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Renato Corti, 1917, who was on the Mexican Border with the 71st Regiment, N. Y. N. G., has obtained a leave of absence to enable him to attend College.

If you want any back numbers of the ALUMNI JOURNAL, to complete your files, order them now, as the supply is limited.

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Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Momen,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

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JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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Number 10.



CLINICAL EXAMINATIONS BY PHARMACISTS.

How can the pharmacist increase the revenue derived from his business without degenerating into a seller of collars, cuffs, alarm-clocks, etc.?

This query was answered by our friend, Doctor Joseph Weinstein in his address as Chairman of the Section of Practical Pharmacy and Dispensing at the 1916 meeting of the A. PH. A. (see page 210).

Many pharmacists, equipped for "clinical examinations," have built up a very lucrative clientele among physicians, in fact, we know of one establishment where four men are kept busy all year doing nothing but this kind of work.

Then again, we have heard it said that this kind of work was not for the pharmacist—that he should limit his activities to preparation and sale of the necessary reagents for the specially trained clinical pathologist doing such work.

We can see no reason why any pharmacist possessing the training suggested by Doctor Weinstein should not be able to intelligently analyse urine.

If any of our readers disagree we would consider it a favor if they made use of the pages of the C. U. C. P. ALUMNI JOURNAL to voice their opinions.

CLINICAL EXAMINATIONS BY PHARMACISTS WIDENING THE SCOPE OF PRACTICAL PHARMACY

By JOSEPH WEINSTEIN, N. Y. C. P. '06.

The paper here printed was read at the Atlantic City Convention of the American Pharmaceutical Association by Doctor Weinstein as Chairman of the Section on Practical Pharmacy and Dispensing. We feel that many a "doubter" as to the professional future of pharmacy will, after carefully reading the article, become convinced that there is something better in store for the pharmacist of the future than the selling of sandwiches and alarm-clocks.

Within the last decade great changes have taken place in medicine and pharmacy. You all know the tremendous progress made in the field of medicine. Has pharmacy kept pace with the advances made by its sister profession? When I speak of pharmacy I have in mind not theoretical pharmacy, not the science of pharmacy proper, which, as we all know, is making great steps forward, but the practice of pharmacy, its functions and its use by the pharmacist as a profession and as a means of earning a livelihood. With the ever increasing competition and in the face of the difficulties to make his pharmacy pay, the practical pharmacist, in attempting to imitate business methods of other merchants, oftentimes brings pharmacy down to a condition of "practically no pharmacy." He branches out into side lines that distract his attention from pharmacy proper. When we glance at the show windows of the modern drug store and look at the display of alarm clocks, kodaks, cigars, candies, stationery, school supplies, souvenirs, hardware and even fruits, we are scarcely aware that we are passing a drug store, if it were not for the colored globes, and even that mark of identification is now discarded by the chain stores.

I will not question the propriety of handling side lines of general merchandise from the point of view of the professional pharmacist. In my opinion it is perfectly legitimate to sell in a drug store everything the public calls for, provided the business is conducted in a dignified manner and not to the exclusion of real pharmacy. Especially is it true of the useful lines of goods that have proven well their compatibility with the stock of the pharmacist of the past as well as with that of his present day successor, such as perfumes, soaps, toilet waters, rubber goods, sponges, brushes and the like. But, are all side lines a profitable business venture? After a careful study of the question we will find that while side lines were profitable sellers in former years, the number of articles that are selling now with reasonable returns is rapidly decreasing. The financial condition of the average pharmacist is such as not to permit him to carry a large stock of the daily increasing variety of goods, hence he can make no attractive displays, can offer no assortment of goods to choose from and has

no complete lines. The result is that this business of his is being gradually undermined by the special stores, the department stores and the chain stores, the giant druggists, who, with their unlimited capital, with their tremendous purchasing power and their up-to-date business methods, are monopolizing commercial pharmacy and threatening the very existence of the small druggists. This is especially true in our large cities.

The problem we are today confronted with is: What can be offered to the practical pharmacist in lieu of the unprofitable side lines? As an elevating professional and lucrative succedaneum I beg to suggest clinical laboratory work, a field closely related to the pharmacist's profession, a scientific side line that brings both additional revenue and considerable prestige.

I shall endeavor briefly to illustrate that there is a demand for the work and that the pharmacist is both fit and equipped to perform such work.

The modern practitioner of medicine, unlike his predecessor, in order to make a diagnosis is not satisfied merely with the feeling of his patient's pulse and looking at his tongue. He has now other means for the purpose of making a correct diagnosis aside from the physical examination and the symptoms of the patient, and that is by examining his vital fluids, his excretions and secretions. A physician today can no more practice medicine successfully and properly diagdiseases without first applying nose clinical tests than a surgeon can operate without the necessary instruments. At present the physician makes part of the examination himself and sends part of the work to the commercial laboratory, if there happens to be any in his vicinity. The time is not far distant when the physician who has neither the time nor the facilities and proper technique to do the work hin/self, will be but too glad to place it in the hands of one who is competent to perform it, and that one is logically nobody else but the pharmacist.

We must not lose sight of the fact that originally the physician was his own dispenser. Both medicine and pharmacy belonged, so to speak, to one person. until the two subjects, were gradually divided into distinctly separate professions. The right and title to diagnose and treat diseases belongs to the physician, and the pharmacist has indisputable claims on the preparing and dispensing of the medicines prescribed by the for-These claims on the part of the mer. pharmacist should be extended further. so as to embrace the new field of clinical and bacteriological work, for, if in order to do justice to his patient, the physician had to relegate the dispensing of medicine to the pharmacist, he will certainly, for the same reasons, have to turn over his clinical work to the one who can perform it better than himself. The pharmacist has been the helpmate of the physician as his dispenser, now let him become also his clinical laboratory chemist and be as ready to engage in that line of work as he is now equipped to do prescription work.

It is evident that this work comes within the domain of practical pharmacy. for if it were foreign to the calling of the pharmacist, a chapter on diagnostic reagents should have no place in the pharmacopœia. These reagents were not put there by the revision committee as an ornament, but for the use of the pharmacist, who by virtue of his close association with the physician and his

knowledge of the use of test tubes, burettes and reagents can make good use of them, is best fit to pursue the work and to advance with it.

The chemistry he is taught in the college of pharmacy should be of great help to him. Most of the colleges give him the necessary training by teaching chemical and microscopical examination of urine, milk, etc. Some also have a fair course in bacteriology.

But, to become fully able to handle all the work expected of a first class clinical laboratory, the pharmacist would have to broaden the scope of his knowledge by taking special courses in clinical pathology and bacteriology. There is no reason whatsoever why every pharmacist should not begin to work with urine analysis, which constitutes fully 90 per cent. of the work in the average laboratory. He can creditably perform the examination of urine with the utensils and reagents that should be found in a properly equipped pharmacy, with but a small addition of a few apparatus and chemicals specially employed in urinary work, which would necessitate a trifling outlay of money. The only relatively expensive item is the microscope, but the investment would show good returns in a very short time.

Beginning with urine analysis, by constant application and with the aid of literature on the various subjects, one becomes interested in the work, acquires experience and technical knowledge and can gradually take up the examinations of blood, sputum, smears, cultures, gastric contents, milk and so on. Nearly all the work, with the exception of complement fixation tests and autogenous vaccines, could be mastered in a reason-

ably short time and carried out successfully in the drug store.

It is to be expected also that our schools of pharmacy will eventually realize the situation and, governed by the law of supply and demand, will include in their curricula full courses in clinical pathology and bacteriology.

The manner in which the work can be carried on and developed depends largely upon location, environments and the ability of the pharmacist. Some may use it as an adjunct to their prescription department, others, especially in the large cities, may make a specialty of it. Whichever course is followed, the results will always be gratifying.

It is needless to enlarge upon the moral effect that this line of work will have in raising the professional standing of the pharmacist, both in the eyes of the public and in the estimation of the physician. He will be looked upon by the public as a scientific man, when called upon to make a puncture in a finger for a drop of blood to be examined; he is certainly not considered so when he hands out a package of razor blades or a glass of ice cream As to the physician, he will cersoda. tainly be more than pleased to learn that the pharmacist has entered that field of He will hail the new order of work. things with delight and satisfaction, when he will be able to send to the drug store in the evening a throat culture and ascertain early next morning by telephone whether it is a case of diphtheria or not. At times some clinical data are wanted while the patient is undergoing an examination, and what will be more gratifying to the physician than to know that the pharmacist downstairs can be

relied upon for a quick report on a blood count or a smear examination, while he is waiting at the bedside of the patient. Through this work the pharmacist and the physician will be in constant communication with each other. The physician will cease to look condescendingly upon the pharmacist as a plain dealer in drugs with some quasi-professional pretentions, but will consider him a man of equal professional standing, whom he can consult on matters pertaining to medicine; particularly on clinical diagnosis.

What a Student Thinks of the C. U. C. P. Alumni Journal.

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New York, September 6, 1916.

TO THE EDITOR OF THE C. U. C. P. ALUMNI JOURNAL:

You will pardon me for this long letter, for I have to express my appreciation of your splendid work in building up the good name and significance of the "Alumni Journal."

If you remember, at the time I subscribed for it, I did so, because the first issue in your editorship won my liking. You promised some new improvements then, which were to come in the following months.

Since that time nine months passed, you fulfilled your promises and I read every new issue of the Journal with growing interest.

I love this paper and it always struck me strange when I found that some of my fellow students did not show the same interest in subscribing for or reading the same.

As a true friend of the Journal, I investigated for the reasons and found that in the majority of cases they really did not know what the "Alumni Journal" means to the student, to the alumni and to the institution as a social organization; they didn't know what it means to be seientifically and literary, an adherent part of their Alma Mater; they didn't know in most of the cases what valuable information they missed by not reading the Journal (about the A. Ph. A. organization, Hager; Dr. Ballard's most interesting article, Mr. Hynson's talk about commercial Phey., etc.). In one word, they didn't know how valuable is the Journal in itself, and they didn't know all these, because they were not told in words about these. The Journal was not advertised well among the students.

This is a very true statement.

And this must be remedied.

For the Journal has such a purpose, which needs publicity. And it needs it in such a large measure that anybody, who takes interest in its progress, must see.

In Europe an Alumni Journal is the forum; it is the connective between the profession, the college and the evercoming fresh element; it is a social training for those who need it; it is a general information bureau; it is an employment office; it is the tribunal in every ease.

I admit that it cannot serve in general as many purposes here for the simple matter that the profession is not entire yet on the main questions of education and pharmaceutical legislation. Nevertheless it can serve all these purposes toward its members or its readers. And I cannot find words to express *all* I hope from a strong Alumni Association brought together and held in one bunch by a proper Journal which cares for the ethics in pharmacy as well as for commercial development.

For instance, the main problem of the profession is the standardization of education and with it in connection the elimination of uneducated helps in standardized pharmacies. This goal can only be reached by a strong professional body composed of graduates in pharmacy, united for the purpose of improving the ethics and restoring the old glory of pharmacy, when it was spoken of yet as custodian of health and sciences. To do this they must show a marked supremacy in knowledge and business abilities above those who did not have a college training. This is the purpose where the alumni association comes handy to those who have hardships in going on a straight line, who need encouragement, who need a true adviser and an able friend. A strong alumni association is not only the backbone of this helpless body of starting drug clerks, but it is the outside fame of the college, it is the rainbow, the colors of which represent the composition and value of the education given in that college.

In building up a strong alumni association, the Journal is the most potent factor, but only then, when its seeds of good advisers fall into the fertile soil in the heart of the first year student. If the start is right, the end is always promising.

I see the good intention and extreme effort of the Journal in this regard. I appreciate its work and it is not introdesty but true friendship when I give a few suggestions as to how to enlarge the number of subscribers among the students, especially among the first year students.

First, by repeated advertising through the faculty and able members of the other elasses a considerably larger number of subscribers may be secured.

Second, if in every issue one or more articles are inserted from the teachers in the different

departments about general interesting subjects, the students will be obliged to secure these valuable copies for future reference (but they must be told with words about these).

Lastly, the fraternities themselves must undertake the issue and co-operate with the Journal. They must use the Journal openly in their general undertakings and in their special business also.

If all these factors are working, the social feeling, the get-together-habit will be greater in the student and will last longer and the alumni association grows bigger and proportionately better and the undertakings of the college itself have a much greater support and the ideal problems of pharmaceutical ethics may be carried out.

You may think that I am an incurable Idealist. I have to confess that I am. I always believe in betterment and I never give up hope. I hope that much from your Journal if spread among the students, and I will take up a part of this work myself to prove that in the coming year.

Let me thank you again for your splendid work in the Journal and for your kindness in reading my letter and remain,

Yours very truly,

JOHN VARGA, 1299 2d Ave., City.

COLLEGE NOTES.

On the recommendation of the Dean and the Committee on Instruction, it has been decided that hereafter the Honou Roll of the graduating class be composed of all students who secure a general average of 85 per cent. or over at the final examinations and that a special gold seal bearing the inscription "with honor" be affixed to the diplomas of those earning this distinction, in addition to the regular College seal.

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The following gentlemen have recently been elected to membership in the College: M. J. Averbeck, Julius Belfort, Martin Goulko, Joseph Maisel, George Niemann, George Oberdorfer, William F. Parker, Vito A. Pittaro, Joseph C. Prote, Harrison E. Purdy, Otto Regnault, William Schaaf, H. A Stebbins, Eugene J. Ward, Arthur F H. Watling, Rudolph Wirth. At the October meeting of the Board of Trustees, the following students were declared to be Graduates in Pharmacy of this College: Miss Jennie Baum, Messrs. J. B. Amedeo, Anthony Bankert, Humbert DeSantis, George H. Dow sey, Isadore Egerman, Valentine C. Geist, Simon Hanellin, Isidore Lattman, Irving J. Levinson, William M Levitt, Isidore Levy, Irwin M. Maer, John S. Marsho, Robert Maselli, Edward A. Pape, Joseph L. Pinck, Paul B. Rhodes, Joseph Smith, Philip Sobel. Carmine A. Sposta, Clement Tarallo, Rudolph Weiss, E. May.

The Enrollment in the various courses for the present session is as follows: Graduate in Pharmacy Course: first year, 240; second year 188. Pharmaceutical Chemist Course: first year, 17; second year, 19; third year, 18. Bachelor of Science Course, 2. Summer Course students, 34. Special students, 6. Evening Courses, 37.

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At the October meeting of the New York College of Pharmacy, held on the evening of the 17th, reports of the chairmen of the delegations to the various pharamaceutical conventions were presented.

The auditing committee, through its chairman Mr. Adolph Henning, presented its report for the fiscal year ending July 1, 1916.

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While the portrait of John Oehler was thrown upon the screen, Dr. George C. Diekman read a very beautiful and impressive testimonial to his memory, at the close of which the meeting rose out of respect and in loving memory of him who had passed away.

FROM THE LIBRARY

ADELAIDE RUDOLPH Assistant Librarian

Those members of the alumni who read the library notes will be interested to know that seventy-seven bound volumes have been added during the past month. This number includes the fiftyfour volumes of The Pharmaceutical Era and the Pharmaceutische Centralhalle that have recently been put into shape and returned from the bindery. Eighteen of the seventy-seven are volumes of the Chemisches Central-Blatt, which have arrived from Germany after a long and eventful journey, having started at the beginning of the war, to replace an unsightly collection of imperfect, unbound volumes. The remaining six include a volume of the Pharmaceutische Zeitung from the bindery, Hudder's book on Indexing and Filing, New York, 1916, and four gifts: a presentation copy from Professor William Mansfield of his just published "The Histology of Medicinal Plants;" an edition de lure copy of the new Pharmacopoeia, originally presented to Professor Arny as member of the Revision Committee, and kindly re-presented by him, as librarian, to the Library; and an Andrews Latin-English and a Liddell and Scott Greek-English lexicon from the assistant librarian.

Besides these, Dean Rusby has enabled us from his own library to complete our file of the Columbia University Quarterly, from Vol. VIII, 1905-6, to date.

We beg to acknowledge also, with many thanks, "Bibliographical Contributions from the Lloyd Library," Vol. II, Nos. 10 and 11. These contain a "Bibliography Relating to Botany Exclusive of Floras" (authors I-L), by Miss Edith Wycoff, the librarian, and with their careful cataloging, are of immense interest to any one in quest of the botanical material which can be obtained in American libraries, and to those who are desirous of knowing more about the treasures of the Lloyd Library itself.

The advent of the new Pharmacopoeia has been-made the occasion for a second exhibition in the show-case of the full set of U. S. Pharmacopoeias owned by the Library. This year the different editions of the National Formulary are added to the display.

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An exhibition of this material seems so peculiarly fitting for the College of Pharmacy to make and so appropriately commemorative of the real founder of the Library, Dr. Charles Rice, that it has afforded the assistant librarian unusual pleasure to be charged with the responsibility of arranging it. For, was it not Dr. Rice's devotion to the cause, as chairman of the Revision Committee for so many years, that put this collection into shape from the beginning, and left his impress, even in its handsome bindings, and in the very words and turns of thought of the books themselves! And the early parts of the National Formulary lie spread out like an open page of autobiography, testifying to Dr. Rice's industrious, productive life, and his practical, constructive ability for making everything with which he was working count to good purpose.

To test the completeness of this collection, after having reviewed the first line, arranged with the fore-runners in the center-the reprint of Dr. Brown's Repertory (1781), the pharmacopoeias of the Massachusetts Medical Society (1808), and of the New York Hospital (1816)—flanked on the left by the Pharmacopoeia of 1820, bearing the autograph of the President (Samuel L. Mitchill, M. D.) of the first National Convention, and on the right by the presentation copy of the Ninth Revision, Prof. Arny called for the two revisions of 1830, which were published by two separate conventions-one meeting in New York and the other in Washington. These were at once produced, and placed amicably side by side. So far as appears on the surface, this was the only "serious misunderstanding" (see Hist. Introd., U. S. P., Rev. 6, 1883, p. VII) that ever occurred; and this happened while all the members still belonged to the rank of the M. D.'s. For pharmacists were not invited to the councils of the pharmacopoeial body until 1840, and took no active part until 1850.

The books included in the National Formulary line are: The New York and Brooklyn Formulary of Unofficial Preparations, ed. 2, N. Y., 1884 (Dr. Rice's own copy, interleaved, and annotated in his own handwriting); A Preliminary Draft of a National Formulary of Unofficial Preparations, Phila., 1886; the first three National Formularies of Unofficial Preparations ("first issue," 1888, "revised edition," 1896, "third edition," 1906); and the National Formulary, ed. 4, 1916.*

*The latter, just received, brings the Library "accessions list" for the month up to seventyeight bound volumes.

Library hours, from 10 a. m. to 2 p. m., and from 3 to 5 afternoons, except on Saturdays.

BOOK EXCHANGE COLUMN.

Library has for Exchange.

American Journal of Pharmacy bound volumes for 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887 (v. 43-59); 1894, 1895, 1896, 1897, 1898, 1899 (v. 66-71); 1902 (v. 74); and one or more Nos. of v. 85, 1913; v. 86, 1914; v. 87, 1915.

Apotheker Zeitung-

v. 26, 1911, nos. 37, 38, 52, 59, 89, 95, 96, 97; v. 27, 1912, nos. 2, 14, 21, 25, 33, 34, 39, 48, 50, 51, 52, 59-64, 66-71, 73, 75-83, 85-87, 93-100, 102; v. 28, 1913, nos. 1-5, 9, 13; v. 29, 1914, nos. 69, 88, 95-99, 102, 103; v. 30, 1915, nos. 1-7, 9-13, 15-17, 19, 20.

Archiv der Pharmazie—

pp. 561-640 of v. 249, 1911; pp. 161-240 & 401-640 of v. 250, 1912, and parts 7-9 of v. 252, 1914.

Chemist & Druggist-

bound volumes 52-65: for 1898 (Jan.-June, 2 copies), 1898 (July-Dec.), 1899 (Jan.-June), 1899 (July - Dec.), 1900 (Jan. - June), 1900 (July-Dec., 2 copies), 1901 (Jan.-June), 1901 (July-Dec.), 1902 (Jan.-June), 1902 (July-Dec.), 1903 (Jan.-June), 1903 (July-Dec.), 1904 (Jan.-June), 1904 (July-Dec.).

Druggists Circular-

bound volumes for 1875-76 (v. 19-20), 1877-78 (v. 21-22), 1879-80 (v. 23-24), 1881 (v. 25), 1882 (v. 26); and Nos. 4, 5, 7, 8 (2 copies), 9 (2 copies), and 10 of v. 58, 1914.

Proceedings of the A. Ph. A.-

bound volumes for 1876, 1877, 1878 (2 copies), 1879, 1880, 1881, 1882, 1884 (2 copies), 1886 (2 copies), 1887 (2 copies), 1890, 1906 (2 copies), 1907 (2 copies), 1908, 1909 (2 copies).

Wanted.

Chemical News-

v. 110, 1914, No. 2873 (Dec. 18), pp. 295-306.

Chemiker Zeitung-

v. 15, 1891, Nos. 43 & 93; v. 20, 1896, No. 1; v. 25, 1901, No. 96; v. 38, 1914, No. 17.

Chemisches Zentralblatt-

84 Jhrg. 1913, No. 17, pp. 1485-1560.

Journal de pharmacie et de chimic-

ser. 5, v. 25, 1892, No. 10 (May 15), pp. 489-536; and the volumes for the years 1894 to 1905 inclusive.

Merck's Report-

v. 15, 1906, especially pp. 189-192.

Pharmaceutical Era-

v. 19, 1898, No. 1; v. 38, 1907, No. 19.

Pharmaceutische Zeitung-

v. 58, 1913, Nos. 3 & 9.

Year-book of Pharmacy (Lond.) the volume for the year 1877.

TASTE AND MANNERS.

What is the difference between taste and manners?

It may be bad manners to knock a man down; but it is not necessarily bad taste.

A rich man in Philadelphia gave a reception and issued invitation cards upon which were engraved his picture. This was not bad manners. It was certainly bad taste.

A large, handsome woman once broke into a meeting of President Lincoln's Cabinet, interrupting the proceedings. The homely Lincoln arose and, addressing her, said:

"Madam, what do you wish?"

She replied:

"I came in here to take a look at you." Lincoln smiled.

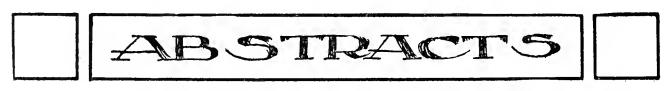
"Well, madam," he replied, "in the matter of looking, I have a distinct advantage of you."

That was both bad taste and bad manners on her part; and on the part of Lincoln it was good manners and good taste to refrain from throwing her out of the window, as in strict justice he should have done.

Good taste is largely a matter of experience, united to natural abilities.

To go up to your father-in-law at your wedding breakfast, with a bottle of champagne in your hand, and slapping him on the back, calling him "old sport," is not only bad taste and bad manners, but wretched sense, especially if the old gentleman is worth a million.

To be told that your friend is too busy to see you in his office and then to call him up over the nearest telephone, is not necessarily bad taste, but bad manners. The two may go together, but this is not an invariable rule.



Conducted by Prof. George C. Diekman.

Pink Color in Fats and Butter.

A. W. KNAPP, in Chem. News, 1916, relates his observations as follows: It is noted that margarine fats, upon exposure to air in laboratories frequently assume a pink color. This is most likely due to the presence of an azo dye. very likely di-methyl-amino-azo-benzene, commonly known as "butter yellow." It is well known that this dyestuff is very sensitive to acid and alkaline vapors, such as abound in most laboratories. In order to detect such coloring matter in butter or margarine, or other fats, the fat is liquefied, filtered, and allowed to solidify in a small beaker, or other convenient laboratory utensil. A crystallizing dish is provided and a filter saturated with strong hydrochloric acid is placed on the bottom, and upon this is placed the beaker containing the fat The whole is carefully covered and left to stand for two hours or longer, when if such coloring matter be present a pink color, gradually diffusing downward from the surface of the fatty substance will be noted. The rapidity of the diffusion, and the depth to which it extends will be a measure of the quantity of coloring matter present. In one case under observation, where the quantity of coloring matter present in the butter used was known to be 0.01 per cent., the pink layer had diffused 1/16 inch in 24 hours, 1/2 inch in 48 hours, and 2 inches in 49 days.

Calcium Acetylsalicylate.

Molecular quantities of acetylsalicylic acid and calcium hydroxide are mixed intimately in a dry condition. The mixture is then treated with either alcohol, ethyl acetate, or acetone and triturated until it is completely soluble in water. The solvent is subsequently removed and the resulting dry mass consisting of calcium acetylsalicylate is broken up and powdered. It is necessary to subsequently extract with ether until the product is neutral. (J. A. WULFING, Berlin, 1916; *Patent*.)

Volatile Oil of Euthamia Caroliniana.

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According to G. A. Russell, in the Journal American Chemical Society, 83 kilos of Euthamia caroliniana (L.) Greene, obtained from Florida, just previous to flowering, yielded, upon distillation, 576 grammes of a volatile oil. The oil is pale yellow in color and possesses a pleasant aromatic odor. Its density was found to be 0.8587 at 23° C. Upon examination it shows the presence of dipentene in considerable amount, with a trace of pinene and possibly of limonene. It also contains about 10 per cent of a laevo-rotatory body of high density, which has, as yet, not been identified. The oil also was shown to contain 5.35 per cent. of free alcohols, and a smaller quantity of combined ones. Aldehydes in small quantity were found present free acids or phenols were, however, not found. The oil is soluble in 6 volumes

of 90% alcohol, and in 9 volumes of 70% alcohol, both solutions being slightly cloudy.

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A Disinfection Process.

The process is patented by the Schweizerisches Serum und Impfinstitut, of Bern, Switzerland, and consists of the following: 300 grammes each of anhydrous copper sulphate, potassium chlorate, in fine powder, and pulverized iron are placed in a suitable container, and covered with one liter each of water and formalin. The action of the water upon the copper sulphate, resulting in its hydration, generates sufficient heat to decompose the potassium chlorate, and the added heat thus produced is sufficient to vaporize the formalin. The liberated oxygen combines with the iron. Manganese dioxide may be added to the other substances.

H

Detection of Benzoic Acid in Foods.

A modification of the so-called Mohler reaction is proposed by J. Grossfeld, in Chem. Ztg., 1916, as follows: The acid is removed by the aid of ether or other appropriate solvent, and the solution thus obtained is vaporized to dryness at low temperature. The residue obtained is heated on a water-bath for twenty minutes, after adding 0.1 gramme of potassium nitrate and I mil of concentrated sulphuric acid. After cooling 2 mils of water are added, the mixture being again heated and subsequently cooled. It is then treated with an excess of ammonia water, and mixed with 2 mils of a solution made by dissolving 2 grammes of hydroxylamine hydrochloride in 100 mils of water. If benzoic acid is present a red coloration will be noted. The color reaction is more intense if the mixture be warmed and then rapidly cooled. Cinnamic acid produces a similar reaction, but salicylic acid may be readily differentiated.

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Presence of Copper in Formaldehyde.

H. KUNZ-KRAUSE in the Apoteker Zeitung reports that copper contamination of formaldehvde occurs readily, if this has been prepared with aid of a copper spiral. Copper formate is produced by the action of formic acid, produced by oxidation of the formaldehyde, on the copper spiral. The presence of copper in formaldehyde may be readily detected by noting the blue-green coloration produced when a few drops of pyridine are added. If copper is present it can be renovated by treatment with pieces of bright iron. If the aldehyde has an acid reaction it must first be shaken with calcium carbonate and subsequently filtered.

K

Determination of Rosin in Gum Resins.

A method calculated to give approximate results is proposed by HUTIN in Caoutchouc et Gutta-Percha, 1916. Rosin is shown to be present by saponifying I gramme of the gum-resin with the minimum quantity of sodium hydroxide. After dilution with water, a solution of copper sulphate is added in slight ex-If rosin was present it will be cess. shown by the formation of resinate of copper, green in color and soluble in oil of turpentine. In order to approximately determine the quantity of rosin present, the sample to be tested is powdered finely and dissolved in 97 to 98 per

cent, alcohol, sand is added, and the whole evaporated on a water-bath to complete dryness. The dry mass is powdered, again mixed with sand and alcohol and again evaporated. The same process is repeated several times. Finally the sand containing mixture is extracted in a Soxhlet apparatus, with chloroform, for four hours. The rosin is thus dissolved, and the gum resin left behind. The sample may also be treated with solution of borax, using a 10 per cent. solution. The gum-resin is then dissolved, and the rosin left.

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Fermentation of Lemonade.

E. HADDON, in Bull. Soc. Chim. de Maurice, 1916, calls attention to fermentative processes which take place at times in Mauritius. The cause of the fermation was found in an organism, bacillus levaniformans, present in the sugar used. This organism was isolated by mixing I gramme of the sugar with 25 mils of a solution containing in each liter 5 grammes of potassium chloride, 2 grammes of sodium phosphate, and 2 grammes of ammonium nitrate, lieating on a water-bath for 20 minutes and then transferring to a dark room and keeping for 3 days at a temperature of 27 to 30° C. Sub-cultures were made subsequently in gelatin. Haddon recommends that all syrup, as well as all vessels used in manufacturing or storing lemonade be sterilized at 120° C. in an autoclave.

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Estimation of Fatty Matter in Cacao and Products.

A thorough extraction of the fatty matter found in cacao powder and other cacao products, by means of the Soxhlet apparatus requires usually about 24

hours, and possesses the disadvantage that considerable quantities of theobromine and like substances are also extracted. W. LANGE, in Chem. Ztg., 1916, proposes a method of extraction by means of which the desired result can be obtained in from one-half to three-quarters of an hour. The method essential is as follows: A wide mouth flask, of about 250 mils capacity is fitted with a rubber stopper with two perforations. Through one of these a tube connects with a water pump, and in the other a filter tube of from 3.5 to 4cm diameter is fitted. Inside of the filter tube, a Witt's filter plate, with perforations of 3/4 to I mm. in diameter, is fitted. A laver of asbestos 3 to 4 cm. in thickness covers the filter plate. Before the extraction of the sample is attempted, water is drawn through the asbestos layer, by means of the water pump until particles of asbestos cease to pass through. From 5 to 10 grammes of cacao powder or grated chocolate are then placed on the asbestos layer, the surface being made smooth by means of From 10 to 15 mils of a glass rod. ether are poured on the sample being extracted and the tube covered with a watch glass. When the ether begins to percolate through the chocolate laver, suction is carefully applied. The same operation is repeated until 100 mils of ether have been employed, using this in quantities of from 5 to 10 mils at a time. Another flask is then attached and the extraction allowed to continue until another 50 mils of the solvent have been employed. The combined ether extracts are then vaporized, and the residue thus obtained dried to constant weight at the lowest possible temperature. The quantity of fat extracted from nine samples examined ranged from 50.9 to 57.3 per cent.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

I. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

Adelaide Rudolph, Bibliography. Hugo H. Schaefer, Queries.

ANSWERS TO QUERIES.

A Dental Disinfectant.—M. J. C., Ohio, has asked us how a dental disinfectant for which he submits a recipe can be made with a clear fluid instead of a milky mixture. His recipe calls for creosote, solution of formaldehyde and glycerin. We will respond by saying that in the *Druggists Circular* for January, 1915, page 26, there was published a recipe calling for one-half ounce each of beechwood creosote and of 40% formaldehyde solution plus enough alcohol to make a clear fluid The one submitting the recipe stated that five drops of alcohol did the trick.

We would like to know if M. J. C. finds that a clear solution can be thus obtained. If not, we suggest that he try the use of an alcoholic solution of the now official paraformaldehyde of the proper proportional strength.

Esbach's Reagent.—M. B. A., New York, will find a recipe for the preparation of this diagnostic fluid on page 206 of the C. U. P. ALUMNI JOURNAL for September.

Benedict's Solution.—K. P. R., New York.—This is a stable modification of the well-known Fehling copper solution used in the estimation of glucose in urine. According to Merck's Reagenzien Verzeichniss it is made by dissolving 17.3 grammes crystallized copper sulphate, 173 grammes of sodium citrate and 100 grammes of anhydrous sodium

carbonate in enough water to make a liter. The citrate and carbonate are dissolved in about 800 mils of water, while the copper salt is dissolved in about 100 mils. The two solutions are then mixed and diluted to one liter.

Galyl.—J. G. C., New York.—This is a substitute for salvarsan and neosalvarsan. It is claimed to be a combination of two molecules of arsenobenzene with two phosphoric groups. It is a yellow powder containing 35 per cent. of arsenic and 7 per cent. of phosphorus, is insoluble in water but is soluble in acqueous solution of sodium carbonate and is given intravenously. For further details see the *Chemist and Druggist* for April 24, 1915, page 565.

Liquor Strychninae Hydrochloricum.—B. L. N., New York.—The following recipe for this preparation is copied from the 1914 edition of the British Pharmacopœia:

Strychnine hydrochloride $17\frac{1}{2}$ grains Alcohol (90%) I fluid ounce Water, enough to make 4 fluid ounces Mix according to art.

Legal Queries.—During the month, we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters, a lawyer should be consulted.

Wine of Cinchona.—T. D. G., Indiana, asks for a recipe for a well-known French proprietary wine of cinchona. Turning to Hager's Handbuch der Pharmaceutischen Praxis and also to Hahn-Holfert-Arend's Spezialitäten und Geheimmittel, we find that both books state that the proprietary in question is a good cinchona wine in which 1 per cent. of iron-ammonium citro-pyrophosphate is dissolved. The Standard Formulary gives more specific information in the following recipe:

Red cinchona bark	I	ounce
Sherry wine	20	ounces
Diluted alcohol	10	ounces
Sugar	те	ounces
Soluble iron phosphate		
(scales)	262	grain s
Water		enough.

Infuse the cinchona in enough water to make 10 ounces. In this dissolve the iron salt and add the other ingredients and filter after several days.

In the *Apotheker Zeitung* for April 17, 1915, page 205, the following recipes were given:

Recipe of the Lyons Pharmaceutical Association.

Yellow cinchona

Red cinchona

Pale Peruvian (loxa) bark

of each 10 grammes Diluted alcohol (60%) 30 grammes Greek wine (Mavrodaphne brand)

enough to make I liter Mix according to art.

Recipe of the Nuremburg Pharmacentical Association.

White gelatin	Ι.
Boiling water	ΙO.
Sherry wine	1000.
Fluidextract of cinchona	30.
Tincture of orange peel	25.
Syrup	100.
Mix according to art.	

These three differing recipes are submitted to our friend for what they are worth.

The average cinchona wines have a disagreeable habit of precipitating after standing for several months and we are not prepared to state whether the recipe just given will stand the test of time. Incidentally an excellent though rather intricate method of preparation of a stable wine of cinchona is given in the *American Journal of Pharmacy* for October, 1900, page 490.

In giving the above recipe for a supposed substitute for a proprietary article, we are violating our custom of declining to suggest recipes for imitations of patent medicines, but in this case, the query was made in good faith and is answered accordingly. Only the other day, a telephone query concerning a certain proprietary was answered by the statement that a certain official preparation was "similar to, but not identical with" the advertised preparation in question. "We've tried that" was the astonishing response, "and we find that the flavor of the official preparation is not quite the same as Blank's mixture. Could you suggest how to make the flavor just like Blank's?" Our response can well be imagined.

Action of Acids on the Skin.— B. F. M., New York, wishes us to settle a dispute by telling the effect of strong acids on the skin.

Hydrochloric acid stains the skin somewhat yellow; nitric acid turns the cuticle brownish yellow, producing the wellknown xanthoproteic acid reaction; sulphuric acid-well; strong sulphuric acid better be left off the skin as it will char the tissue and what is worse is apt to produce an open sore even when only a few drops are applied. In short, strong acids and cuticle are therapeutically incompatible. Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Meaning of "O. S."—A. C. L., New York, telephoned us to find out what "os" meant on a prescription direction. Off hand our response was the "os" meant mouth. However, we asked our friend to repeat the prescription in full and we received the following dictation, along with the remark that the querist thought it was an eye prescription.

Mercuric Chloride Solution-

I to 5000 I ounce.

Signa: 1 gtt. O. S. every four hours.

The entire prescription threw a new light on the subject and it was plain to see that the abbreviation was "O. S. (oculus sinister) and not "os" (mouth). This shows that telephone queries and prescriptions by telephone are not always safe.

Etching Glass with Hydrofluoric Acid.—H. H. B., New York, writes that he understands that 55 per cent. hydrofluoric acid solution is generally used to etch glass, but he finds that it is commercially more feasible to purchase 52 per cent. acid. He wishes to know if acid of that strength will do the work.

Reference to our technical library shows that even 40 per cent. hydrofluoric acid is suggested for glass etching; so we think it safe to advise H. H. B. to purchase the 52 per cent. acid instead of trying to get the far more costly 55 per cent. variety.



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1916-1917

President John A. Steffens

Honorary President THOMAS F. MAIN

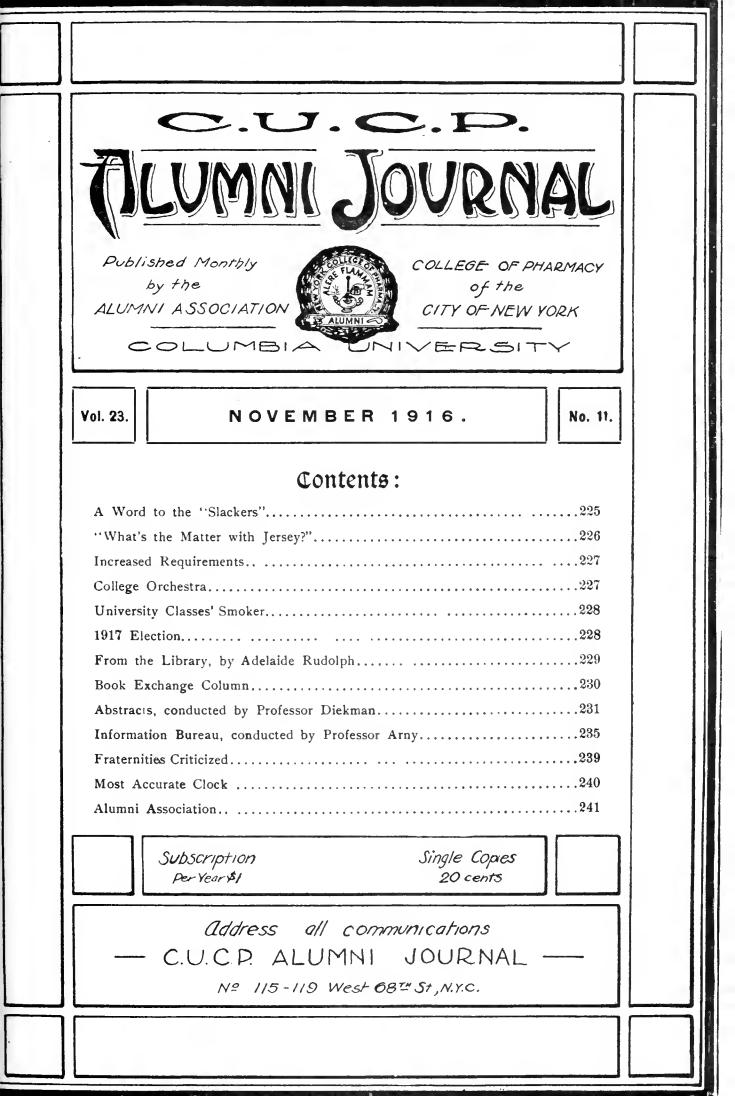
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Stated meetings of the Association will be held at the College on the second Wednesday of every month except July, August and September.

Information relating to Alumni matters will be published in the current numbers of the C. U. C. P. ALUMNI JOURNAL, 115 West 68th Street, New York City.

THE NEXT MEETING OF THE ALUMNI ASSOCIATION WILL BE HELD WEDNESDAY EVENING NOVEMBER 8th, 1916, AT 8.15 O'CLOCK.

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The new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Momen,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

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C. A. C. P. Alumni Iournal

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CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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A Word to the "Slackers"

As usual we find in the classes quite a few students who, due to lack of application, are not making the proper progress in their work. They take things easily and as long as they get along they never seem to think of the coming examinations until the latter are upon them. Then they attempt to "cram" and make up for lost time. The majority succeed in passing the test as far as the required mark is concerned, but it goes without saying that they have not obtained full value for the time spent at College.

The underlying reason for pursuing their studies is not to force them to attempt to memorize a great number of facts, figures and formulæ—pigeon-hole knowledge as it was aptly defined by our friend Mr. Charles Holzhauer—but to properly prepare them for the profession, the ranks of which they have chosen to enter, by teaching them how to think out the problems that will confront them in the future.

Self-reliance, initiative, "horse-sense" —call it by whatever name we may means nothing but to be able to do the right thing at the right time and not to do the wrong thing at any time.

Only those students who take their studies seriously and follow the instruction from day to day and who are not satisfied to simply memorize isolated facts, but who try to follow the explanations made to them and make use of their own reasoning powers while pursuing their studies will receive full value for

work, time and money expended. A word to the "slackers": Wake up! Take hold! Apply yourself, get down to real work and do not wait until the too precious time has been wasted.

J. H.

"What's the Matter with Jersey?"

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For several years this question has been often heard when pharmaceutical matters were the topic of discussion. It was well known that many regarded New Jersey as the "dumping ground" for those who, not having the necessary preliminary education, were debarred from examination for license in New York, Pennsylvania and several other states.

The requirements in New Jersey, as viewed by the members of the State Board of Pharmacy, were that a certain number of years must have been spent in a retail pharmacy before a candidate was admitted for the examination.

This state of affairs placed the State in a bad light and seemed to show a lack of progressiveness. Many members of The New Jersey Pharmaceutical Association, very much dissatisfied with existing conditions, have been fighting for something better. It seems strange that New Jersey, which was a leader when the Pharmacy Act of 1895 was placed upon the books—that law at that time being considered as one of the best of its kind —failed to progress.

The fight for better conditions—it has been a long and hard one—has been successful. The spirit of progressiveness exhibited by the members of the present "Board" augurs well for the future of pharmacy in New Jersey. Although hindered somewhat by the failure of passage of the desired new pharmacy act at the last session of the lawmakers, they have gone ahead and are trying to do the best they can with the tools at their command.

The New Jersey State Board of Pharmacy has become affiliated with the N. A. B. P. and this will undoubtedly be of great benefit.

To prevent as much as possible the falsification of "required practical experience" it has been ruled by the Board that any candidate from outside of the State must have such statement certified to by the Secretary of the Board of Pharmacy of his native State. This will keep out many undesirables.

And last, but by far the most important, the Board, in adopting the following rule, has taken a step that will do much to again place Jersey pharmacists in good standing.

Resolution Adopted Oct. 19, 1916, by "Board of Pharmacy of the State of New Jersey."

Whereas, the "Board of Pharmacy" is directed by Section 3 of the Pharmacy law to examine candidates for registration in the subjects of Materia Medica, Pharmacy, Chemistry. and Toxicology and to grant certificates to such persons as it may judge, upon the basis of said examinations, to be properly qualified to practice Pharmacy, and

Whereas, it has been found by the "Board" that candidates who have not had instruction in a School of Pharmacy upon these subjects and sciences, fail to pass satisfactory examinations in said subjects and therefore cannot be considered to be properly qualified, and

Whereas, the "Board" is empowered by the aforementioned Act to make by-laws and rules for the proper fulfillment of its duties, therefore

Be it resolved, that every person applying for registration as a pharmacist under this Act on and after July 1st, 1918, must present a certificate of graduation from an approved School of Pharmacy, giving not less than a two-year course before graduation, and be it further

Resolved, that a School of Pharmacy, in order to be approved by this "Board," must have in the judgment of the "Board" proper facilities and equipment for instruction in laboratory and classroom in the above-mentioned branches and must require that the students shall have at least one year of High School instruction or its equivalent before entering upon the course in Pharmacy.

"What's the matter with Jersey?" Nothing, except that she and the members of the Board of Pharmacy and the members of The N. J. P. A., who now see in sight the successful end of the long fight for higher standards, are to be congratulated. J. H.

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Increased Requirements.

Apropos of the foregoing it might not be out of place to say to the future pharmacists and "pharmasisters" that the New York State Board of Pharmacy has ruled that after January, 1917, a candidate for license must receive at least 75 per cent. in each subject.

At the Colleges, the passing mark is usually 60 per cent. Many could do better, but they do not try. When these youthfuls appear before the Board they will then realize—too late, of course that they have made a serious mistake. We would not be at all surprised if the passing mark in college examinations will in the near future be similarly raised, thus making greater efforts still more necessary.

J. H.

College Orchestra.

In another article in this issue, mention is made of the performance, at the University Smoker, of the C. U. C. P. Orchestra.

To the uninitiated the above will receive nothing but passing notice, but to those acquainted with college affairs and conditions it represents a wonderful step to that ever elusive goal—College Spirit. To hear the students singing the Columbia songs was enough to stir every one present. Even the janitor of the building joined in. It reminded the older men present of the good times they had at the "Student Nights"—an institution apparently forgotten—when every one present, led by the orchestra, would join in the singing of the college songs.

Organizing an orchestra at the College of Pharmacy is not as easy as might be imagined. Senior and Junior students attend on alternate days, so if rehearsals are held on Senior days the Junior students must ask their employers for time off or else do as some of them do: ask that their dinner hour be so arranged that it will be at the same time as the rehearsal and then go without their dinner.

If the rehearsals are held on Junior days, as the majority of them are, in addition to the foregoing, it cannot start until 6:00 P. M., as the Accounting Course is given from 5:00 P. M. to 6:00 P. M.

Rehearsals are held at least twice a week. The music is not studied so much for public appearance and rendition as for the mutual benefit of the members.

George Schneider, who is assistant in the Department of Analytical Chemistry, is conducting the orchestra. The per-

sonnel of the orchestra is as follows: Violins, Miss Elizabeth Kish, '19, S. Jacoff, '18, S. Maser, '18, N. Castellucci, '18, Joseph Triner, '18, J. D'Urgolo, '18; 'Cellos, R. Kirkland, '17, Dr. C. Ballard; Clarinets, E. Mazzollini, '18, R. Ferguson, '18; Cornets, Miss May O'Connor, '17, W. Greenberg, '18, O. J. Blosmo, Special; Drums, David Feldman, '18; Piano, P. Cagnina, '18.

We feel that the support of the College as a whole and the students, fraternities, societies, etc., as individuals should be behind Dr. Schneider and his organization.

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University Classes' Smoker.

The Annual Smoker of the Second and Third Year University Classes tendered to the Freshman Class was held in the University Commons on November 17th.

The Smoker was unique in several respects. In the first place there were about sixty people present, which is the largest number ever gathered together by the three classes.

The biggest surprise of the evening, for the majority of those present, was the fact that the ladies of the different classes had been invited and a goodly number availed themselves of the invitation. And a pleasant surprise it was, for after the talks given by the members of the Faculty and guests, dancing was indulged in, the music being supplied by the College orchestra, under the leadership of Dr. Schneider.

Professor Mansfield fulfilled the office of Toastmaster admirably as he usually does when called upon to do so. In addition to Professor Mansfield, the Faculty was represented by Drs. Schaefer, Brown and Schneider.

1917 Class Election.

The election of officers of the Class of 1917 was held in the College Building on November third.

The majority of the students took an active interest in the election as it took place just a few days before the Presidential election.

Practically every member of the Second Year Class deposited his (or her) ballot, which had been previously printed with all of the candidates' names upon it, in the ballot box. This was the first time in the history of the College that printed ballots were used and they proved a great success, as might well be imagined when one considers the methods formerly used in class elections.

The Independent Party (Non-Fraternity) sprung a surprise for practically all of the successful candidates were Independents.

The following were elected: D. E. Gitlaw, President; S. Benjamin, Vice-President; Miss Alma Adams, Secretary; B. Markowitz, Treasurer; J. J. Coronel, Historian; P. D. Bloom, Reporter.

P. D. BLOOM,

Reporter.



FROM THE LIBRARY

ADELAIDE RUDOLPH

Assistant Librarian

The record for the month shows twenty-nine books added to the "accessions list":

- From the bindery, seven volumes of the Pharmaceutical Era.
- By purchase, six volumes of the Chemische Centralblatt, and the Formula Book, published by The Druggists Circular, 1915.
- By gift, from the author, "Kalletes: an Historical Tale Nisyros" of (in Greek), by Jacobos N. Kazabis, 1916. ("Jack Casavis," as he writes his name, was a junior student of the College last year.) From the College of Physicians and Surgeons, twelve other volumes, among which is included the very interesting old book of "Domestic Medicine; or A Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine," by William Buchan, 1797.

The collection of photographs of the College and Faculty, which Professor Arny started when he first became librarian, has been augmented by a picture of the old College building in East 23rd Street. This was picked up recently in an old book stall in that vicinity by a student of Dr. Diekman's, and presented through him to the Library.

Of a collection of somewhat different character we have had the first installment from a good friend of the College, who is getting together a fine lot of mortars, jars, etc., for the illustration of the history of pharmacy. Just now, perhaps, we can find room for photographs better than for the objects themselves, and we are glad to keep a record in this way of the collections in our midst that may be drawn upon when we wish to arrange a loan exhibition to inaugurate that spacious new C. of P. library and museum combined, which is to be—we all know how delightful it will be, with its beautiful carved reading tables, and handsome glass cases for exhibits, and all the other furnishings to match!

The Library is very happy, however, in its present quarters, with its one good show-case for rare books, and with its kind, watchful friends to lend a few historic jars to adorn an exhibition, or make a gift of flowers with appropriate setting to encourage the first feeble signs of decorative effort.

The Alumni will be interested to learn that the C. of P. library has been made a member of the New York Special Libraries Association, which has been formed lately on the initiative of the Municipal Reference Library. This is an imporatnt step, we feel, towards pleasant and helpful co-operation among the City libraries.

Library hours, from 10 a. m. to 2 p. m., and from 3 to 5 afternoons, except on Saturdays.

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BOOK EXCHANGE COLUMN.

Library has for Exchange.

Apotheker Zeitung-

- v. 26, 1911, nos. 37, 38, 52, 59, 89, 95, 96, 97; v. 27, 1912, nos. 2, 14, 21, 25, 33, 34, 39, 48, 50, 51, 52, 59-64, 66-71, 73, 75-83, 85-87, 93-100, 102; v. 28, 1913, nos. 1-5, 9, 13; v. 29, 1914, nos. 69, 88, 95-99, 102, 103; v. 30, 1915, nos. 1-7, 9-13, 15-17, 19, 20.
- Archiv der Pharmazie-

pp. 561-640 of v. 249, 1911; pp. 161-240 & 401-640 of v. 250, 1912, and parts 7-9 of v. 252, 1914.

- Chemist & Druggist
 - bound volumes 52-65: for 1898 (Jan.-June, 2 copies), 1898 (July-Dec.), 1899 (Jan.-June), 1899 (July-Dec.), 1900 (Jan.-June), 1900 (July-Dec., 2 copies), 1901 (Jan.-June), 1901 (July-Dec.), 1902 (Jan.-June), 1902 (July-Dec.), 1903 (Jan.-June), 1903 (July-Dec.), 1904 (Jan.-June), 1904 (July-Dec.).

Druggists Circular-

bound volumes for 1875-76 (v. 19-20), 1877-78 (v. 21-22), 1879-80 (v. 23-24), 1881 (v. 25), 1882 (v. 26); and nos. 4, 5, 7, 8 (2 copies), 9 (2 copies), and 10 of v. 58, 1914.

Pharmaceutical Journal—

bound volumes for 1873-74 to 1879-80 (ser. 3, v. 4-10); 1890-91 to 1892-93 (ser. 3, v. 21-23); July-Dec., 1895 to July-Dec., 1899 (ser. 4, v. 1-9); July-Dec., 1901 (ser. 4, v. 13); July-Dec., 1902 to July-Dec., 1905 (ser. 4, v. 15-21); July-Dec., 1906 (ser. 4, v. 23); Jan.-June, 1908, to Jan.-June, 1909 (ser. 4, v. 26-28). 1878 (2 copies), 1879, 1880, 1881, 1882, 1884 (2 copies), 1886 (2 copies), 1887 (2 copies), 1890, 1906 (2 copies), 1907 (2 copies), 1908, 1909 (2 copies).

Wanted.

- Chemical News
 - v. 110, 1914, no. 2873 (Dec. 18), pp. 295-306.
- Chemiker Zeitung v. 15, 1891, nos. 43 & 93; v. 20, 1896, no. 1; v. 25, 1901, no. 96;

v. 38, 1914, no. 17.

- Chemisches Zentralblatt— 84 Jhrg. 1913, no. 17, pp. 1485-1560.
- Journal de pharmacie et de chimieser. 5, v. 25, 1892, no. 10 (May 15), pp. 489-536; and the volumes for the years 1894 to 1905 inclusive.
- Merck's Report
 - v. 15, 1906, especially pp. 189-192
- Pharmaceutical Era
 - v. 19, 1898, no. 1; v. 38, 1907, no. 19.

Pharmaceutische Zeitung-

v. 58, 1913, nos. 3 & 9.

Year-book of Pharmacy (Lond.) the volume for the year 1877.

RECIPROCITY.

Thirty-six states are now reciprocating pharmacy certificates through the National Association of Boards of Pharmacy.

For information and blanks address H. C. Christensen, secretary N. A. B. of Ph., 450 Bowen avenue, Chicago, Ill.



Conducted by Prof. George C. Diekman.

Fermentation Process for Citric Acid.

J. A. MARTIN, in Amer. J. of Pharm., 1916, gives the results of experiments made by him in this direction. The mould used was probably the Citromyces tollensianus, as this particular mould has been found capable of converting larger quantities of dextrose than other similar ones studied until now. The author inoculated a 10 per cent. dextrose solution containing the proper nutrient salts with spores of the mould. The mixture was kept at a temperature of 20° C. in presence of air. Results were noted after four days, a growth becoming visible and the liquid becoming covered with a thin, soft green layer. The formation of citric acid began after five days had elapsed and the maximum amount was reached after tweny-four days, totaling then about 20 per cent. of the weight of dextrose employed. The experiments were conducted in shallow vessels, as it was found that the citric acid remained in the upper layers and this procedure also facilitated free access of air. The acid was neutralized from time to time by addition of calcium carbonate, and in this way it was found possible in one experiment to increase the quantity of acid to 43 per cent. of the weight of sugar employed, after 60 days had elapsed. The best results were obtained in solutions of sugar containing not more than 10 per cent. of this substance. The medium should be either neutral or slightly acid, and suitable nutrient salts must be present. Light has no influence on the production; the temperature must, however, be carefully regulated, and as the process is one of oxidation, free access of air must be insured. The author is of the opinion that the process may be made of commercial value after more study.

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Rancid Fats.

G. Issoglio, Atti. R. Accad. Sci. Torino, 51, 582-605. Through Journ. Chem. Soc., 1916, 110, 401-402, proposes a new method for the analysis of rancid fats. He uses the term "oxidisability number," by which he refers to the number of milligrammes of oxygen required to oxidise the organic compounds removed by the distillation of 100 grammes of a fat or oil in a current of steam. For fat and oils which are to be used as foods, this number was found to range between 3 and 10. Fats which had undergone decomposition yielded numbers which were much higher. The author states that in his opinion a number exceeding 15 would justify the rejection of the sample as a food. The "oxidisability number" is ascertained as follows: 20 to 25 grammes of the fat or oil to be

examined, exactly weighed, and about 100 mils of distilled water, are placed in a distilling flask with a long neck, and distilled in a current of steam, about 100 mils of distillate being collected in 10 minutes. 10 mils of the distillate, 50 mils of distilled water, 10 mils of 20 per cent. sulphuric acid, and 50 mils of N/100 potassium permanganate V. S., are placed in a flask, fitted with a ground condenser, heated to boiling, and kept at the boiling temperature for 5 minutes. After the contents of the flask have cooled, 50 mils of N/100 oxalic acid, V. S., are added, and the contents then titrated with N/100 potassium permanganate V. S. If X mils of the latter are used and the volume required for a blank test in which 10 mils of distilled water, replace the fat or oil, is x, the oxidisability number will be found by the expression 80 (X - x) /P, P being the weight of fat or oil taken.

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Concentrated Fertilizer.

A patent for the preparation of a concentrated fertilizer has been granted by the U.S. Government to W.H. Ross and A. R. Merz, under date of July 18th, 1916. The patentees announce that the process is dedicated to the public. The fertilizer, having the composition of xKH₂PO₄+yNH₄H₂PO₄ is formed by treating one equivalent of phosphate rock with 10 equivalents of orthophosphoric acid, in this manner forming three equivalents of calcium mono-phosphate, with six equivalents of phosphoric acid as excess. Potassium sulphate or carbonate is added in sufficient quantity to precipitate the calcium as either sulphate or carbonate, and the precipitate removed by filtration. Gaseous ammonia

is passed through the filtrate until the latter is neutral to cochineal. The liquid is then concentrated until upon cooling it solidifies.

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Alkaloids in Egyptian Hyoscyamus.

F. Hughes, in Bulletin 3 of the Tech. Sci. Service, 1916, reports as follows: Hyoscyamus muticus, of Egyptian origin was found to contain varying quantities of alkaloidal material at different times. Thus, if the plant parts be collected after ripening of the seed, only 0.60 per cent. of alkaloids was found, while if collected about the time of flowering, from 1.50 to 2 per cent. was obtained. He calls attention to the great care which must be taken in drying, stating that in an extract prepared from the plant parts carelessly dried, no alkaloids were obtainable, although vaporization was carried out under reduced pressure.

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Iodine and Starch.

A. Clementi, in Arch. Farm. Sperim., 20, 258-268, calls attention to the disturbing influence of certain substances on the color reaction between iodine and He finds that the presence of starch. furfurol inhibits or destroys the blue The rapidity of the color coloration. destruction is directly in proportion to the amount of furfurol present, and in inverse proportion to the amount of iodine present. Thus, in a mixture containing a large proportion of iodine and a small proportion of furfurol, the loss of color is not noted. The presence of other protein bodies, such as albumins, globulins, plant proteins, albuminoids and phosphoproteins, also causes a more or less rapid loss of color. Tyrosine and

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adrenaline likewise exert some influence, while glycerin, alanine, leucine and asparagine, if present, are negative in action.

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Colloidal Carbon.

S. Tarczynski, in Z. f. Elektrochem., 1916, 22, 252-254, reports on the decomposition of organic liquids by the electric arc. The passage of the electric arc between carbon electrodes immersed in various organic liquids, such as carbon tetrachloride, chloroform, benzene, etc., contained in an ice-cooled flask, resulted always in the formation of both precipitated and colloidal carbon. After filtration the latter gave an olive-green or reddish-brown solution, which was extremely stable, showing the Tyndall effect, and gave, upon heating, a black amorphous precipitate of carbon. That the carbon was actually produced from the organic compounds was shown by the fact that an experiment with platinum electrodes gave the same result. In addition to these products, chlorine, tetrachloroethylene, hexachloroethane and hexachlorobenzene were formed in the decomposition of carbon tetrachloride, and all these substances, together with hydrogen chloride and tetra-and pentachloro-ethane, from chloroform. The final products of the decomposition are carbon, chlorine, and hexachlorobenzene, which are always formed in the largest amount; the others are all intermediate products (J. Soc. Chem. Ind., 1916).

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Mercury Hydrosols.

C. Amberger, in *Kolloid*. *Zeitsch.*, 1916, 110, 97-101 reports as follows: Therapeutically active and stable colloidal mercury can be obtained by the

use of albumins or their products of decomposition as protective agents. Solid hydrosols containing up to 80 per cent. of mercury have been prepared by the addition of a solution of mercuric chloride to mixtures of glutin or dextrin with pyrogallol, cathecol, or certain aminophenols, whereby a yellowish-white precipitate is obtained. On the addition of alkali reduction takes place, and colloidal mercury is obtained. If glutin or dextrin is mixed with a solution of an alkali and a mercuric salt added, colloidal mercuric oxide is obtained. By the reaction between colloidal mercury and colloidal mercuric oxide, prepared as above, stable preparations of colloidal mercurous oxide are obtained (J. Soc. Chem. Ind., 1916).

Chemical Changes in Cotton Seed in Storage.

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J. B. Rather, in J. Ind. Eng. Chem., 1916, 604-607, reports on some very interesting observations as follows: А 5.000 pound lot of dry-harvested cotton seed was stored in a pile measuring 12 feet by 12 feet by 6 feet. The mass was kept in this manner for 77 days. During intervals samples taken from different parts of the mass were analyzed and the temperature in different parts of the mass observed. It was found that the moisture content fell from 13.77 to 10.94 per cent., and that the mass became heated, the highest temperature noted being 43° C. (109° F.). Perhaps the most important changes noted are the increase in free fatty acids and total acidity. In order to make certain that these latter changes were due to the increased temperature, experiments were made with cotton seed heated and stored

From these it in air tight containers. was demonstrated that even a short period of heating will result in the hydrolysis of no less than 10 per cent. of the fatty matter of cotton seed. Longer periods of heating or a long continued storage of heated seed will result in the hydrolysis of as much as 70 per cent. of the oil contained in the seed. 33 per cent. of the protein was also hydrolyzed and the total acidity rose to seven times The author stated its normal amount. that cotton seed of this kind is practically valueless, except for use as a fertilizer and for the manufacture of certain kinds of soap. It was also established that the increase in acidity noted was not due to length of storage, but rather to the heating which resulted. Samples taken from parts of the mass which had not become heated were found to possess normal values.

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Formation of Acetaldehyde.

H. Mueller-Thurgau and A. Osterwalder, in Landw. Jahbr. Schweiz, 1915, 408-420, discuss the formation of acetaldehyde in wine during and after fermentation. The authors had, on a previous occasion, made the claim that acetaldehyde appears as an intermediary product in alcoholic fermentation. They claim now to have been able to confirm their previous findings by combining the aldehyde with sulphur dioxide, during the fermentation, in this manner protecting it from further action. Samples of sterilized grape juice were fermented and small quantities of potassium metabisulphite added at varying intervals of time. After completion of fermentation the wine contained considerable quantities of combined sulphur dioxide, and the distillate obtained from it after being rendered alkaline with sodium carbonate, gave reactions for aldehyde. Similar experiments were carried out with solutions of sucrose and of dextrose. Calculated on 100 grammes of fermented sugar, the distillate from 4 wine samples contained 890, 350, 634 and 454 milligrammes, from the sucrose solutions 434 and 879 milligrammes, and from the dextrose solutions 583 and 1180 milligrammes of acetaldehyde. These quantities naturally do not represent more than a fraction of the acetaldehyde produced, since free sulphur dioxide was only present during a small portion of the total time during which fermentation was going on, while acetaldehyde is being formed during the whole period as an essential intermediate product of the sugar decomposition. In finished wines, acetaldehyde may be produced by the oxidation of the alcohol; it can be caused either by exposure to the air or by storing in partly filled containers. Treatment with sulphur dioxide removes it (J. Soc. Chem. Ind., 1916).

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Identification of Croton Oil.

Comte. J. Pharm. Chim., 1916, 14. 38-Croton oil, from Croton tiglium, or 39. a mixture of oils containing croton oil, is shaken thoroughly with twice its volume of absolute alcohol. The clear alcoholic solution is then poured on a very concentrated solution of potassium or sodium hydroxide, contained in a test tube, and the whole heated for 30 seconds in a bath of boiling water and then set aside to cool. If croton oil is present, a ring possessing either an intense reddish-brown or reddish-violet color will form at the point of contact of the two liquids.



Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian.

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Adelaide Rudolph, Bibliography. Hugo H. Schaefer, Queries.

ANSWERS TO QUERIES.

Automobile Anti-Freezing Mixture. B. F. C., New York, wishes to know the composition of a non-freezing liquid used to cool automobile engines during the winter weather.

We understand that a mixture of 1 part of wood alcohol with 2 to 3 parts of water will not freeze even at a temperature of ten degrees below zero.

Vogel's Pharmakognosie.—T. L. J., New York.—This book is published by Carl Gerold's Sohn, Vienna. We have in our College library the edition of 1892.

Color for Smelling Salts.—R. K. B., New York, wishes to know how to color smelling salts a golden yellow.

Pharmaceutical Formulas suggests the use of the coal-tar dye, eosine yellow; the Druggists Circular Formula Book reconmends methyl-orange. We would suggest experimentation with ammonium dichromate.

Solidified Brilliantine.—L. P., New York.—Pharmaceutical Formulas gives the following recipes for the cosmetic named above.

1.		
Hydrous wool-fat	$1\frac{1}{2}$	ounces
Spermaceti	I	ounce
Castor oil	4	ounces
Oil of bitter almonds	2	minims
Oil of clove2	0	minims
Oil of bergamot4	0	minims
Mix, according to art		

	11.	
Olive [®] oi	110	ounces
Spermac	eti 3	ounces
Oil of b	ergamot 2	drachms
Oil of c	love	minims
Oil of re	ose geranium40	minims

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Mix, according to art.

Italian Drug Names.—F. J. H., New York. While we know of no book giving English and Italian pharmaceutical terms, we have found quite useful a book entitled Rousseau's Poliglota Vademecum Farmacio.

This book, which is published by the American Esperantist Association, Washington, D. C., gives pharmaceutical synonyms in eight modern languages, including Italian. Of course, there is in it a special index for each language.

Orzo.—D. H. P., Connecticut. The sample you submit is unhulled barley, the Italian name of which is "orzo." A decotion made by boiling two drachms with one pint of water until twelve ounces of liquid remain is used as a nutrient, diuretic and demulcent.

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

40 Grain Vinegar.—L. L. J., New York.—This is a crude method used in commerce to express the strength of vinegar. It presumably means that I ounce of such vinegar requires 40 grains of potassium bicarbonate for complete neutralization. If "ounce" is taken to mean fluid ounce then a 40 grain vinegar will contain about 5 per cent. of acetic acid; a 50 grain vinegar contains about 6 per cent.; and a 100 grain contains about 12 per cent. of acetic acid.

Our examination of a large number of samples of vinegar has shown that the commercial values run even lower than the figures just cited.

For details concerning "Grains" in vinegar testing, see Arny's Principles of Pharmacy.

Compound Pills of Galbanum.—C. R. L., New York.—The following recipe for these pills is given in The British Pharmacopoeia of 1898:

Asafetida50	grammes
Galbanum	grammes
Myrrh	grammes
Syrup of glucose25	grammes
(or	enough)

Heat all together on a waterbath, stirring until a uniform mass results. Dose.—4 to 8 grains.

The syrup of glucose mentioned in the recipe is made by mixing one part of commercial (liquid) glucose with two parts of syrup.

The Composition of Proprietary Preparations.—A number of queries to the composition of proprietary remedies have been answered by telephone during the past month, by reporting analyses published by cliemists in various bureaus devoted to such work. For various reasons, at this time we will not print the answers to such queries, but will refer our readers to the two publications of the American Medical Association, "The Propaganda for Reform in Proprietary Medicines" and "Nostrums and Quackery" as well as to the Bulletins of the food and drug departments of the States of Connecticut, Ohio, Indiana and North Dakota, all of which we have in the library.

Latin Terms.—B. K. H., New York, asks us for the Latin words meaning (a) bruising, (b) cutting. For the first we would use "contusum" and for the second "concissum" seems appropriate.

Percentage of Alcohol in Liniment of Soft Soap.—M. L. M., New York, desires to know the percentage of alcohol in tincture of green soap. By the latter name, we presume our querist means the official liniment of soft soap and according to Paul Caldwell (Dr. Circ., 50-1906-43) this preparation contains about 29 per cent. of alcohol.

Calamine Lotion.—B. T. H.. New York.—According to the British Pharmaceutical Codex, this lotion is prepared as follows:

Prepared calamine	2	ounces
Zinc oxide	I	ounce
Glycerin	Ι	fluidounce
Rose water enough to		

make20 fluidounces

Triturate the calamine and the zinc oxide with the glycerin and then add the rose water.

In compounding this and other British recipes, it must be borne in mind that the British fluidounce represents 437.5 grains of water and is therefore smaller than the U. S. fluidounce which represents 454.6 grains of water.

Legal Queries.—During the month. we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted. Naphtha, Gasoline, Benzine and Benzene.—A. A., New Jersey, is puzzled like so many of the rest of us over these synonyms and turns to us for information.

We will get rid of benzene first by stating that this is the scientific name for benzol- C_6H_6 , which, as we all know, is a distillation product from coal-tar.

Benzine and Gasoline are on the other hand, distillates from petroleum, and right here it might be stated that at the petroleum refineries, all of the more volatile distillates from petroleum are called "naphtha," each having as a prefix the degrees Baume that the distillate possesses. Thus at oil refineries automobile gasoline is sold as "68° to 72° naphtha"; 68° naphtha meaning one having the specific gravity 0.713; while 72° naphtha means the specific gravity 0.699. Benzine of commerce is called 59° to 62° naphtha; the 59° having the specific grav-The commercial product is ity 0.746. unfortunately quite different from the official benzine which is directed to have a specific gravity between 0.638 and 0.660 or to be therefor 89° to 82° Pharmacists wishing the offinaphtha. cial benzine must order it from chemical houses under the name petroleum ether and curiously enough the average oil refinery does not know it even by that name, selling it as 89° naphtha or 85° naphtha or 82° naphtha as the specific gravity chances to be.

To add to the confusion, in France and to a certain extent in England, benzol, C_6H_6 , is called benzine. For this phase of the matter, those interested are referred to a paper by Otto Raubenheimer, which appeared on page 144 of the *Chemist and Druggist* for July 25th, 1908.

Thompson's Emulsion of Linseed Oil.—J. M. A., New York. A recipe for this preparation printed in the Druggists Circular for November, 1914, page 671, is as follows:

Linseed oil $\dots 9^{1/2}$ ounces Oil of Gaultheria $\dots 9^{1/2}$ ounces Oil of Gaultheria $\dots 80$ minims Oil of cinnamon $\dots 80$ minims Diluted hydrocyanic acid. 80 minims Glycerin $\dots 190$ minims Syrup $\dots 6^{1/2}$ ounces Mucilage of Irish moss;

enough to make..... 2 pints Mix according to art.

Triturate the mixed oils with the acacia, add three ounces of water and triturate until emulsified. Then add the syrup, the glycerin and the hydrocyanic acid, and lastly the balance of the water.

Iron Balls.—H. J. B., New York, wishes to know what is meant by "iron balls." If H. J. B. would read and save his copies of the C. U. C. P. ALUMNI JOURNAL he would find the following on page 146 in the June issue. "Iron Balls.—I. G., New York, had a call for this product and states that the customer brought a sample, which consisted of a little black 'bolus' to which is attached a loop of string. This is undoubtedly *boule de mars*, a form of iron and potassium tartrate formerly enjoying great vogue in France as a tonic. The lump was suspended in a glass of wine and each time it was so immersed a small amount of the iron salt dissolved in the wine."

H

Method of Generating Formaldehyde.

A process patented by H. Anhaltzer consists in treating a mixture of equal parts of paraformaldehyde and potassium of sodium persulphate with a solution of sodium peroxide.

SPECIAL ELECTION of the

ALUMNI ASSOCIATION

WILL BE HELD

Wednesday Evening December Thirteenth 1916.

A Cryptograph.

One of our readers, whose modesty induced him to ask us not to publish his name has submitted the following for deciphering:

54 Sudran fas gard arent of paperment

We have our suspicions, but would like to hear from our readers.

Fraternities Criticized.

New York City. November 20th, 1916.

TO THE EDITOR OF THE C. U. C. P. ALUMNI JOURNAL:

Some time ago I applied for a position with College privileges, when there was a vacancy. I was told by a friend not to waste any time chasing after the job, as the proprietor, an ex-Greek letter fraternity man, only hired members of his frat.

From that time on I have given the matter of fraternities some serious thought. I have come to the conclusion that the idea, in any walk of life, is detestable. I know exactly what you are going to say when you get this. This fellow is a sore-head, nobody asked him to join a fraternity.

Be that as it may, I am looking at it purely from the standpoint of its social value.

The Greek letter fraternity is unique among secret societies, inasmuch as it is the only organization of its kind founded on an aristocracy of social advantage and educational opportunity.

Young men join fraternities at the most impressionable time of their lives. Does the artificial stimulation of a set of exclusive loyalties, no matter how charming from within, tend to the finest broadening of the fair minded instincts with which every young man is somewhat equipped?

The main object of such parochial organization will be found to be the sense of antagonism and superiority to the large unaffiliated group, which must ultimately result in that most unjustified procedure which plain men not blinded by fine phrases commonly call discrimination. If the impelling motive be intellectual superiority, why need it express itself in so exclusive a forum?

It seems passing strange that the older men of the American Association for the Advancement of Science seem not to hunger for this strange form of manifesting their mental gymnastics. How ridiculous that they should love light rather than darkness! But no doubt we must allow for the decreptitude of age, for producing the peculiar phenomenon of equality of opportunity.

Greek letter fraternities are peculiar to the United States and Canada. These countries are afflicted with two elements. First, the element of chronological superiority, by which we mean the excessive intelligences which made an ancestor prefer 1630 to 1830 as a convenient date for crossing the Atlantic. Second, the 1830 class, who by form of organization hope to be mistaken for the 1630 class.

In European countries, not remarkable for their democracy, such organizations have not been added to their sorrows. As a matter of fact, student bodies in those countries are centres of radical thinking.

It may seem amazing, yet it has sometimes been averred, that European education has an heightening effect upon the mentality of its recipients.

In the choice of Greek nomenclature, they have unconsciously forgotten that the Greek genius was not a matter of letters (which any chyrographer will assure us is merely a matter of convenience), but was also characterized by so peculiar a situation as the existence of a Pericles.

Now, he who copies forms without understanding substance is either snob or pedant.

If you wish to deny democracy we have no case against you, Gentlemen of the Fraternities. But you dare not do so. Fear is the mother of hollowness and that accounts for the factitious appearance of the arguments commonly adduced for fraternities. It requires a wealth of rhetoric and the full panoply of dialectics to disguise so patent a contradiction.

Criticism of exclusiveness is usually a product of "thwarted" psehychology. For example, our Jewish compatriots did wail most loudly at the injustice of the denial of their basking in the company of the retiring and somewhat annoyed Gentiles. From which they deduced the indubitably true conclusion that exclusiveness was an evil. In order to enforce their opinions they have organized an exclusiveness peculiar to the sons of the covenant.

Our Terratological collection is now complete. The aristocracy of Yankee chronology has been supplemented by the aristocracy of celestial selection. In this bewildering variety what chance has an ordinary man?

Tell the unvaruished truth. You are apostles of artificial advantage. You are organized opponents of equality of opportunity. You have lost the common touch for the adoration of our "bunch," including, always, number one.

You would not be half so objectionable if you would drop your shams and admit yourselves to be the "Haberdasher and Stock Exchange House of Lords"—self perpetuated unto all eternity within the Halls of the College of Pharmacy.

Very truly yours,

J. J. CORONEL, Historian Class '17

MOST ACCURATE CLOCK.

TIMEPIECE IN CLEVELAND IS SAID TO HOLD WORLD'S RECORD.

In the Case School of Applied Science in Cleveland there is a clock that holds the world's record for accurate timekeeping. Over a period of several months it showed a variation of only eight-thousandths of a second a day, which, in a year's time, would be less than three seconds.

Ship chronometers, which are the most accurate time measuring instruments in general use, cannot keep true time within less than three to five seconds a month. Marine observations are absolutely dependent on accurate timepieces, but ship's officers have to be satisfied if they can adjust their chronometers so that they will either gain or lose a certain amount each day. Then they add or subtract and get absolutely correct time.

This Case clock, says the *Youth's Companion*, stands on a stone pier, independent of the building, that extends

sixteen feet to a natural shale foundation. It is in a small room surrounded by two other rooms, all built with brick walls. Gas stoves heat the outer rooms, and electric contact thermometers regu-The gas stove late the temperature. flame automatically rises or falls with the variation in the outside air temperature. Thus on warm days in August the flame in the gas stove is very low, while in below zero January it burns at its brightest. In the clock room itself the temperature is adjusted by an ordinary sixteen candle-power incandescent lamp that is flashed on and off by another electric contact thermometer. The school strictly enforces the rule that there must never be more than two persons in this inner room at one time.

The clock, which stands five feet high, has three separate dials that register the hours, minutes and seconds. It is enclosed in an airtight glass jar, inside of which are delicate instruments for measuring temperature, atmospheric pressure and moisture. A small amount of chloride of lime, which is an efficient desiccating material, is kept always in the jar to absorb the moisture.

By the aid of a set of dry batteries the clock automatically winds itself every seven minutes. The movement is adjusted slow or fast by pumping air in or out of the glass container. Observations are made from the outside through double glass windows through the separating walls and by means of a small electric lamp placed over the dials.

Not only can this wonderful piece of clock mechanism be adjusted to show less than a three-second annual variation, but it is also possible to make electric connections with other similar clocks elsewhere. With this as a master clock the others can be made to keep the same accurate time.



THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1916-1917

Acting President Monroe H. Weil

Honorary President THOMAS F. MAIN

Vice-Presidents VICTOR M. OREFICE ERNEST WINDT

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING, NOVEMBER 8th, 1916.

Meeting called to order at 8:45 P. M.

In the absence of the President, Vicepresident Weil took the chair.

Present.—L. W. Brown, '14; B. J. Davis, '14; C. D. Hakes, '11; E. J. Kodet, '14; H. H. Schaefer, '12; J. Hostman, '96; M. H. Weil, '10; L. Roon, '10; A. J. Bauer, '03; R. Hageman, '16.

The minutes of the June meeting were approved as printed in the C. U. C. P. Alumni Journal.

The report of the Treasurer was called for, but the Treasurer was absent.

The Registrar reported the death of John Oehler, Associate Professor Chemistry at the College and also the marriages of F. L. Hunt, '11 and A. Muench, '12, same having been reported in the C. U. C. P. Alumni Journal.

Motion was made, seconded and carried that the chair be empowered to appoint a committee to draw up and have engrossed a set of resolutions to be presented to the family of the late Professor Oehler.

The following communication was received from President Steffens:

> Milwaukee, Wis., Oct. 8th, 1916.

Mr. Leo Roon, Sec.,

Alumni Association.

Sir :

Shortly after my election to the Presidency of the Association, I was appointed to my present position with the Newport Chemical Works, Carrollville, Wisconsin.

It appears that I shall be here at least a year longer, so that my duties to the Alumni Association cannot be performed.

I therefore desire to tender my resignation from the Presidency.

Sincerely,

(Signed) JOHN A. STEFFENS.

Motion was made, seconded and carried that the resignation of President Steffens be accepted with sincere regrets of the Association.

The communication of M. Krechevsky, '15, regarding mailing of Alumni certificate, was received and ordered filed. The Secretary was ordered to notify the writer to appear at the next meeting to receive certificate and bill for dues.

The communication of J. Iglitzen, '15, regarding the same matter was received and ordered filed.

A motion was made and properly carried that the Secretary send notices of the next meeting to the members announcing that, because of the vacancy caused by the resignation of President Steffens, an election to fill the office of President would be held at the December meeting.

Editor Hostmann of the Journal requested that the matter of renewal of the Journal contract be taken up since the end of the year was approaching.

It was moved and carried that Professor Hostmann be retained as Editor of the C. U. C. P. Alumni Journal for the coming year.

A motion was made, seconded and carried that a Committee of three be appointed by the chair to draw up the Alumni Journal contract and to present same at the next meeting. The Chair appointed H. Herold, '94, L. N. Brown, '14 and B. J. Davis, '14 to serve on that Committee.

It was moved and carried that a committee be appointed for arranging a 25th Anniversary Dinner to Professor George C. Diekman to be held sometime in December. Professor Hostmann was appointed Chairman and was asked to choose his committee.

The following applicants were proposed and elected to membership:

A. S. Ventura, 1912.

M. F. Schlesinger, 1885 (life member-ship).

Emil Steiert, 1911 (life membership). J. B. Madden, 1916.

Professor Hostmann reported that he had received the following sums for dues from members:

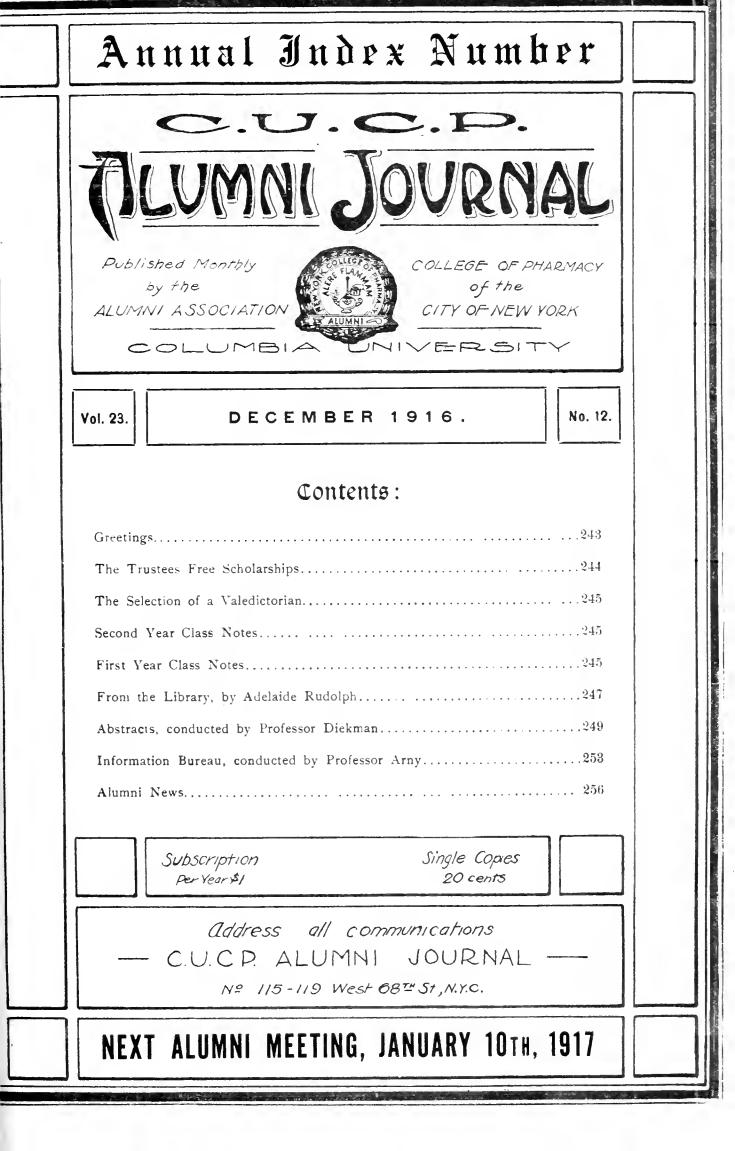
F. O	. Ghir	ardi			••••	\$	2.00
В. Ј.	Davis		•••		•••	•••	2.00
Emil	Steie	t	•••	•••	• • •	•••	15.00

It was moved and carried that a Committee of Five, consisting of the instructors at the College be appointed as a Propaganda Committee to acquaint the students with the aims and purposes of the Alumni Association.

The following bills were ordered paid: Mr. and Mrs. J. Goetz, \$10.00; B. J. Quinn, \$13.00.

There being no further business, the meeting was declared adjourned.

LEO. ROON, Secretary.



Che new York College of Pharmacy

Columbia University

The 87th Annual Term of Instruction of this College,

Open to Men and Women,

will begin on Monday, September 25, 1916.

The College offers a course of two years, consisting of three days' instruction weekly, to those possessing the Pharmacy Student Certificate of the New York State Education Department, based on fifteen Regents' counts, or one year's work in an accredited high school, and leading to the degree of Graduate in Pharmacy.

N. B.—Beginning with the fall of 1918 this requirement will be increased to 30 counts or two years of high school work.

As a department of Columbia University, the College offers courses of three, four and six years, of three days' instruction weekly through the academic year, leading respectively to the degrees of Pharmaceutical Chemist (Ph. Ch.), Bachelor of Science in Pharmacy (B. S. in Phar.) and Doctor of Pharmacy (Phar. D.). Any of these courses with some extra work in language admits the graduate to the College of Physicians and Surgeons of this University, without examination. Admission to these courses is based on graduation from an accredited high school, or the certificate of the Columbia University Committee on Entrance Examinations, or of the College Entrance Examination Board. Candidates for the degree of Ph. Ch. alone, who do not intend to study medicine, will be admitted on a Regent's Qualifying Certificate of 60 counts.

The Isaac Plaut Fellowship provides seven hundred and fifty dollars annually, for one year of study at a foreign university, for that Bachelor of Science in Pharmacy who holds the highest rank among the members of his class.

The Max J. Breitenbach cash prize of two hundred dollars and the George J. Seabury scholarship provide tuition fees for the fourth year to the two students standing highest at the close of the third year.

A Summer Preparatory Course of twelve weeks prepares the student in special directions for the regular work of the term.

Evening courses in Pharmacy, Chemistry, Urine Analysis, Microscopy and Pharmacognosy are given in connection with the Extension teaching of the University.

Those interested will please communicate with

THOMAS F. MAIN, Secretary, 115-119 West 68th St., New York City.

C. A. C. P. Alumni Iournal

PUBLISHED MONTHLY BY THE ALUMNI ASSOCIATION

OF THE NEW YORK COLLEGE OF PHARMACY, COLUMBIA UNIVERSITY

JEANNOT HOSTMANN, EDITOR

CONTRIBUTING EDITORS

H. H. RUSBY G. C. DIEKMAN H. V. ARNY

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Number 12.



Another Year Another Volume.

We wish to thank our friends, subscribers, readers, contributors and advertisers for their support and assistance. We hope that all will share with us the feeling that the JOURNAL has been worth while; we hope that our readers will continue to find the "Abstracts" both interesting and instructive; we hope that they will find more frequent use for the "Information Bureau" which although only twelve months old is quite a "bumper" and "is growing fast"; we hope that our readers will continue to consider the JOURNAL as "their own" and that they will remember that its columns are always open for the expression of their opinions; we hope that our advertising patrons feel that their patronage has resulted in profit to them.

In addition to extending cordial holiday greetings we wish to assure them one and all that we will endeavor to make each succeeding volume a better one.

The Annual Index.

It may not be out of place at this time to mention that this issue of the JOURNAL contains the index for volume XXIII.

Strange to say so many readers make no pretense whatever to preserve their periodicals. Any publication worth reading is worth saving. The extremely interesting and valuable material found in the "Information Bureau" as well as under "Abstracts" is of such a nature that many a practical pharmacist will find it just "what he is looking for."

We therefore ask our readers to file their copies of the JOURNAL as the index places the information contained therein at their fingers' ends.

"Lest We Forget."

The Twenty-fifth Anniversary Dinner being tendered to Professor Diekman will be held at the Drug & Chemical Club, 100 William Street, on Tuesday evening, January 23rd, 1917, at 6.30 o'clock.



THE TRUSTEES FREE SCHOLARSHIPS.

For a great many years the Trustees have annually offered two free scholarships, to be won at a competitive examination held just previous to the opening of the College, in the fall. These scholarships were designed specially as a reward of superior ability among the members of the preceding first-year class. Although other competitors were not excluded, it was rarely, if ever, that any such presented themselves. Originally, the subjects of the examination included certain of the common school branches. in addition to those of the first year of the College course.

Competition for these prizes has never been so successful as was hoped and expected by the Trustees. Not only was there a want of interest as shown in the small number of applicants, but the scholarship of those competing fell far short of what it should have been. So far was this true, that in a majority of cases, no awards could properly be made. Several years ago, the change was made of restricting the subjects to those of our first year. Although this to some extent stimulated competition, the result was not altogether satisfactory. Especially was it found that the best students did not present themselves; in fact, some of the poorest students in the classes have been seen at these examinations.

In view of these facts, the Trustees and the Faculty have made a thorough study of the subject and have completely revised the conditions and methods of the competition. Hereafter, there will be no special examination for the scholarships, the awards being made on the basis of the results of the regular spring exami-Members of the University nations. class will be competitors at the close of their second year, since they take part of the first year college subjects in each of the two years. The two students standing highest in this average of all studies of the first year of the College course will receive the scholarships. By this method, the entire class will enter into the competition and on an absolute parity.

Aside from the honor of standing first and second in their class, these students will receive a very substantial award, in the form of a cash value of \$130, increased by possible future increases in the fee. Certainly, the honor is the more valuable prize of the two, and it is not impossible that some student winning it may be disposed to designate a more needy member of the class to receive the whole or a part of the financial benefit.

The announcement of the award of the scholarship will become a part of the program of the annual commencement. It is believed that this arrangement cannot fail to meet the hearty approval of our entire student body.

H. H. Rusby.

THE SELECTION OF A VALE-DICTORIAN.

Throughout a very long period, the College has been almost uniformly fortunate in the valedictorians who have been selected to represent its successive classes. Nevertheless, the suggestion has been advanced that some more systematic and safe method of selection should be employed than that which has obtained. After a careful study by a special committee, and subsequent discussion by the Faculty, the following method has been adopted, and will be put into effect by the class of 1917.

Each of the three class sections is to nominate three candidates for the position. Each of these candidates will present an address, in writing, previous to February 1. The writers of six of these addresses will then be selected by the Faculty to compete in their delivery. The Faculty will then take into consideration both the matter of the addresses and the manner of delivery, in the selection of the valedictorian. This contest is merely for the selection of the best man or woman for the honor. The address as finally presented need not be the exact one submitted in the contest.

In the opinion of the Faculty, the great advantage of this method lies in the competition of the sections in securing the selection of one of their representatives. In order to accomplish this, they will be certain to put forward their best talent, disregarding all racial, religious or other group preferences and acting solely in the interest of the College welfare and class reputation.

H. H. Rusby.

Second Year Class Notes.

At a recent meeting of the officers of the class it was decided to give an entertainment, the nature of which was to be decided by the members of the class. According to the vote of the class, the majority of the members favored a banquet.

There seems to be a lack of unity among the students. One class seems to be indifferent, thinking their duty done after casting the ballot; another, not caring for the officers, take no interest in class affairs; and still another will support no one but themselves or particular friends.

The announcement by Dean Rusby, regarding the new method of choosing the valedictorian, was received with much enthusiasm. The following were chosen by their respective sections:

Section I.—Messrs. Bartner, Cool and Coronel.

Section II.—Messrs. Gitlow, Genung and Markowitz.

Section III.—Messrs. J. Smith, Steiger and Tulchin.

P. D. BLOOM, Class Reporter.

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Election of Officers, Class 1918.

The method of electing the officers of the Class of 1918 was a departure from the old, stereotyped method. At the first meeting, held December 12th, not only were the officers elected, but they were duly installed as such. This was made possible by having each section make its own nominations for the officers before

the regular class meeting. The nominees were:

Section 1.—President, C. Engleman; Vice-President, Miss S. Temliak; Secretary, Miss F. L. Newmark; Treasurer, H. G. Clark; Reporter, Miss P. Reiter.

Section 2.—President, M. Humphries; Vice-President, A. W. Finnegan, Secretary, R. D. Moyer; Treasurer, R. Forman, Jr.; Reporter A. R. Jacobson.

Section 3.—President, B. Rosenberg; Vice-President, G. A. Schuman; Secretary, M. Obrentz; Treasurer, W. Richman; Reporter, S. O'Sullivan.

With the exception of Class Reporter, Section 2 placed all of the officers.

> S. O'SULLIVAN, Reporter.

The special attention of the graduates and other friends of the College is called to a lecture to be given by Professor Curt P. Wimmer at the College meeting to be held on the evening of Tuesday, January 16, 1917. The subject of Dr. Wimmer's lecture 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. The meeting is open to all and a cordial invitation to attend is hereby extended.

The College has received a framed and enlarged photograph of the late Professor John Oehler, the gift of his widow. The picture will be given a prominent place in the College collection, as an inspiration to those who will come after. Those of us who knew him need no such reminder to keep alive the memory of John Oehler's sterling qualities.

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

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Mr. Jose Blanco, who completed three years' work at the University of Michigan is working for his Bachelor of Science in Pharmacy degree.

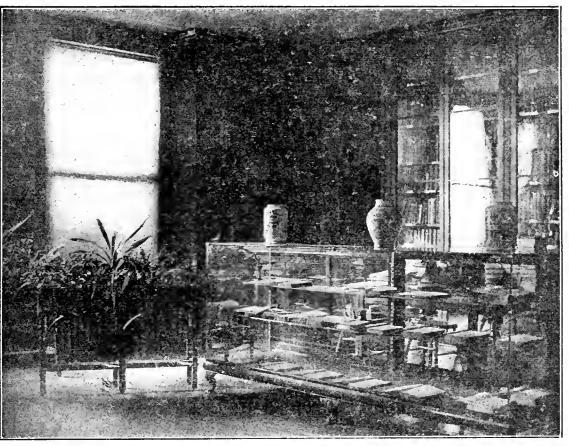
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With the termination of the Christmas holidays, the interest of the Faculty and student body will be centered on preparations for the final examinations, which commence April 28.

Mr. O. J. Blosmo, of the Department of Pharmacy of the University of Minnesota, is doing special work with the College in the various departments. It has been very pleasant to have Mr. Blosmo in attendance, and it is to be regretted that his leave of absence from Minnesota comes to an end in January.

FROM THE LIBRARY

ADELAIDE RUDOLPH Assistant Librarian



A CORNER OF THE LIBRARY.

The gift of two beautiful fern boxes by one of our generous trustees, Mr. Max J. Breitenbach, has made a wonderful transformation in the library. In fact, it appears to us now an ideal spot. The alumnus who does not believe this should drop in some morning when the sun shines, and sit down for a quiet hour of reading opposite these fern boxes, and the glass showcase, and the old blue and white jars, used in the "long-ago" for the former favorites of the apothecarv's art and care. One need not puzzle over what the contents of the jar might have been, for the name stands out clearly as part of the decoration. This jar was for "Mithridatium Damocratis," that old compound, which a learned physician from Philadelphia hailed as "that good old mixture of three hundred and sixtyfive remedies-one for each day of the vear." (The dispensatories in our rare old book collection do not mention so many, but it is a good story to tell and to repeat nevertheless.) The second jar contained nuces cupres [si] (cypress nuts), and the other, rob or robub ribesiorum, the "rob de ribes" of most old dispensatories (an inspissated juice of currants, held deservedly in high favor when made into a cooling drink for fevers. etc.).

The accompanying sketch in black and white gives a good suggestion of this scene.

We must not forget, in our gratefulness to Dr. Fraser for the jars and to Mr. Breitenbach for the plants, our indebtedness to the C. U. C. P. ALUMNI JOURNAL editor for his fable of the "little bird," and to Mr. Simpson of the office, whose keen appreciation of the aesthetic values in everyday living has brought the whole matter of fern boxes to such a satisfactory conclusion.

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One may very properly become reminiscent at the close of the year and of the volume, and recall pleasantly the state of progress of any adventure, and the friends who have encouraged it.

We look into our "accessions book" and see that two hundred and fifty-five volumes have been added since January first. Fifty-six of these were gifts, one hundred and thirty were volumes of journals newly bound, and sixty-nine came to us through the "regular appropriation" by purchase. The donors' names appear (arranging them alphabetically):

Arny, Professor H. V.

Casavis, J. N. (presentation copy).

College of Physicians and Surgeons' library.

Columbia University library.

Diekman, Mrs. G. C.

Hostmann, Professor J.

Lyon, Professor A. B. (presentation copy).

Mansfield, Professor W. (presentation copy).

Rubinfeld, S. F.

Rudolph, Miss A.

Rusby, Dean H. H.

Schleussner, R.

For the gift of pamphlets and of odd numbers of journals to complete our sets, we recall especially the kindness of Professor Kremers of the Wisconsin University, Dean Rusby, Professor Diekman, the Lloyd Library of Cincinnati, the C. U. C. P. ALUMNI JOURNAL, The Pharmaceutical Era, and the state pharmaceutical associations that have sent us reports of their proceedings.

Of those who have contributed journals for the reading tables we have already published lists in this Journal, and, therefore, will not repeat for lack of space. We certainly have appreciated all these "beneficiaries," and, not the less because we have not mentioned them heretofore, some personal letters of commendation or encouragement from such good-wishers as Mr. Thomas J. Keenan and Professor Edward Kremers, and the many little kindnesses of those who live their everyday life with us about the College.

We make our profound bow to these and also to all the students of the Senior and Junior classes, who have helped us magnificently this year to establish a real library "atmosphere," as it has been called, that impresses so agreeably the outsider, coming in to do research work free from annoyance. We wish you all a happy Christmas and a happier New Year, and hope that you in turn will like to join us in the same delightfully helpful and sympathetic spirit, as you did yesterday, when we pass on into the

"To-morrow to fresh woods and pastures new."

H

Library hours, from 10 a. m. to 2 p. m., and from 3 to 5 afternoons, except on Saturdays.



Shark Liver Oil.

M. Tsujimoto, in J. Ind. Eng. Chem., 1916, calls attention to a highly unsaturated hydrocarbon present in shark liver oil. This hydrocarbon, named "squalene," is found in some shark-liver oils, and can be produced in Japan in commercial quantities, by distilling the oils which contain it, under reduced pressure, or with superheated steam, and treating the distillate with alkali to remove free fatty acids. The hydrocarbon is readily soluble in ether, acetone, petroleum ether and carbon tetrachloride. It is only sparingly soluble in alcohol and glacial acetic acid. When mixed with I per cent. of cobalt resinate, it produces, even at low temperatures, a smooth, colorless film, in about 10 days. This film was much firmer than one obtained from fatty oils. Complete hydrogenation of squalene results in the production of an oil-like substance, resembling liquid paraffin. When subjected to a temperature of -80° C. this oil-like product becomes a transparent jelly, resuming its mobile character at about -35° C.

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Detection of Arachis Oil.

The presence of arachis oil, in quantity as low as 5 per cent. in olive oil, cottonseed oil, soya bean oil and corn oil, may be detected as follows: About 20 grammes of the suspected oil are saponified by aid of alcoholic potassium hydroxide solution, and the excess of

alkali neutralized by aid of a 25 per cent. solution of acetic acid in 95 per cent. alcohol, phenolpthalein being employed as indicator. The mixture is then treated with 50 mils of a 5 per cent. solution of magnesium acetate in a mixture of equal parts of water and 95 per cent. alcohol. After heating to boiling, it is allowed to cool to room temperature with occasional shaking, and then set aside for about 24 hours at a temperature of about 10 to 15° C. The resulting precipitate is then removed by filtration, and washed twice with 50 per cent. alcohol and three times with distilled water. It is then mixed with 100 mils of hot water and a sufficient quantity of diluted sulphuric acid to insure complete decomposition of the magnesium salts. The separated fatty acids are now washed with water. dissolved in 90 per cent. alcohol, and set aside, when arachidic acid separates in crystal form.

Detection of Benzoic Acid.

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W. Stadlin, in *Chem.-Zeit.*, 1916, 770, recommends the following method for the detection of benzoic acid in edible fats: From 20 to 30 grammes of the fat, in a semi-melted condition, are spread evenly over the parchment diaphragm of a Kreis dialyser, and covered with 50 per cent. alcohol. The outer chamber of the dialyser is also filled with alcohol of the same strength. After 24 hours the dialysate is made slightly alkaline and heated on a water-bath to re-

move alcohol, the original volume of liquid being maintained by addition of water. The liquid is then made slightly acid and extracted twice with ether. The combined extracts are allowed to vaporize at a low temperature, and the residue, in the form of fine crystalline needles, is dissolved in 10 mils of water. To this solution are added 3 drops of diluted (1 in 10) solution of hydrogen dioxide, 3 drops of diluted (1 in 10) solution of ferric chloride, and 3 drops of 3 per cent. ferrous sulphate solution. If benzoic acid was present a violet coloration (salicylic acid) will appear in about onehalf minute. The same method may be employed if the presence of salicylic acid is also suspected, only in that event, the solution of ferric chloride is added without previously oxidizing with hydrogen dioxide.

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Aromatic Sulphuric Acid, U. S. P.

W. S. D. Penniman, W. W. Randall, C. O. Miller, and L. H. Enslow, in J. Ind. Eng. Chem., 1916, comment upon the official process of assay, as follows: In order that complete hydrolysis of ethylsulphuric acid may be effected, when this is heated with water, is is necessary that the alcohol formed be removed. In case of aromatic sulphuric acid, no appreciable hydrolysis of the ethylsulphuric acid takes place, until nearly all of the free alcohol has been expelled. For this reason methods such as given in the U. S. P., in which the sample is diluted with water and then heated under a reflux condenser, always show low results. Complete hydrolysis can be effected in most cases by heating the sample with six times its volume of water, and heating in an open vessel on a water bath, strongly boiling, for a period of at least 4 hours.

Oxidation of Manganous Salts.

W. Prandtl, Berlin, 1916, states as follows: If a cold solution of a manganous salt be acidified in excess with strong hydrochloric acid, and a few drops of a solution of sodium nitrite added, the liquid assumes an intense brownish-yellow color, owing the formation of a manganic salt. The same result is obtained when cold strong hydrochloric acid is mixed with a small quantity of the nitrite solution, and a few drops of a manganous solution added. When a neutral solution of a manganous salt is mixed with sodium nitrite (neutral) in excess and oxalic acid added, an intense cherry-red coloration is noted, owing to the formation of manganic This reaction is said to be oxalate. extremely sensitive and to be of value in the detection of small quantities of manganese in presence of larger quantities of iron.

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Marine Animal Oils.

The detection of marine animal oils in oils, fats and soaps was made the subject of study by J. Marcusson, and H. von Huber, who report their findings in Mitt. K. Materialpruef., 1916, as follows: The product "neutraline," which is prepared by subjecting marine animal oils to a high temperature, in absence of air, or in presence of an indifferent gas, or other similar products do not respond to They, however. the octobromide test. show positive results with the Tortelli and Jaffe color reaction test. They are also characterized by a high specific gravity, usually above 0,930, and a high degree of viscosity. Four samples examined showed from 31,7 to 40,5 Engler degrees, at 20° C. While it is true that

other oils also possess a high specific gravity and viscosity, these can usually be identified by some special character-Thus, castor oil by its solubility istics. in alcohol and its high acetyl value; soluble castor oil (blown castor oil), by showing presence of a considerable quantity of hydroxy acids, which are insoluble in petroleum benzin. Certain varnishes and like products obtained from linseed oil, may readily be recognized by odor or by the phytosteryl acetate test. Hydrogenated marine animal oils may be identified by examination of the unsaponifyable matter for presence of octodecyl alcohol, m. p. 60° C. The constituent of marine animal oils to which the octobromide reaction is due, namely, clupanodonic acid, is also found, in small quantity, however, in some oils or terrestrial animal origin. In case of doubt, however, recourse may be had to a determination of the quantity of this acid present, and also to the iodine value of the oil itself, or that of the separated fatty acids. **. s**

Thebaine and Phenyldihydrothebaine.

M. Freund and E. Speyer, Berlin, 1916, report on investigation results of phenyldihydrothebaine. The authors state that this compound may be regarded as having the same structure as the alkaloid itself. They furthermore claim that no aliphatic double bonds are present as is claimed by Knorr, arriving at this conclusion because of the fact that the compound resisted reduction by means of any of the ordinary methods, in both acid and alkaline solutions. In presence of colloidal palladium the absorption of one hydrogen molecule was noted, the resulting compound proved. however, to be a secondary base $(C_{24} H_{25})$

 O_3) NH. CH₃, and was formed by the breaking of the nitrogen ring, and not by an addition because of a double linkage. It was furthermore shown that the formation of dihalogen-phenyldihydrothebaine is surrounded by difficulties, and that there are obvious structural changes.

Arsenobenzene Derivatives.

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Denysz, J., in Comptes rend., 1916, 246-248, 163, discusses the causes of the injurious effects often observed after the injection of these bodies. He claims that the injurious effects often noted by the injection of bodies containing the arsenobenzene group, such as neo and novosalvarsan, are caused by the formation and deposition of a precipitate which occludes the capillaries. This was found to be especially true in case of the monoand di-sodium salts of the arsenobenzene derivatives in presence of mineral salts, such as sodium chloride. This precipitation may be retarded or prevented in the presence of blood serum, sugars and glycerin. In case of prolonged treatment he recommends that only very dilute solutions be employed. He also recommends that the di-sodium salts be emploved in place of the neutral products, claiming that these are more active and also safer. It is also pointed out that the appearance of distressing and unpleasant symptoms within 6 hours after an injection, caused by the formation of the afore-mentioned precipitate, is really an essential factor in the efficiency of these products in a therapeutical sense.

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Removing Formaldehyde Vapors.

A. Scholtz, of Hamburg, has patented a process having for its object the rapid removal of noxious vapors after disin-

fection of rooms with formaldehyde, or by means of Salforkose, a preparation containing formaldehyde and carbon disulphide. The process is essentially as follows: A mixture of ammonia and menthone or an essential oil containing menthone, such as dementholized Japanese oil of peppermint, is vaporized within the room which has been subject to the disinfection. It is claimed that the room can be used sooner than if ammonia alone be employed.

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Mimeograph Inks.

The following processes for manufacture of mimeograph inks are subject to U. S. Patents:

(1) A carbon black pigment is ground thoroughly in a suitable mineral oil, with or without the addition of a small quantity of blue pigment. This mixture is then incorporated with Turkey-red oil, or other sulphonated oil.

(2) A colored pigment or lake color is employed in place of the black pigment in 1.

(3) A dyestuff possessing the desired color, or its basic substance is dissolved in alcohol. An acid which is capable of forming colors soluble in oils, and a small quantity of a solvent for aniline dyestuffs (basic) are added. This solution is thoroughly ground with a mineral oil, with or without the further addition of other pigments. Turkey-red oil is finally added to the mixture.

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Physical and Chemical Tests for Acetylsalicylic Acid.

D. E. Tsakalotos, in *J. Pharm. Chim.*, 1916, 14, 174-177, states as follows: If acetylsalicylic acid be heated to its melting point on glass, and allowed to cool, it will crystallize in concentric rings. If heated above its melting point, it solidifies slowly and a white porcelain-like mass is formed. If the acid is fused and maintained in this condition, acetic acid is liberated and salicylo-salicylic acid is formed. It is therefore difficult to determine the melting point of the acid with any degree of certainty. If pure acetylsalicylic acid be dissolved rapidly in alcohol, and water added, the resulting solution does not at once show the characteristic reaction with diluted ferric chloride. If, however, the solution be allowed to stand for some time before adding the diluted ferric chloride, a violet coloration will be noted. A sample of the acid heated sufficiently to liquify it, then allowed to cool and dissolved in water, produces an immediate and intense color reaction with ferric chloride. If it is heated for some time above its melting point, allowed to cool and then dissolved in alcohol, the addition of water causes a precipitation of salicylosalicylic acid, and the addition of diluted ferric chloride a pale violet coloration. Self's vanadium reagent for salicylic acid when added to acetvlsalicylic acid, in dry form, does not at once show any reaction. In a short while, however, a yellowishgreen color is produced, changing later to an intense green. In case the acid has been previously heated to its melting point, the intense green color is noted at If previously heated above its once. melting point, the green color is noted, but changes very rapidly to a deep brown. Self's reagent may be prepared as follows: Dissolve a small quantity of ammonium vanadate in concentrated sulphuric acid, and add water until the orange color produced begins to lose its intensity. The addition of formaldehyde is not essential.



- BUREAU

Conducted by Prof. H. V. Arny.

GENERAL INFORMATION.

1. Telephone inquiries will be answered cheerfully without charge. Residents of Greater New York or vicinity wishing to inquire about some pharmaceutical problem will ring up the Information Bureau, Columbus 117, and will receive information immediately, if same is accessible.

2. Non-residents will have their problems answered in the next issue of the C. U. C. P. ALUMNI JOURNAL without cost, if they send their inquiries by mail.

3. Those not wishing to wait for their information until the next issue of the JOURNAL may have their inquiries answered by mail by enclosing a selfaddressed stamped envelope.

4. Problems requiring extended research will be handled for a fee as moderate as consistent with high grade service.

5. Translations of articles from foreign languages, either in full or in abstract, as well as transcripts of papers appearing in English or American pharmaceutical, chemical or botanical periodicals will be prepared for those desiring to pay for such service.

6. As in the past, all visitors to the library, desiring to do their own research work, will be given courteous attention.

H. V. ARNY, Librarian. Adelaide Rudolph, Bibliography. Hugo H. Schaefer, Queries.

ANSWERS TO QUERIES.

Potassium Metabisulphite.—R. T. N., New York.—This is a synonym for potassium pyrosulphite, $K_2S_2O_5$ which is now used to some extent as a photographic developer. The above formula shows that it can be considered as a combination of K_2SO_3 with SO_2 . It can be prepared by passing SO_2 gas into a saturated solution of potassium carbonate. On cooling the pyrosulphite deposits in hard tabular crystals.

Lister's Solution.—R. P. H., New York.—We find this name in Hiss and Ebert's "Pharmaceutical Preparations" as one of the synonyms of liquor antisepticus, U. S. P. VIII. We might point out that U. S. P. IX has dropped this popular preparation and that the recipe for liquor antisepticus of the new National Formulary differs in several respects from the former pharmacopoeial formula.

Hand Lotion for Electroplaters.— A. K. H., Brooklyn, desires a recipe for a hand lotion to be used by workers in a plating factory to relieve the corrosive effect of the alkaline cyanide fluids used as "baths" in the process of electro-plating. We have been unable to find a recipe suggested for this specific purpose, but we would be inclined to try as a remedy a tragacanth or quince-seed hand lotion containing a considerable quantity of boric acid. Recipes for the basic lotion are easily obtainable, but if A. K. H., desires one or more, we will be glad to furnish them.

Emulsion of Iodoform and Glycerin.

-P. H., New York.--While we have been unable to find a recipe bearing that specific name, the following recipe for an emulsion of iodoform containing glycerin may be what you want. It is taken from Martindale and Westcott's Extra Pharmacopoeia, where it is stated that it is used for injection into sinues.

Finely powdered iodoform	I	part
Glycerin	7	parts
Boiled water	2	parts
Mix well in the order name	d.	

In the Guy's Hospital Pharmacopoeia it is suggested that the iodoform be moistened with 90% alcohol prior to mixing with the glycerin.

Dakin's Solution.—P. H., New York. —This in an antiseptic preparation suggested by Dr. H. D. Dakin of New York, made by the following recipe:

Dissolve 140 grammes of dried sodium carbonate (or 400 grammes of the dekahydrated carbonate) in 10 liters of water and then add 200 grammes of chlorinated lime. After one-half hour of standing, syphon off the clear liquid, filter it if necessary and then add to the filtrate 40 grammes of boric acid.

For details, see the *Chemist and Drug*gist for September 4th, 1915, page 342, where a recipe for a stronger solution is also given.

Legal Queries.—During the month we have answered a number of queries relating to pharmacy laws, local, state, and national, emphasizing each time that the information given was merely the personal opinion of a layman. For this reason we do not print such answers, since in serious legal matters a lawyer should be consulted.

Soluble Essence of Ginger.—B. W. H., New York.-The principle of soluble essence of ginger has been carefully studied by Dr. J. C. Thresh, who found that the real pungency of ginger root is not found in the resins but in an alcohol gingerol. While the resins are insoluble in diluted alcohol, the gingerol can be dissolved in that fluid. The procedure recommended by Thresh was to mix a strong tincture of ginger (menstruum, 95 per cent. alcohol) with slaked lime (which removes the two chief resins), then to dilute with an equal volume of diluted alcohol, then to precipitate the excess of lime with diluted sulphuric acid; then to macerate for 24 hours; then to dilute with an equal volume of water; and lastly to filter through powdered pumice.

"Pharmaceutical Formulas" (from which the foregoing information is compiled) suggests the simpler method of diluting a strong alcoholic tincture with its own bulk of water, then adding the slaked lime, then macerating for 24 hours, then filtering, washing the filter with diluted alcohol. Lastly, filter again through sand or pumice.

The resulting product is miscible with syrup to a clear fluid. At times, the originally clear "soluble extract" deposits resinous matter on standing for some months, due undoubtedly to the oxidation of the gingerol. We wonder whether this oxidation could be prevented by adding a little glucose to the product (in place of some of the water) prior to the final filtration?

Names of Manufacturers.—We gladly furnish our querists with information concerning the manufacturers of goods handled by the drug trade, but for obvious reasons, such answers are not published in this department.

Teaberry.—D. T. V., New York.— This is one of the many synonyms for wintergreen. In Lyons Plant Names we find as other common names for this herb, partridge berry, checker berry, chicken berry, spice berry, dew berry, ground berry, grouse berry, hill berry, ivy berry, liver leaf, red berry tea, Canadian tea, mountain tea, chinks, drunkards, red pollen, ivory plum pippins and rapper dandies.

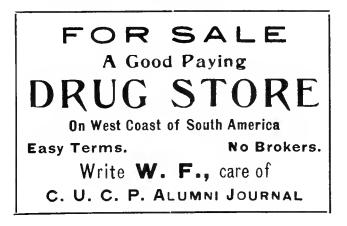
Prescription Incompatibility.-B. G., New York, submits for criticism a prescription calling for 11/2 drachms of strontium bromide, 2 drachms of sodium salicylate and enough water to make 2 fluid ounces. The trouble is due to the formation of sparingly soluble strontium salicylate. While strontium bromide is soluble in about 0.35 part of water and sodium salicylate dissolves in 0.9 part of water, strontium salicylate requires for solution 18 parts of water. In short the 90 grains of strontium bromide directed in the prescription will yield 107 grains of strontium salicylate and this will require over 1800 grains (about 4 fiuid ounces) of water to dissolve it. As the prescription calls for less than 2 fluid ounces of water, the strontium salicylate precipitates. We are unable to suggest any way the prescription, as written, can be compounded without the production of the precipitate.

Ebullioscope.—R. B. G., New York. The apparatus you have in mind is Sullivan's Ebullioscope, by means of which the percentage of alcohol in wines or perfumes can be quickly determined and that with a fair degree of accuracy. It is based on the variation of the boiling point of mixtures of alcohol and water in accordance with the amount of alcohol present; the apparatus consisting of a jacketed metallic reservoir (heated by a lamp) with an alembic type of condenser. A thermometer graduated in tenths of a degree and a slide rule for assisting in the calculation of results.

The apparatus is described at length in Leach's Food Inspection and Analysis and it can be purchased of almost any scientific instrument dealer.

"Ammiac Powder."-T. L. B., New York, desires information concerning "ammiac powder" which, he claims, is used in flavoring tobacco. This query has proven troublesome as we can find no direct reference to anything of smilar name used in the tobacco industry. We incline to the belief that what is desired is powdered ammi. This name is given to several fruits of the plants of the Umbellifera, all of which are related to The Egyptian ammi is said caraway. to be the fruit of Carum copticum; Hager states that "ammi officinale" is the fruit of Ptychotis coptica or ajowan seed; while the "Real Enzyklopedie der gesamten Pharmazie" mentions under the name "ammi," the fruit of Ammi Visnaga; of Ammi majus, of Heloscidum laterifolium; of Ptycotis verticillata and of Sison Amonium.

All of which in plain English is that the nearest "hit" we can make on "ammiac powder" is powdered ajowan seed.





THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK

Officers, 1916-1917

President Monroe H. Weil

Honorary President Thomas F. Main

Victor M. Orefice Ernest Windt

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION HELD WEDNESDAY EVENING, DECEMBER 13th, 1916.

Meeting called to order at 8.30 P. M. Acting President Weil in chair.

Present :— B. J. Davis, '14; L. Fryer, '16; J. A. Miraglia, '13; C. D. Hakes, '11; J. H. Hecker, '08; M. A. Maggio, '16; N. A. Smedira, '15; E. Steiert, '11; E. C. Steinach, '00; H. A. Herold, '94; J. J. Rampulla, '16; J. Hostmann, '96; S. Rubinfeld, '16; M. H. Weil. '10; V. Orefice, '15; H. H. Schaefer, '12; L. Roon, '10.

The minutes of the previous meeting were adopted as read with the following corrections to be made: L. W. Brown to L. N. Brown; receipt of \$15 in dues from E. Steiert changed to receipt of \$15 from E. Steiert for life membership.

Treasurer's report—Treasurer absent.

Special business before the meeting was the election of a President to fill the unexpired term of President Steffens whose resignation had been accepted.

Nominations were declared in order.

1st Vice-President Monroe H. Weil was nominated.

Nominations were closed and the Secretary was directed to cast a ballot for Dr. Weil.

President Weil delivered a short address asking the members for strong, active support to help rejuvenate the languid spirit in the Association.

Dr. Schaefer, chairman of the committee on resolutions, made the following report:

WHEREAS, it was with profound regret that this Association learned of the death of one of its oldest members, JOHN OEHLER, and

WHEREAS, the Alumni Association has lost an associate who has performed faithfully and intelligently the duties of Assistant Professor of Chemistry and has worked indefatigably in the interests of this Association, therefore be it

RESOLVED, that the officers and members desire to express their sense of profound personal loss in the demise of Professor Oehler, and their heartfelt sympathy with the members of his family in this hour of their bereavement. And be it further

RESOLVED, that a page be set aside in our minutes for these resolutions and that a copy thereof be forwarded to Mrs. Oehler.

The report was accepted and the committee discharged with thanks.

Professor Hostmann, Chairman of the Diekman Dinner Committee, reported progress. The dinner is to be held at the Drug and Chemical Club on the evening of January 23rd. The Chairman stated that the entire committee would be appointed shortly.

Dr. Brown, Chairman of the C. U. C. P. JOURNAL Contract Committee, asked that the committee be given until the next meeting when it would submit its final report.

The Propaganda Committee, through its Chairman, Dr. Brown, reported progress.

The Registrar had nothing to report.

Due to the election of 1st Vice-President Weil to the presidency, announcement of an election to be held at the next meeting to fill the vacancy in the 1st vice-presidency was ordered made.

Much discussion took place on the relative values of notifying the members of the stated meetings by post card and by the C. U. C. P. JOURNAL.

A motion was made and carried that, with the consent of the Editor of the C. U. C. P. ALUMNI JOURNAL, the notices of the meetings be printed on the cover page of the publication.

The Secretary was ordered to communicate with Dr. Diekman, Chairman of the Committee on Audit, asking for the return of the books to the Treasurer.

The following applicants were proposed and elected to membership:

E.	J.	Goldberg	'16
С.	А.	Sposta	'16

The applications were accompanied by the necessary dues.

The following sums for dues were received:

$\mathbf{V}.$	Orefice	'I 5	\$2.00
Ν.	A. Smedira	'15	2.00

It was moved that the President be empowered to appoint a special committee for soliciting life memberships for the Association.

Bill for services from J. Lavelle for \$5 was presented and ordered paid.

Long discussion took place under Good and Welfare. Many ideas were advanced aiming to find a method of building up the Association in finances and in spirit.

The meeting was declared adjourned at 11.30 P. M.

LEON ROON, Secretary.

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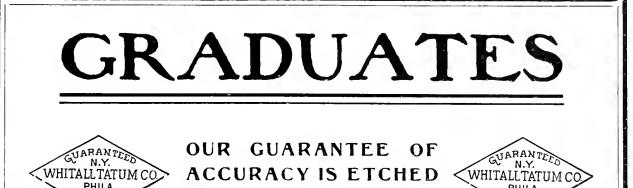
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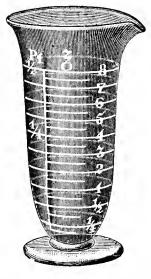
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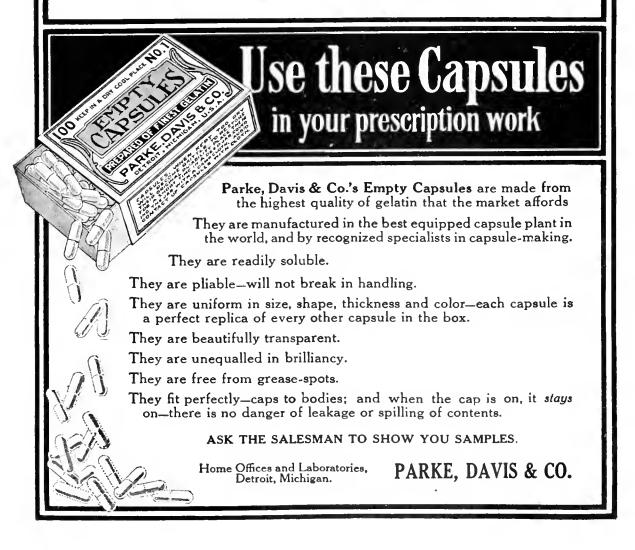
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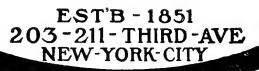
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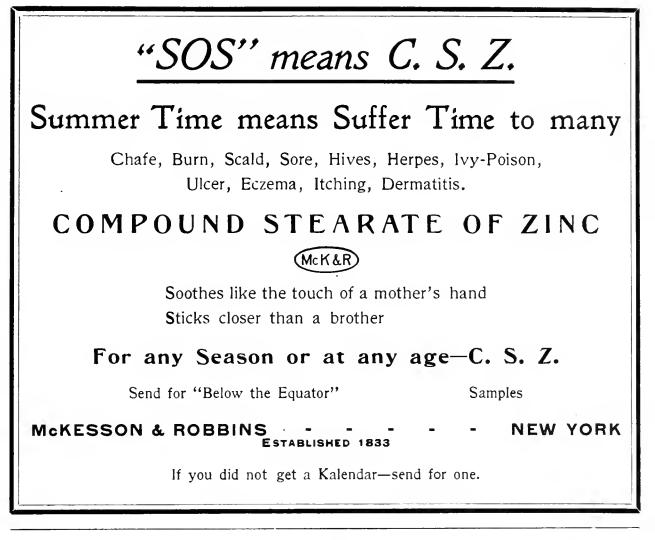
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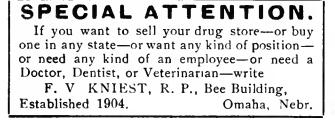
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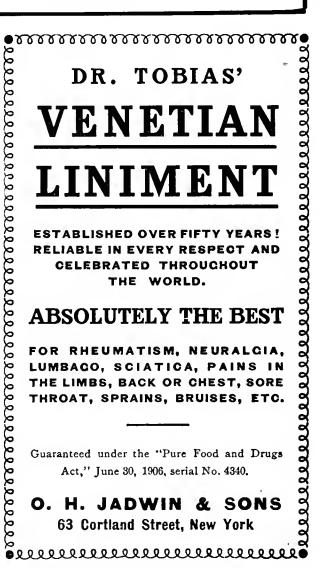
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Complete exhaustion

is just as deplorable in the human being as it is absolutely essential in pharmacy.

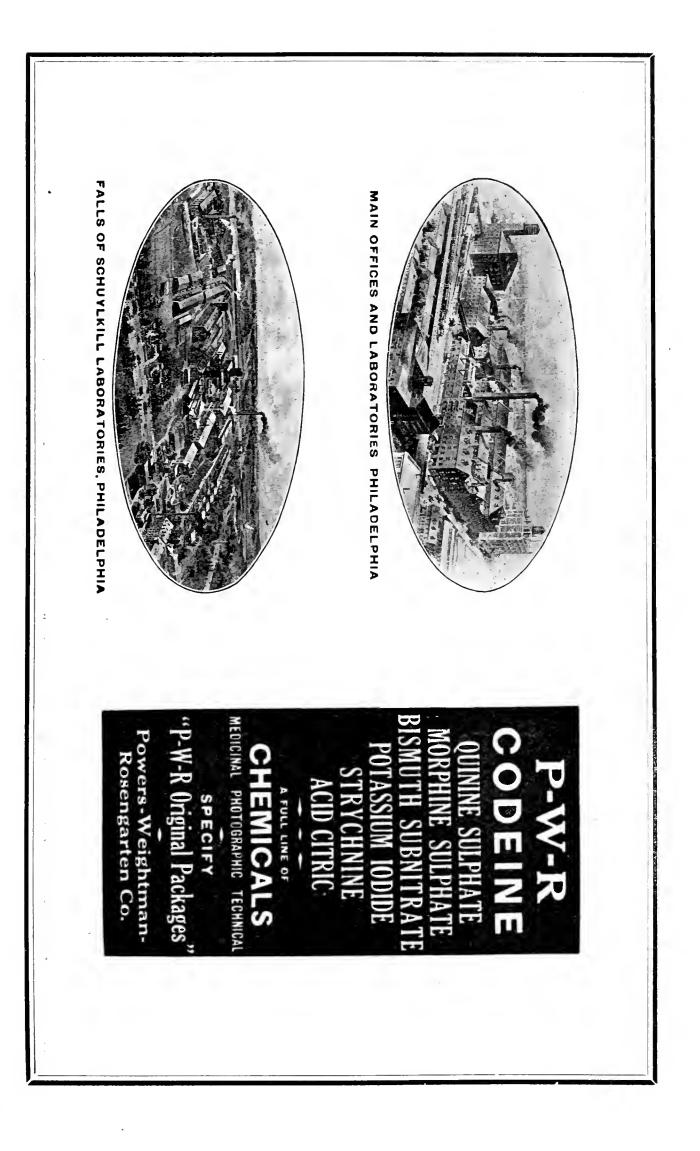
In the individual it means lost vitality; in our products it means maximum drug value.

The Doctor aided by the Druggist tries just as hard to check the one as we strive to increase the other; and our mutual skill is fairly measured by the results.

Complete exhaustion of everything medicinal in botanicals of prime quality is the rock-bottom foundation of our "Quality Products."

SHARP & DOHME

Purveyors to the drug trade Since 1860



A SAFE AND PALATABLE LAXATIVE FOR CHILDREN.

Mrs. Winslow's Soothing Syrup

ABSOLUTELY NON-NARCOTIC

DOES NOT CONTAIN OPIUM, MORPHINE NOR ANY OF THEIR DERIVATIVES

FORMULA IS PLAINLY STATED ON EVERY BOTTLE.

MEETS THE REQUIREMENTS OF ALL FEDERAL, STATE AND MUNICIPAL FOOD AND DRUG LAWS. CAN BE SOLD THROUGHOUT THE WORLD.

Anglo American Drug Co. 215=217 Fulton Street New York



A product with a reputation coveted by others

"Listen to them!"

PRESCRIPTION CHEMICALS

The reputation of the Druggist—the satisfaction of the Physician—and the welfare of the patient require that chemicals used in dispensing should conform to the highest standard for purity. When ordering chemicals for the dispensing department

Specify <u>"M. C. W."</u>

MALLINCKRODT CHEMICAL WORKS ST. LOUIS-NEW YORK

